



5.1.3

B V RAJU COLLEGE

VISHNUPUR :: BHIMAVARAM



2017-18

B V RAJU COLLEGE, VISHNUPUR, BHIMAVARAM

DEPARTMENT OF PHYSICS AND ELECTRONICS

GUEST LECTURE FOR THE ACADEMIC YEAR 2017-18

Sl No	TOPIC	NAME OF THE GUEST LECTURER	Organization	DATE	LINK FOR PHOTOS
1	GEO-STATIONARY SATELLITES	Dr. P.S.BRAHMANDAM	SRI VISHNU COLLEGE OF ENGINEERING FOR WOMEN	22-01-2018	https://drive.google.com/file/d/1ZFGoiEJ7x11ibxFcAfruf_IQp8uAk2N/view?usp=sharing
3	CRYSTALSTRUCTURES	Dr.A.PADMANABHAM	G V V R INSTITUTE OF TECHNOLOGY	24-01-2018	https://drive.google.com/file/d/1TyDueJo644gT4loJHyqwV170cBVT-ARv/view?usp=sharing
3	CENTRALFORCES & RELATIVISTIC MECHANICS	V N V RADHA KRISHNA MURTY	G V V R INSTITUTE OF TECHNOLOGY	05-02-2018 & 06-02-2018	https://drive.google.com/file/d/1Mi-Q8ZkheYLynHOYOT3RdgbnHWKAsQ72/view?usp=sharing

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**B.V. RAJU
COLLEGE**
YISHNUPUR -
BHIMAVARM -534202



5.1.3

Mathematics Department 2017-2018

S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Paluri Madhura Subhashini	01

State level FDP on project work in Mathematics



S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
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1	Ch.Satyanarayana	01
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State level FDP on project work in Mathematics



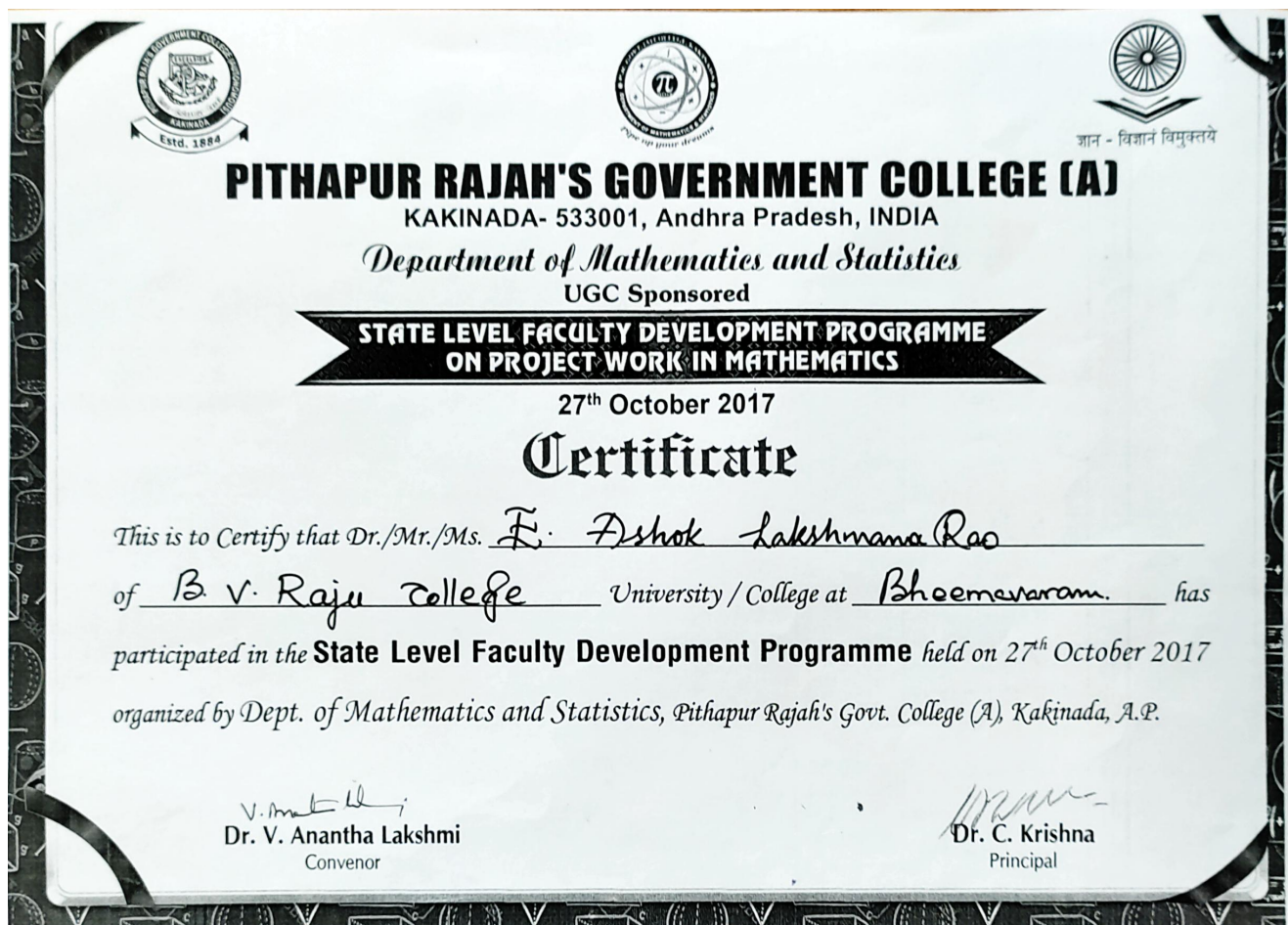
S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Madugula Siva	01

State level FDP on project work in Mathematics



S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Esinagiri Ashok Lakshmana Rao	01

State level FDP on project work in Mathematics



S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	D.S.Priyadarsini	01

State level FDP on project work in Mathematics





**B.V.RAJU
COLLEGE**

**VISHNUPUR -
BHIMAYARM -534202
6.3.3**



Mathematics Department 2018-2019

S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Ch.Satyanarayana	02

1. Golden Jubilee national colloquium on higher education: the past and the future
2. Advanced Training in Mathematics



CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE · INDIA

Certificate

This is to certify that

Mr C H Satyanaryana

B V Raju College, Vishnupur, Bhimavaram, W.G. Dist, A.P.

Participated in the

Golden Jubilee National Colloquium

on

Higher Education: the Past and the Future

Organized by the Centre for Education Beyond Curriculum (CEDBEC),

CHRIST (Deemed to be University), Bengaluru

on 28 – 30 November 2018

Date: 30 November 2018

Dr Anil Joseph Pinto
Registrar



National Centre for Mathematics

A joint center of TIFR and IIT Bombay



Advanced Training in Mathematics

Instructional School for Teachers

"Mathematics for Computer Science"

Certificate

This is to certify that Mr. Chilukuri Satyanarayana from B. V. Raju College, Bhimavaram, Andhra Pradesh, has participated in the Instructional School for Teachers on "Mathematics for Computer Science" held at the Chennai Mathematical Institute, Chennai during June 18-30, 2018.

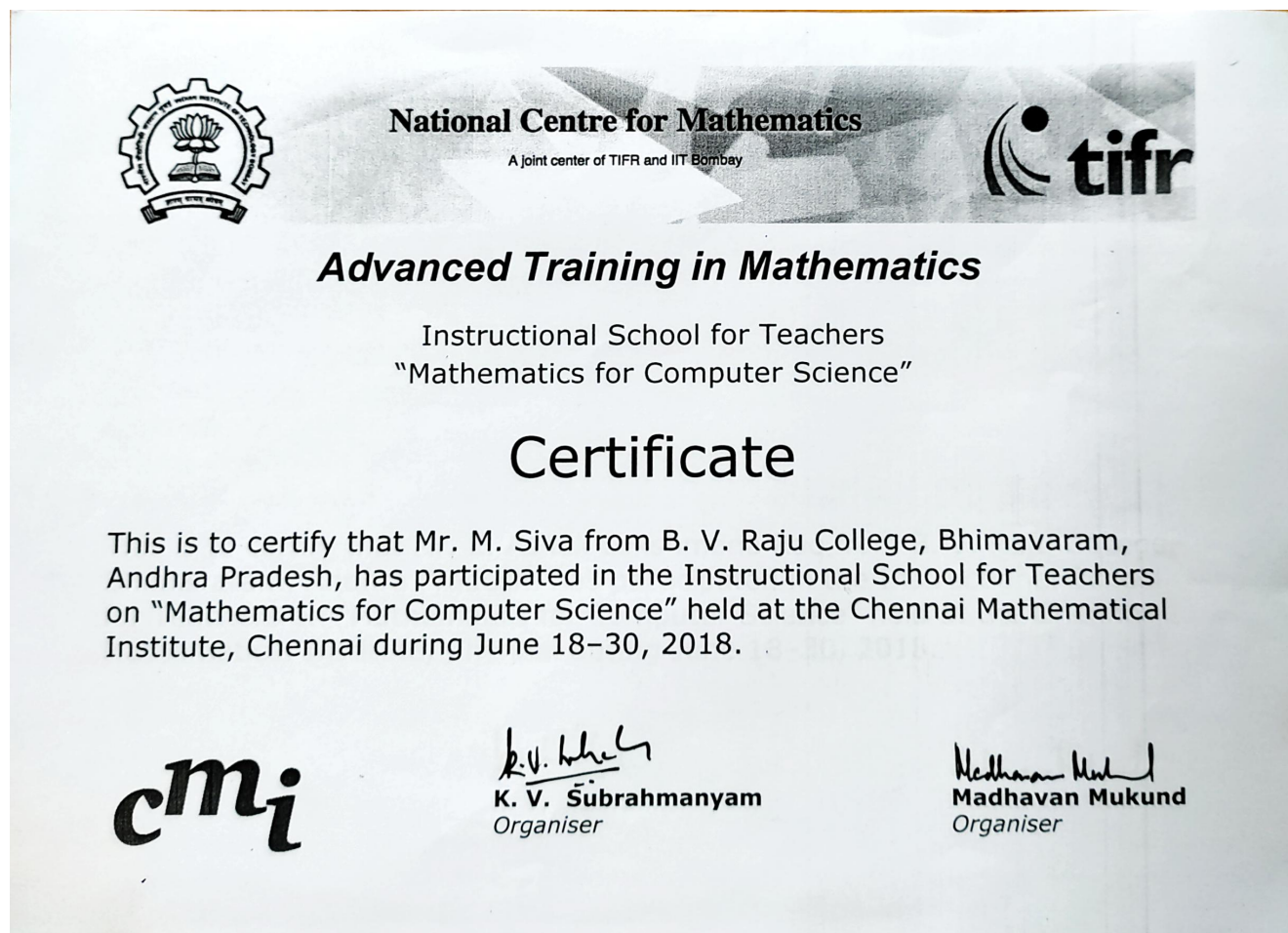


K. V. Subramanyam
Organiser

Madhavan Mukund
Organiser

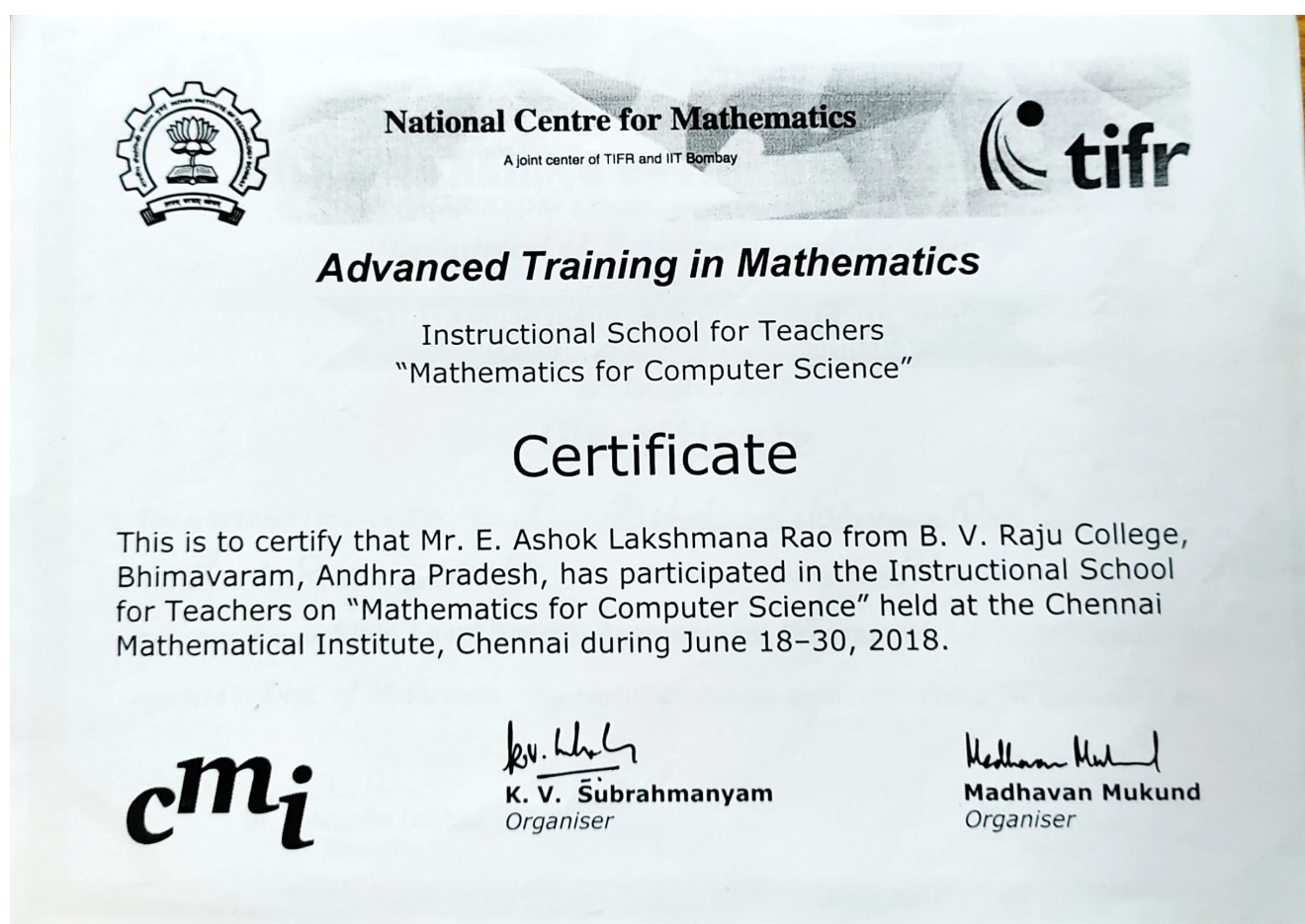
S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Madugula Siva	01

Advanced Training in Mathematics



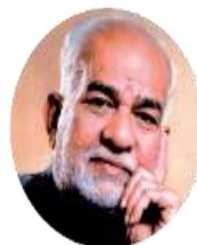
S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Esinagiri Ashok Lakshman Rao	01

Advanced Training in Mathematics





B.V.RAJU COLLEGE



**VISHNUPUR -
BHIMAYARM -534202
6.3.3**

Mathematics Department 2019-2020

S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Bh. Geetha	01

3 day National Level Workshop



SRI CHITTURI INDRAIAH MEMORIAL
GOVERNMENT DEGREE COLLEGE



DISTRICT IDENTIFIED COLLEGE & DRC
WEST GODAVARI, ANDHRA PRADESH
3 DAY NATIONAL LEVEL WORKSHOP
AS FACULTY DEVELOPMENT PROGRAMME

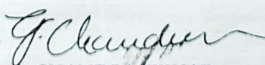
19th to 21st November 2019

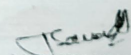
RESEARCH METHODOLOGY - MECHANISM FOR EFFECTIVE IMPLEMENTATION

Participation Certificate

This is to certify that Mr./Mrs. Bh. Geeta
of B. V. Raju Degree College, Bhimavaram has
participated in the Three Day National Level Workshop as Faculty Development Programme on
RESEARCH METHODOLOGY - MECHANISM FOR EFFECTIVE IMPLEMENTATION from 19-11-2019 to 21-11-2019.

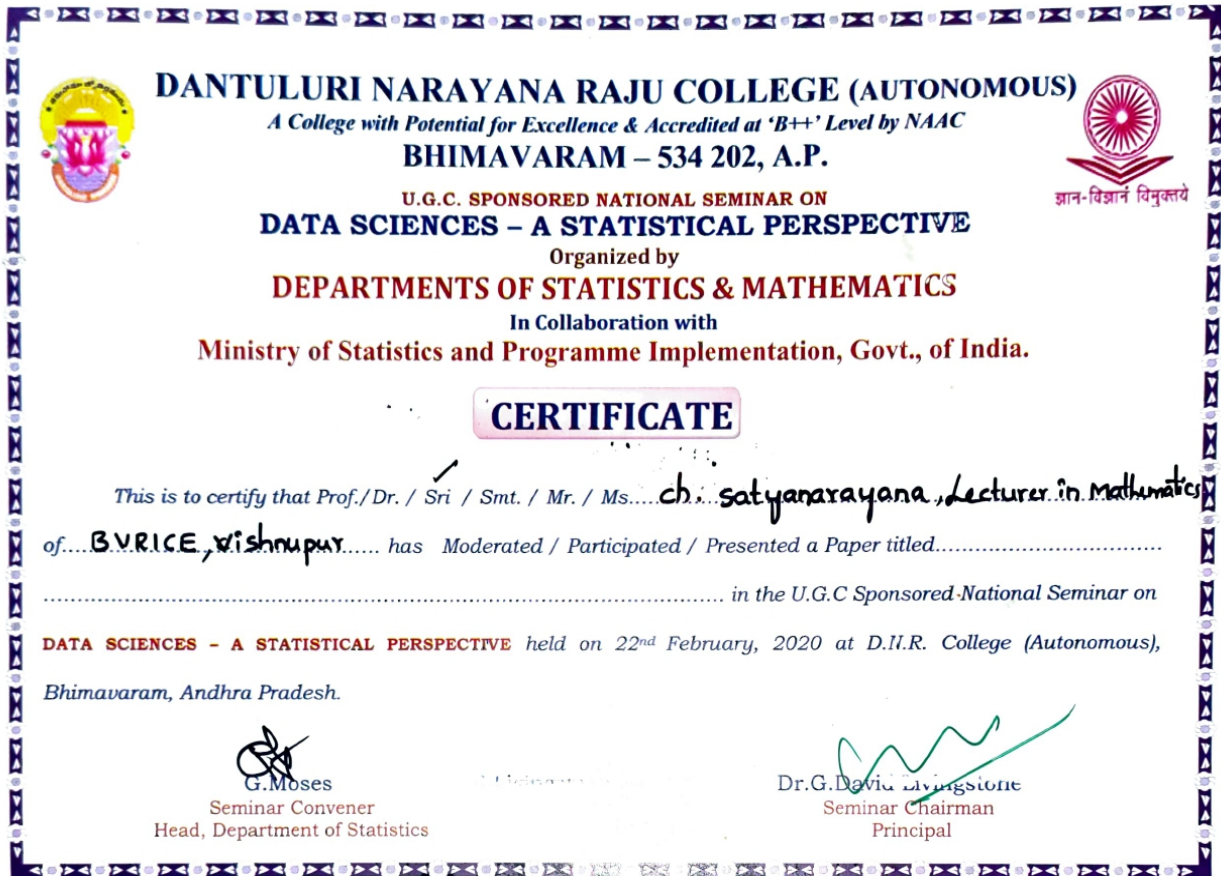

P.V.L. NARAYANA
RUSA Coordinator


G. CHANDRASEKHAR
IQAC Coordinator


Dr. J. SANATH KUMAR
Principal

S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Ch Satyanarayana	01

Data sciences-A Statistical perspective





**B.Y.RAJU
COLLEGE**

**VISHNUPUR -
BHIMAYARM -534202
6.3.3**



Mathematics Department 2020-2021

S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Paluri Madhura Subhashini	03

1. Applications of Mathematics in Research Methodology , Emerging Technologies
2. Two day National Webinar : NEMSEA
3. International webinar on Research Methodology



Hyderabad Institute of Technology and Management

(Accredited by NAAC, NBA (CSE, ECE), Approved by AICTE, Affiliated by JNTUH)
Medchal, Hyderabad, Telangana State, India

Certificate of Participation

This is to certify that

MADHURA SUBHASHINI. PALURI

has attended One Week Faculty Development Program on

“Applications of Mathematics in Research Methodology & Emerging Technologies”

from 12th to 16th October 2020, Organized by Department of Mathematics, HITAM.

Dr. Surekha Dhok
Convener

Dr. J Shivakumar
Principal



ADIKAVI NANNAYA UNIVERSITY

UNIVERSITY COLLEGE OF ENGINEERING

RAJAMAHENDRAVARAM

DEPARTMENT OF SCIENCE & HUMANITIES

A Two-Day National Webinar on

Emerging Trends in Mathematical Sciences and Engineering Applications

6 & 7 January, 2021

Certificate of Participation

This is to certify that P. Madhura subhashini
from B. V. Raju college has
attended the Two-Day National Webinar on "**Emerging Trends in Mathematical Sciences and Engineering Applications (NEMSEA 2021)**", held on 6th & 7th January 2021 organized by the Department of Science and Humanities, University College of Engineering.

Mr M Balakrishna
Course Coordinator

Dr G Venkata Rao
Convener

Dr V Persis
Principal, UCE



Y.V.N.R. GOVERNMENT DEGREE COLLEGE

(NAAC GRADE "B+" CGPA : 2.61)

AFFILIATED TO KRISHNA UNIVERSITY

KAIKALURU - 521 333, KRISHNA DIST. A.P.



18th & 19th
November 2021

International Webinar on

RESEARCH METHODOLOGY

Organised by : **Depts of Physics, Chemistry**
In Association with : **IQAC**



Certificate

This is to certify that Prof. / Dr. / Mr. / Ms. Madhura subhashini. Paluri
Professor / Asso. Prof. / Asst. Prof. / Research Scholar / Student of Mathematics
University / College B.V. Raju College, Bhimavaram
has participated in International Webinar on "RESEARCH METHODOLOGY".

Sri N. Srinivasa Rao
ORGANISING SECRETARY

Sri K. Ramesh
ORGANISING SECRETARY

Dr. R. Jala Babu
IQAC, CO-ORDINATOR

Dr. B. Raghunatha Reddy
PRINCIPAL

S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Ch Satyanarayana	04

1. FDP on Managing Online Classes & Co-Creating MOOCS 2.0
2. 1 Day Webinar
3. Research Design ethics and metrics.
4. Cyber security : Challenges and oppurtunities.





GOVERNMENT DEGREE COLLEGE

RAMACHANDRAPURAM, E.G.District, A.P,India-533255

(Affiliated to Adikavi Nannaya University,Rajamahendravaram)



CERTIFICATE OF PARTICIPATION

This is to certify that

SATYANARAYANA CHILUKURI

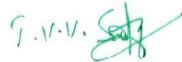
LECTURER of B V RAJU COLLEGE BHIMAVARAM

has participated in one day National webinar on ***“Role of Teachers to Ameliorate the psychological impact of covid-19 on student community”*** held on 6th June 2020 conducted by Department of Chemistry,Physics and Mathematics.



Basa Venkata Rao

Convenor



T.V.V.Saatyanarayana

Organising Secretary



Dr.P.Subhashini

Chairperson & Principal



ISO 9001:2015

NAAC 'A' Grade Cycle 3

K.B.N. COLLEGE (AUTONOMOUS)

Sponsored by S.K.P.V.V. Hindu High Schools' Committee, Kothapeta, Vijayawada - 520001.
A College with Potential for Excellence (CPE) All India 92nd Rank in NIRF by MHRD (2017)

Certificate Of Participation

This is to certify that Mr./Ms./Dr./Prof. SATYANARAYANA CHILUKURI of
..... B V RAJU COLLEGE College
has participated in **One-Week Virtual Faculty Development Programme (Under Autonomous Funds)** on
"RESEARCH DESIGN, ETHICS & METRICS" organized by **Internal Quality Assurance Cell**
(IQAC) and **Research Promotion & Monitoring Cell, K.B.N. College, Vijayawada** from **18th to 23rd October, 2021.**

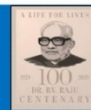
G. Venk
Convenor

K. Rao
Principal



B V RAJU INSTITUTE OF TECHNOLOGY

(UGC Autonomous)
Affiliated to JNTUH, Telangana
Vishnupur, Narsapur, Medak Dist.-502313



Department Of Information Technology

CERTIFICATE OF PARTICIPATION

THIS CERTIFIES THAT

SATYANARAYANA CH



COMPLETED WEBINAR ON
CYBER SECURITY: CHALLENGES & OPPURTUNITIES

MAY 31, 2020

[Signature]
Convenor

[Signature]
Principal

S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Madugula Siva	02

1. One week international FDP
2. Applications of Mathematics in Research Methodology , Emerging Technologies





S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	E.Ashok Lakshmana Rao	01

1. One week international FDP



ADIKAVI NANNAYA UNIVERSITY

RAJAMAHENDRAVARAM, ANDHRA PRADESH, INDIA - 533296



Certificate Of Participation

This is to certify that E Ashok Lakshmana Rao , Lecturer

B V Raju college

has participated in 1 Week International Faculty Development Programme on
" Enhancing Digital Proficiency: A Platform for Refining the Research and
Teaching Skills " on the dates 12th - 16th, August 2020.

DR.B. KEZIA RANI
CONVENER
NSS, CO-ORDINATOR
ADIKAVI NANNAYA UNIVERSITY

DR.D. AJAY RATHAN
CO - CONVENER
ASST.PROFESSOR, DCMS
ADIKAVI NANNAYA UNIVERSITY

PROF.B. GANGA RAO
REGISTRAR
ADIKAVI NANNAYA UNIVERSITY

PROF.M. JAGANNADHA RAO
VICE CHANCELLOR
ADIKAVI NANNAYA UNIVERSITY

S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Kadakatla Pavan Kumar	03

1 . One week international FDP

2. Applications of Mathematics in Research Methodology
3. Quantitative Methods Using SPSS





Hyderabad Institute of Technology and Management
(Accredited by NAAC, NBA (CSE, ECE), Approved by AICTE, Affiliated by JNTUH)
Medchal, Hyderabad, Telangana State, India

Certificate of Participation

This is to certify that

K PAVAN KUMAR

*has attended One Week Faculty Development Program on
"Applications of Mathematics in Research Methodology & Emerging Technologies"
from 12th to 16th October 2020, Organized by Department of Mathematics, HITAM.*

Dr. Surekha Dhok
Convener

Dr. J Shivakumar
Principal



**Hands-on Session on
Quantitative Methods using SPSS**

Certificate Of Participation

This is to certify that K pavan kumar

B.v.raju college

has participated in 2 day Hands on session on " **Quantative Methods using SPSS** "
organised by Tech Edu Teacher on the dates 13th & 14th Sep, 2020

Samuel Johnson K

PROF. SAMUEL JOHNSON. K
FACULTY - VSB - VIT AP UNIVERSITY
DIGITAL EDUCATIONAL COACH

S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	D.Sridevi Priyadarsini	03

1. Applications of Mathematics in Research Methodology, Emerging Technology
2. Two day National Webinar : NEMSEA
3. National Education Conclave





ADIKAVI NANNAYA UNIVERSITY

UNIVERSITY COLLEGE OF ENGINEERING

RAJAMAHENDRAVARAM

DEPARTMENT OF SCIENCE & HUMANITIES

**A Two-Day National Webinar on
Emerging Trends in Mathematical Sciences and Engineering Applications
6 & 7 January, 2021**

Certificate of Participation

This is to certify that Devireddy Sridevi Priyadarsini
from B.V.Raju college, vishnupur, Bhimavaram has
attended the Two-Day National Webinar on **"Emerging Trends in Mathematical Sciences
and Engineering Applications (NEMSEA 2021)"**, held on 6th & 7th January 2021 organized
by the Department of Science and Humanities, University College of Engineering.

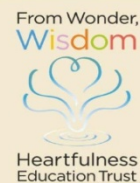
Mr M Balakrishna
Course Coordinator

Dr G Venkata Rao
Convener

Dr V Persis
Principal, UCE



Heartfulness Education Trust



Certificate Of Participation

This is to certify that Ms/Mr. Devireddy Sridevi Priyadarsini has participated
in the National Education Conclave on 'Re-Imagining University Education with a Heart-Centered Approach'
held on 12th and 13th January 2021.

Dr. Nivedita Shreyans
Convener
National Education Conclave



Mr. Ramesh Krishnan
Conference Director
National Education Conclave

S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	N.Veera kanaka Durga	02

1. Applications of Mathematics in Research Methodology , emerging Technologis
2. International webinar on Research Methodology





Y.V.N.R. GOVERNMENT DEGREE COLLEGE

(NAAC GRADE "B+" CGPA : 2.61)

AFFILIATED TO KRISHNA UNIVERSITY

KAIKALURU - 521 333, KRISHNA DIST. A.P.



18th & 19th
November 2021

International Webinar on **RESEARCH METHODOLOGY**

Organised by : **Depts of Physics, Chemistry**
In Association with : **IQAC**



Certificate

This is to certify that Prof. / Dr. / Mr. / Ms. *Nandikolla Veera Kanaka Durga*
Professor / Asso. Prof. / Asst. Prof. / Research Scholar / Student of *Statistics*
University / College *B.V. Raju College, Bhimavaram*
has participated in International Webinar on "RESEARCH METHODOLOGY".

Sri N. Srinivasa Rao
ORGANISING SECRETARY

Sri K. Ramesh
ORGANISING SECRETARY

Dr. R. Jala Babu
IQAC, CO-ORDINATOR

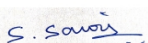
Dr. B. Raghunatha Reddy
PRINCIPAL


S.NO	NAME OF THE FACULTY	NO OF FDP'S ATTENDED
1	Dusanapudi Radha Krishna	03

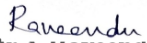
1. Applications of Mathematics in Research Methodology , emerging Technologies
2. 5 day online FDP
3. One day National Webinar


MALLA REDDY ENGINEERING COLLEGE(Autonomous)
5-Day Online Faculty Development Program
on
Applications of Mathematics and Statistics in Engineering (AMSE-2020)
Certificate of Participation

This is to certify that
RADHAKRISHNA.DUSANAPUDI
Of BV RAJU COLLEGE Participated in a **5- Day FDP** on **"Applications of Mathematics and Statistics in Engineering"(AMSE-2020), 23rd- 27th Nov, 2020** organized by the Department of Mathematics, Malla Reddy Engineering College(Autonomous), Secunderabad.


Prof. S Saroja
 Convener & HOD


Dr. Y. Suresh Kumar
 Coordinator


Dr. A. Kaveendra
 Principal


Dr. A. Ramaswami Reddy
 Director

KXLOM8-CE000469
Made for free with Certify'em

ADIKAVI NANNAYA UNIVERSITY
Rajamahendravaram-533296
 ISO:9001:2015 Certified
NATIONAL SERVICE SCHEME
CERTIFICATE OF PARTICIPATION

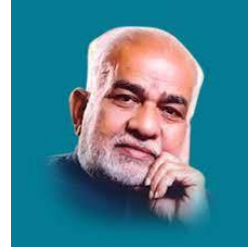
This is to certify that
Dusanapudi Radha Krishna
 has participated in the One day National Webinar on
"Business Intelligence as a Service (BlaaS) - Key Enabler in Driving Digital Transformation"
 organized by the NSS Cell, Adikavi Nannaya University, Rajamahendravaram,
 Andhra Pradesh on 10-06-2021


Dr. B. Kezia Rani
 NSS Coordinator
 AKNU


Prof. T. Ashok
 Registrar
 AKNU


Prof. M. Jagannadha Rao
 Vice-Chancellor
 AKNU

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B.V.RAJU COLLEGE
VISHNUPUR, BHIMAVARAM
DEPARTMENT OF M.Sc. CHEMISTRY

5.1.3- Capacity building and skills enhancement initiatives

ACADEMIC YEAR
2017-2018



B.V.RAJU COLLEGE

VISHNUPUR, BHIMAVARAM

DEPARTMENT OF M.Sc. CHEMISTRY

5.1.3- Capacity building and skills enhancement initiatives

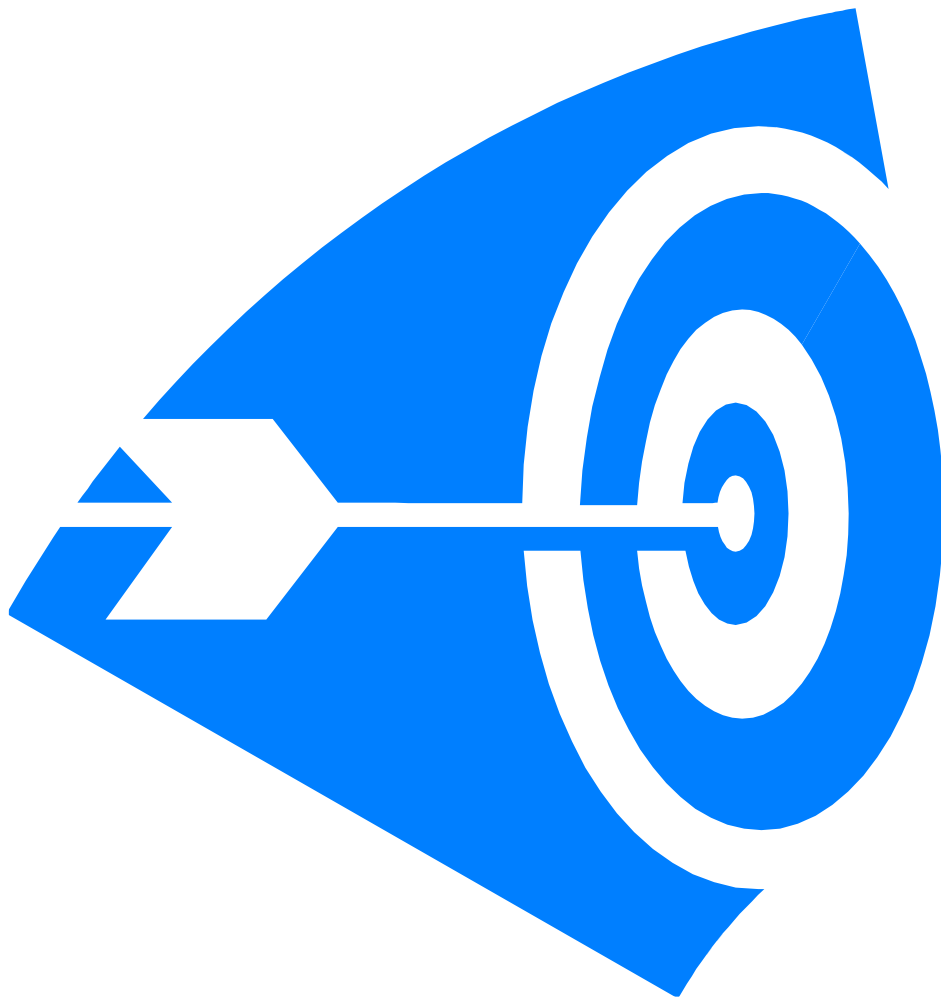
S.No.	Name of the capacity development and skills enhancement program	Year of the students	Date of implementation (DD-MM-YYYY)	Number of students enrolled	Name of the agencies/consultants involved with contact details (if any)	Department offered
1.	Spoken English	II year M.Sc. Chemistry	07/03/2017	25	UG English Department	M.Sc. CHEMSITRY
2.	Personal counselling	I & II year M.Sc. Chemistry	18/07/2017	10	Internal	M.Sc. CHEMSITRY
3.	Bridge Course	I year M.Sc. Chemistry	23/07/2017	7	Internal	M.Sc. CHEMSITRY
4.	Remedial classes	I & II year M.Sc. Chemistry	01/09/2017	14	Internal	M.Sc. CHEMSITRY
5.	Mentoring	I & II year M.Sc. Chemistry	03/07/2017	56	Internal	M.Sc. CHEMSITRY

SPOKEN ENGLISH

2017-2018

**BV RAJU COLLEGE-
VISHNUPUR, BHIMAVARAM
SPOKEN ENGLISH**

Language is wine upon the lips



SHORT MATERIAL FOR THIRTY-DAYS PROGRAMME

SPOKEN ENGLISH

SYLLABUS

I VOCABULARY

II TENSES AND STRUCTURES

III VOICE

IV SPEECH

V MODALS

VI CONCORD

VII PREPOSITIONS

VIII ARTICLES

IX CONVERSATIONS

X SELF INTRODUCTION

vocabulary

Vocabulary refers to the words we know to communicate effectively. In general, vocabulary can be described as oral vocabulary or reading vocabulary.

- ❖ Oral vocabulary refers to the words we use in speaking or recognize in listening.
- ❖ Reading vocabulary refers to the words we recognize in print.

Here are some big ways that boosting the brain's word bank can help throughout our lives.

- Faster processing speed
- Expanded abstract thinking
- More success at work
- Improved citizenship

A good vocabulary is the single best predictor for career success.

S.No.	VERB FORM-1	VERB FORM-2	VERB FORM-3
1	abash	abashed	abashed
2	Abate	abated	abated
3	abide	abode	abode
4	absorb	absorbed	absorbed
5	accept	accepted	accepted
6	accompany	accompanied	accompanied
7	ache	ached	ached
8	achieve	achieved	achieved
9	acquire	acquired	acquired
10	act	acted	acted
11	add	added	added
12	address	addressed	addressed
13	adjust	adjusted	adjusted
14	admire	admired	admired
15	admit	admitted	admitted
16	advise	advised	advised
18	agree	agreed	agreed
22	announce	announced	announced
24	apologize	apologized	apologized
25	appear	appeared	appeared
26	applaud	applauded	applauded
28	approach	approached	approached
29	approve	approved	approved
30	argue	argued	argued
31	arise	arose	arisen

32	arrange	arranged	arranged
33	arrest	arrested	arrested
34	ask	asked	asked
35	assert	asserted	asserted
37	astonish	astonished	astonished
42	avoid	avoided	avoided
43	awake	awoke	awoken
45	banish	banished	banished
46	bash	bashed	bashed
47	bat	batted	batted
48	be (am,are)	was / were	been
49	bear	bore	born
50	bear	bore	borne
51	beat	beat	beaten
52	beautify	beautified	beautified
53	become	became	become
54	befall	befell	befallen
55	beg	begged	begged
56	begin	began	begun
57	behave	behaved	behaved
58	behold	beheld	beheld
59	believe	believed	believed
60	belong	belonged	belonged
61	bend	bent	bent
62	bereave	bereft	bereft
63	beseech	besought	besought
64	bet	bet	bet
65	betray	betrayed	betrayed
66	bid	bade	bidden
67	bid	bid	bid
68	bind	bound	bound
69	bite	bit	bitten
70	bleed	bled	bled
71	bless	blessed	blessed
72	blossom	blossomed	blossomed
73	blow	blew	blown
74	blur	blurred	blurred
75	blush	blushed	blushed
76	board	boarded	boarded
77	boast	boasted	boasted
78	boil	boiled	boiled
79	bow	bowed	bowed
80	box	boxed	boxed
81	bray	brayed	brayed

82	break	broke	broken
83	breathe	breathed	breathed
84	breed	bred	bred
85	bring	brought	brought
86	broadcast	broadcast	broadcast
87	brush	brushed	brushed
88	build	built	built
89	burn	burnt	burnt
90	burst	burst	burst
91	bury	buried	buried
92	bust	bust	bust
93	buy	bought	bought
94	buzz	buzzed	buzzed
95	calculate	calculated	calculated
96	call	called	called
97	canvass	canvassed	canvassed
98	capture	captured	captured
99	caress	caressed	caressed
100	carry	carried	carried
101	carve	carved	carved
102	cash	cash	cash
103	cast	cast	cast
104	catch	caught	caught
105	cause	caused	caused
106	cease	ceased	ceased
107	celebrate	celebrated	celebrated
108	challenge	challenged	challenged
109	change	changed	changed
110	charge	charged	charged
111	chase	chased	chased
112	chat	chatted	chatted
113	check	checked	checked
114	cheer	cheered	cheered
115	chew	chewed	chewed
116	chide	chid	chid/chidden
117	chip	chipped	chipped
118	choke	choked	choked
119	choose	chose	chosen
120	classify	classified	classified
121	clean	cleaned	cleaned
122	cleave	clove/cleft	cloven/cleft
123	click	clicked	clicked
124	climb	climbed	climbed
125	cling	clung	clung

126	close	closed	closed
127	clothe	clad	clad
128	clutch	clutched	clutched
129	collapse	collapsed	collapsed
130	collect	collected	collected
131	colour	coloured	coloured
132	come	came	come
133	comment	commented	commented
134	compare	compared	compared
135	compel	compelled	compelled
136	compete	competed	competed
137	complain	complained	complained
138	complete	completed	completed
139	conclude	concluded	concluded
140	conduct	conducted	conducted
141	confess	confessed	confessed
142	confine	confined	confined
143	confiscate	confiscated	confiscated
144	confuse	confused	confused
145	congratulate	congratulated	congratulated
146	connect	connected	connected
147	connote	connoted	connoted
148	conquer	conquered	conquered
149	consecrate	consecrated	consecrated
150	consent	consented	consented
151	conserve	conserved	conserved
152	consider	considered	considered
153	consign	consigned	consigned
154	consist	consisted	consisted
155	console	consoled	consoled
156	consort	consorted	consorted
157	conspire	conspired	conspired
158	constitute	constituted	constituted
159	constrain	constrained	constrained
160	construct	constructed	constructed
161	construe	construed	construed
162	consult	consulted	consulted
163	contain	contained	contained
164	contemn	contemned	contemned
165	contend	contended	contended
166	contest	contested	contested
167	continue	continued	continued
168	contract	contracted	contracted
169	contradict	contradicted	contradicted

170	contrast	contrasted	contrasted
171	contribute	contributed	contributed
172	contrive	contrived	contrived
173	control	controlled	controlled
174	convene	convened	convened
175	converge	converged	converged
176	converse	conversed	conversed
177	convert	converted	converted
178	convey	conveyed	conveyed
179	convict	convicted	convicted
180	convince	convinced	convinced
181	coo	cooed	cooed
182	cook	cooked	cooked
183	cool	cooled	cooled
184	co-operate	co-operated	co-operated
185	cope	coped	cope
186	copy	copied	copied
187	correct	corrected	corrected
188	correspond	corresponded	corresponded
189	corrode	corroded	corroded
190	corrupt	corrupted	corrupted
191	cost	cost	cost
192	cough	coughed	coughed
193	counsel	counselled	counselled
194	count	counted	counted
195	course	coursed	coursed
196	cover	covered	covered
197	cower	cowered	cowered
198	crack	cracked	cracked
199	crackle	crackled	crackled
200	crash	crashed	crashed
201	crave	craved	craved
202	create	created	created
203	creep	crept	crept
204	crib	cribbed	cribbed
205	cross	crossed	crossed
206	crowd	crowded	crowded
207	crush	crushed	crushed
208	cry	cried	cried
209	curb	curbed	curbed
210	cure	cured	cured
211	curve	curved	curved
212	cut	cut	cut
213	cycle	cycled	cycled

214	damage	damaged	damaged
215	damp	damped	damped
216	dance	danced	danced
217	dare	dared	dared
218	dash	dashed	dashed
219	dazzle	dazzled	dazzled
220	deal	dealt	dealt
221	decay	decayed	decayed
222	decide	decided	decided
223	declare	declared	declared
224	decorate	decorated	decorated
225	decrease	decreased	decreased
226	dedicate	dedicated	dedicated
227	delay	delayed	delayed
228	delete	deleted	deleted
229	deny	denied	denied
230	depend	depended	depended
231	deprive	deprived	deprived
232	derive	derived	derived
233	describe	described	described
234	desire	desired	desired
235	destroy	destroyed	destroyed
236	detach	detached	detached
237	detect	detected	detected
238	determine	determined	determined
239	develop	developed	developed
240	die	died	died
241	differ	differed	differed
242	dig	dug	dug
243	digest	digested	digested
244	dim	dimmed	dimmed
245	diminish	diminished	diminished
246	dine	dined	dined
247	dip	dipped	dipped
248	direct	directed	directed
249	disappear	disappeared	disappeared
250	discover	discovered	discovered
251	discuss	discussed	discussed
252	disobey	disobeyed	disobeyed
253	display	displayed	displayed
254	dispose	disposed	disposed
255	distribute	distributed	distributed
256	disturb	disturbed	disturbed
257	disuse	disused	disused

258	dive	dived	dived
259	divide	divided	divided
260	do	did	done
261	donate	donated	donated
262	download	downloaded	downloaded
263	drag	dragged	dragged
264	draw	drew	drawn
265	dream	dreamt	dreamt
266	dress	dressed	dressed
267	drill	drilled	drilled
268	drink	drank	drunk
269	drive	drove	driven
270	drop	dropped	dropped
271	dry	dried	dried
272	dump	dumped	dumped
273	dwell	dwelt	dwelt
274	dye	dyed	dyed
275	earn	earned	earned
276	eat	ate	eaten
277	educate	educated	educated
278	empower	empowered	empowered
279	empty	emptied	emptied
280	encircle	encircled	encircled
281	encourage	encouraged	encouraged
282	encroach	encroached	encroached
283	endanger	endangered	endangered
284	endorse	endorsed	endorsed
285	endure	endured	endured
286	engrave	engraved	engraved
287	enjoy	enjoyed	enjoyed
288	enlarge	enlarged	enlarged
289	enlighten	enlightened	enlightened
290	enter	entered	entered
291	envy	envied	envied
292	erase	erased	erased
293	escape	escaped	escaped
294	evaporate	evaporated	evaporated
295	exchange	exchanged	exchanged
296	exclaim	exclaimed	exclaimed
297	exclude	excluded	excluded
298	exist	existed	existed
299	expand	expanded	expanded
300	expect	expected	expected
301	explain	explained	explained

302	explore	explored	explored
303	express	expressed	expressed
304	extend	extended	extended
305	eye	eyed	eyed
306	face	faced	faced
307	fail	failed	failed
308	faint	fainted	fainted
309	fall	fell	fallen
310	fan	fanned	fanned
311	fancy	fancied	fancied
312	favour	favoured	favoured
313	fax	faxed	faxed
314	feed	fed	fed
315	feel	felt	felt
316	ferry	ferried	ferried
317	fetch	fetches	fetches
318	fight	fought	fought
319	fill	filled	filled
320	find	found	found
321	finish	finished	finished
322	fish	fished	fished
323	fit	fit/fitted	fit/fitted
324	fix	fixed	fixed
325	fizz	fizzed	fizzed
326	flap	flapped	flapped
327	flash	flashed	flashed
328	flee	fled	fled
329	fling	flung	flung
330	float	floated	floated
331	flop	flopped	flopped
332	fly	flew	flown
333	fold	folded	folded
334	follow	followed	followed
335	forbid	forbade	forbidden
336	force	forced	forced
337	forecast	forecast	forecast
338	foretell	foretold	foretold
339	forget	forgot	forgotten
340	forgive	forgave	forgiven
341	forlese	forlore	forlorn
342	form	formed	formed
343	forsake	forsook	forsaken
344	found	founded	founded
345	frame	framed	framed

346	free	freed	freed
347	freeze	froze	frozen
348	frighten	frightened	frightened
349	fry	fried	fried
350	fulfil	fulfilled	fulfilled
351	gag	gagged	gagged
352	gain	gained	gained
353	gainsay	gainsaid	gainsaid
354	gash	gashed	gashed
355	gaze	gazed	gazed
356	get	got	got
357	give	gave	given
358	glance	glanced	glanced
359	glitter	glittered	glittered
360	glow	glowed	glowed
361	go	went	gone
362	google	googled	googled
363	govern	governed	governed
364	grab	grabbed	grabbed
365	grade	graded	graded
366	grant	granted	granted
367	greet	greeted	greeted
368	grind	ground	ground
369	grip	gripped	gripped
370	grow	grew	grown
371	guard	guarded	guarded
372	guess	guessed	guessed
373	guide	guided	guided
374	handle	handled	handled
375	hang	hung	hung
376	happen	happened	happened
377	harm	harmed	harmed
378	hatch	hatched	hatched
379	hate	hated	hated
380	have	had	had
381	heal	healed	healed
382	hear	heard	heard
383	heave	hove	hove
384	help	helped	helped
385	hew	hewed	hewn
386	hide	hid	hidden
387	hinder	hindered	hindered
388	hiss	hissed	hissed
389	hit	hit	hit

390	hoax	hoaxed	hoaxed
391	hold	held	held
392	hop	hopped	hopped
393	hope	hoped	hoped
394	horrify	horrified	horrified
395	hug	hugged	hugged
396	hum	hummed	hummed
397	humiliate	humiliated	humiliated
398	hunt	hunted	hunted
399	hurl	hurled	hurled
400	hurry	hurried	hurried
401	hurt	hurt	hurt
402	hush	hushed	hushed
403	hustle	hustled	hustled
404	hypnotize	hypnotized	hypnotized
405	idealize	idealized	idealized
406	identify	identified	identified
407	idolize	idolized	idolized
408	ignite	ignited	ignited
409	ignore	ignored	ignored
410	ill-treat	ill-treated	ill-treated
411	illuminate	illuminated	illuminated
412	illumine	illuminated	illuminated
413	illustrate	illustrated	illustrated
414	imagine	imagined	imagined
415	imbibe	imbibed	imbibed
416	imitate	imitated	imitated
417	immerse	immersed	immersed
418	immolate	immolated	immolated
419	immure	immured	immured
420	impair	impaired	impaired
421	impart	imparted	imparted
422	impeach	impeached	impeached
423	impede	impeded	impeded
424	impel	impelled	impelled
425	impend	impended	impended
426	imperil	imperilled	imperilled
427	impinge	impinged	impinged
428	implant	implanted	implanted
429	implicate	implicated	implicated
430	implode	imploded	imploded
431	implore	implored	implored
432	imply	implied	implied
433	import	imported	imported

434	impose	imposed	imposed
435	impress	impressed	impressed
436	imprint	imprinted	imprinted
437	imprison	imprisoned	imprisoned
438	improve	improved	improved
439	inaugurate	inaugurated	inaugurated
440	incise	incised	incised
441	include	included	included
442	increase	increased	increased
443	inculcate	inculcated	inculcated
444	indent	indented	indented
445	indicate	indicated	indicated
446	induce	induced	induced
447	indulge	indulged	indulged
448	infect	infected	infected
449	infest	infested	infested
450	inflamm	inflamed	inflamed
451	inflate	inflated	inflated
452	inflect	inflected	inflected
453	inform	informed	informed
454	infringe	infringed	infringed
455	infuse	infused	infused
456	ingest	ingested	ingested
457	inhabit	inhabited	inhabited
458	inhale	inhaled	inhaled
459	inherit	inherited	inherited
460	initiate	initiated	initiated
461	inject	injected	injected
462	injure	injured	injured
463	inlay	inlaid	inlaid
464	innovate	innovated	innovated
465	input	input	input
466	inquire	inquired	inquired
467	inscribe	inscribed	inscribed
468	insert	inserted	inserted
469	inspect	inspected	inspected
470	inspire	inspired	inspired
471	install	installed	installed
472	insult	insulted	insulted
473	insure	insured	insured
474	integrate	integrated	integrated
475	introduce	introduced	introduced
476	invent	invented	invented
477	invite	invited	invited

478	join	joined	joined
479	jump	jumped	jumped
480	justify	justified	justified
481	keep	kept	kept
482	kick	kicked	kicked
483	kid	kidded	kidded
484	kill	killed	killed
485	kiss	kissed	kissed
486	kneel	knelt	knelt
487	knit	knit	knit
488	knock	knocked	knocked
489	know	knew	known
490	lade	laded	laden
491	land	landed	landed
492	last	lasted	lasted
493	latch	latched	latched
494	laugh	laughed	laughed
495	lay	laid	laid
496	lead	led	led
497	leak	leaked	leaked
498	lean	leant	leant
499	leap	leapt	leapt
500	learn	learnt	learnt
501	leave	left	left
502	leer	leered	leered
503	lend	lent	lent
504	let	let	let
505	lick	licked	licked
506	lie	lay	lain
507	lie	lied	lied
508	lift	lifted	lifted
509	light	lit	lit
510	like	liked	liked
511	limp	limped	limped
512	listen	listened	listened
513	live	lived	lived
514	look	looked	looked
515	lose	lost	lost
516	love	loved	loved
517	magnify	magnified	magnified
518	maintain	maintained	maintained
519	make	made	made
520	manage	managed	managed
521	march	marched	marched

522	mark	marked	marked
523	marry	married	married
524	mash	mashed	mashed
525	match	matched	matched
526	matter	mattered	mattered
527	mean	meant	meant
528	measure	measured	measured
529	meet	met	met
530	melt	melted	melted
531	merge	merged	merged
532	mew	mewed	mewed
533	migrate	migrated	migrated
534	milk	milked	milked
535	mind	minded	minded
536	mislead	misled	misled
537	miss	missed	missed
538	mistake	mistook	mistaken
539	misuse	misused	misused
540	mix	mixed	mixed
541	moan	moaned	moaned
542	modify	modified	modified
543	moo	mooed	mooed
544	motivate	motivated	motivated
545	mould	moulded	moulded
546	moult	moulted	moulted
547	move	moved	moved
548	mow	mowed	mown
549	multiply	multiplied	multiplied
550	murmur	murmured	murmured
551	nail	nailed	nailed
552	nap	napped	napped
553	need	needed	needed
554	neglect	neglected	neglected
555	nip	nipped	nipped
556	nod	nodded	nodded
557	note	noted	noted
558	notice	noticed	noticed
559	notify	notified	notified
560	nourish	nourished	nourished
561	nurse	nursed	nursed
562	obey	obeyed	obeyed
563	oblige	obliged	obliged
564	observe	observed	observed
565	obstruct	obstructed	obstructed

566	obtain	obtained	obtained
567	occupy	occupied	occupied
568	occur	occurred	occurred
569	offer	offered	offered
570	offset	offset	offset
571	omit	omitted	omitted
572	ooze	oozed	oozed
573	open	opened	opened
574	operate	operated	operated
575	opine	opined	opined
576	oppress	oppressed	oppressed
577	opt	opted	opted
578	optimize	optimized	optimized
579	order	ordered	ordered
580	organize	organized	organized
581	originate	originated	originated
582	output	output	output
583	overflow	overflowed	overflowed
584	overtake	overtook	overtaken
585	owe	owed	owed
586	own	owned	owned
587	pacify	pacified	pacified
588	paint	painted	painted
589	pardon	pardoned	pardoned
590	part	parted	parted
591	partake	partook	partaken
592	participate	participated	participated
593	pass	passed	passed
594	paste	pasted	pasted
595	pat	patted	patted
596	patch	patched	patched
597	pause	paused	paused
598	pay	paid	paid
599	peep	peeped	peeped
600	perish	perished	perished
601	permit	permitted	permitted
602	persuade	persuaded	persuaded
603	phone	phoned	phoned
604	place	placed	placed
605	plan	planned	planned
606	play	played	played
607	plead	pled	pled
608	please	pleased	pleased
609	plod	plodded	plodded

610	plot	plotted	plotted
611	pluck	plucked	plucked
612	ply	plied	plied
613	point	pointed	pointed
614	polish	polished	polished
615	pollute	polluted	polluted
616	ponder	pondered	pondered
617	pour	poured	poured
618	pout	pouted	pouted
619	practise	practised	practised
620	praise	praised	praised
621	pray	prayed	prayed
622	preach	preached	preached
623	prefer	preferred	preferred
624	prepare	prepared	prepared
625	prescribe	prescribed	prescribed
626	present	presented	presented
627	preserve	preserved	preserved
628	preset	preset	preset
629	preside	presided	presided
630	press	pressed	pressed
631	pretend	pretended	pretended
632	prevent	prevented	prevented
633	print	printed	printed
634	proceed	proceeded	proceeded
635	produce	produced	produced
636	progress	progressed	progressed
637	prohibit	prohibited	prohibited
638	promise	promised	promised
639	propose	proposed	proposed
640	prosecute	prosecuted	prosecuted
641	protect	protected	protected
642	prove	proved	proved
643	provide	provided	provided
644	pull	pulled	pulled
645	punish	punished	punished
646	purify	purified	purified
647	push	pushed	pushed
648	put	put	put
649	qualify	qualified	qualified
650	quarrel	quarrelled	quarrelled
651	question	questioned	questioned
652	quit	quit	quit
653	race	raced	raced

654	rain	rained	rained
655	rattle	rattled	rattled
656	reach	reached	reached
657	read	read	read
658	realize	realized	realized
659	rebuild	rebuilt	rebuilt
660	recall	recalled	recalled
661	recast	recast	recast
662	receive	received	received
663	recite	recited	recited
664	recognize	recognized	recognized
665	recollect	recollected	recollected
666	recur	recurred	recurred
667	redo	redid	redone
668	reduce	reduced	reduced
669	refer	referred	referred
670	reflect	reflected	reflected
671	refuse	refused	refused
672	regard	regarded	regarded
673	regret	regretted	regretted
674	relate	related	related
675	relax	relaxed	relaxed
676	rely	relied	relied
677	remain	remained	remained
678	remake	remade	remade
679	remove	removed	removed
680	rend	rent	rent
681	renew	renewed	renewed
682	renounce	renounced	renounced
683	repair	repaired	repaired
684	repeat	repeated	repeated
685	replace	replaced	replaced
686	reply	replied	replied
687	report	reported	reported
688	request	requested	requested
689	resell	resold	resold
690	resemble	resembled	resembled
691	reset	reset	reset
692	resist	resisted	resisted
693	resolve	resolved	resolved
694	respect	respected	respected
695	rest	rested	rested
696	restrain	restrained	restrained
697	retain	retained	retained

698	retch	retched	retched
699	retire	retired	retired
700	return	returned	returned
701	reuse	reused	reused
702	review	reviewed	reviewed
703	rewind	rewound	rewound
704	rid	rid	rid
705	ride	rode	ridden
706	ring	rang	rung
707	rise	rose	risen
708	roar	roared	roared
709	rob	robbed	robbed
710	roll	rolled	rolled
711	rot	rotted	rotted
712	rub	rubbed	rubbed
713	rule	ruled	ruled
714	run	ran	run
715	rush	rushed	rushed
716	sabotage	sabotaged	sabotaged
717	sack	sacked	sacked
718	sacrifice	sacrificed	sacrificed
719	sadden	saddened	saddened
720	saddle	saddled	saddled
721	sag	sagged	sagged
722	sail	sailed	sailed
723	sally	sallied	sallied
724	salute	saluted	saluted
725	salvage	salvaged	salvaged
726	salve	salved	salved
727	sample	sampled	sampled
728	sanctify	sanctified	sanctified
729	sanction	sanctioned	sanctioned
730	sap	sapped	sapped
731	saponify	saponified	saponified
732	sash	sashed	sashed
733	sashay	sashayed	sashayed
734	sass	sassed	sassed
735	sate	sated	sated
736	satiate	satiated	satiated
737	satirise	satirised	satirised
738	satisfy	satisfied	satisfied
739	saturate	saturated	saturated
740	saunter	sauntered	sauntered
741	save	saved	saved

742	savor	savored	savored
743	savvy	savvied	savvied
744	saw	sawed	sawn
745	say	said	said
746	scab	scabbed	scabbed
747	scabble	scabbled	scabbled
748	scald	scalded	scalded
749	scale	scaled	scaled
750	scam	scammed	scammed
751	scan	scanned	scanned
752	scant	scanted	scanted
753	scar	scarred	scarred
754	scare	scared	scared
755	scarify	scarified	scarified
756	scarp	scarped	scarped
757	scat	scatted	scatted
758	scatter	scattered	scattered
759	scold	scolded	scolded
760	scorch	scorched	scorched
761	scowl	scowled	scowled
762	scrawl	scrawled	scrawled
763	scream	screamed	screamed
764	screw	screwed	screwed
765	scrub	scrubbed	scrubbed
766	search	searched	searched
767	seat	seated	seated
768	secure	secured	secured
769	see	saw	seen
770	seek	sought	sought
771	seem	seemed	seemed
772	seize	seized	seized
773	select	selected	selected
774	sell	sold	sold
775	send	sent	sent
776	sentence	sentenced	sentenced
777	separate	separated	separated
778	set	set	set
779	sever	severed	severed
780	sew	sewed	sewn
781	shake	shook	shaken
782	shape	shaped	shaped
783	share	shared	shared
784	shatter	shattered	shattered
785	shave	shove	shaven

786	shear	shore	shorn
787	shed	shed	shed
788	shine	shone	shone
789	shirk	shirked	shirked
790	shit	shit	shit
791	shiver	shivered	shivered
792	shock	shocked	shocked
793	shoe	shod	shod
794	shoot	shot	shot
795	shorten	shortened	shortened
796	shout	shouted	shouted
797	show	showed	shown
798	shrink	shrank	shrunk
799	shun	shunned	shunned
800	shut	shut	shut
801	sight	sighted	sighted
802	signal	signalled	signalled
803	signify	signified	signified
804	sing	sang	sung
805	sink	sank	sunk
806	sip	sipped	sipped
807	sit	sat	sat
808	ski	skied	skied
809	skid	skidded	skidded
810	slam	slammed	slammed
811	slay	slew	slain
812	sleep	slept	slept
813	slide	slid	slid/slide
814	slim	slimmed	slimmed
815	sling	slung	slung
816	slink	slunk	slunk
817	slip	slipped	slipped
818	slit	slit	slit
819	smash	smashed	smashed
820	smell	smelt	smelt
821	smile	smiled	smiled
822	smite	smote	smitten
823	smooth	smoothed	smoothed
824	smother	smothered	smothered
825	snap	snapped	snapped
826	snatch	snatched	snatched
827	sneak	sneaked	sneaked
828	sneeze	sneezed	sneezed
829	sniff	sniffed	sniffed

830	soar	soared	soared
831	sob	sobbed	sobbed
832	solicit	solicited	solicited
833	solve	solved	solved
834	soothe	soothed	soothed
835	sort	sorted	sorted
836	sow	sowed	sowed
837	sparkle	sparkled	sparkled
838	speak	spoke	spoken
839	speed	sped	sped
840	spell	spelt	spelt
841	spend	spent	spent
842	spill	spilt	spilt
843	spin	span/spun	spun
844	spit	spat/spit	spat/spit
845	split	split	split
846	spoil	spoilt	spoilt
847	spray	sprayed	sprayed
848	spread	spread	spread
849	spring	sprang	sprung
850	sprout	sprouted	sprouted
851	squeeze	squeezed	squeezed
852	stand	stood	stood
853	stare	stared	stared
854	start	started	started
855	state	stated	stated
856			
857	stay	stayed	stayed
858	steal	stole	stolen
859	steep	steeped	steeped
860	stem	stemmed	stemmed
861	step	stepped	stepped
862	sterilize	sterilized	sterilized
863	stick	stuck	stuck
864	stimulate	stimulated	stimulated
865	sting	stung	stung
866	stink	stank	stunk
867	stir	stirred	stirred
868	stitch	stitched	stitched
869	stoop	stooped	stooped
870	stop	stopped	stopped
871	store	stored	stored
872	strain	strained	strained
873	stray	strayed	strayed

874	stress	stressed	stressed
875	stretch	stretched	stretched
876	strew	strewed	strewn
877	stride	strode	stridden
878	strike	struck	struck/stricken
879	string	strung	strung
880	strive	strove	striven
881	study	studied	studied
882	submit	submitted	submitted
883	subscribe	subscribed	subscribed
884	subtract	subtracted	subtracted
885	succeed	succeeded	succeeded
886	suck	sucked	sucked
887	suffer	suffered	suffered
888	suggest	suggested	suggested
889	summon	summoned	summoned
890	supply	supplied	supplied
891	support	supported	supported
892	suppose	supposed	supposed
893	surge	surged	surged
894	surmise	surmised	surmised
895	surpass	surpassed	surpassed
896	surround	surrounded	surrounded
897	survey	surveyed	surveyed
898	survive	survived	survived
899	swallow	swallowed	swallowed
900	sway	swayed	swayed
901	swear	swore	sworn
902	sweat	sweat	sweat
903	sweep	swept	swept
904	swell	swelled	swollen
905	swim	swam	swum
906	swing	swung	swung
907	swot	swotted	swotted
908	take	took	taken
909	talk	talked	talked
910	tap	tapped	tapped
911	taste	tasted	tasted
912	tax	taxed	taxed
913	teach	taught	taught
914	tear	tore	torn
915	tee	teed	teed
916	tell	told	told
917	tempt	tempted	tempted

918	tend	tended	tended
919	terminate	terminated	terminated
920	terrify	terrified	terrified
921	test	tested	tested
922	thank	thanked	thanked
923	think	thought	thought
924	thrive	throve	thriven
925	throw	threw	thrown
926	thrust	thrust	thrust
927	thump	thumped	thumped
928	tie	tied	tied
929	tire	tired	tired
930	toss	tossed	tossed
931	touch	touched	touched
932	train	trained	trained
933	trample	trampled	trampled
934	transfer	transferred	transferred
935	transform	transformed	transformed
936	translate	translated	translated
937	trap	trapped	trapped
938	travel	travelled	travelled
939	tread	trod	trodden
940	treasure	treasured	treasured
941	treat	treated	treated
942	tree	treed	treed
943	tremble	trembled	trembled
944	triumph	triumphed	triumphed
945	trust	trusted	trusted
946	try	tried	tried
947	turn	turned	turned
948	type	typed	typed
949	typeset	typeset	typeset
950	understand	understood	understood
951	undo	undid	undone
952	uproot	uprooted	uprooted
953	upset	upset	upset
954	urge	urged	urged
955	use	used	used
956	utter	uttered	uttered
957	value	valued	valued
958	vanish	vanished	vanished
959	vary	varied	varied
960	verify	verified	verified
961	vex	vexed	vexed

962	vie	vied	vied
963	view	viewed	viewed
964	violate	violated	violated
965	vomit	vomited	vomited
966	wake	woke	woken
967	walk	walked	walked
968	wander	wandered	wandered
969	want	wanted	wanted
970	warn	warned	warned
971	waste	wasted	wasted
972	watch	watched	watched
973	water	watered	watered
974	wave	waved	waved
975	wax	waxed	waxed
976	waylay	waylaid	waylaid
977	wear	wore	worn
978	weave	wove	woven
979	wed	wed	wed
980	weep	wept	wept
981	weigh	weighed	weighed
982	welcome	welcomed	welcomed
983	wend	went	went
984	wet	wet	wet
985	whip	whipped	whipped
986	whisper	whispered	whispered
987	win	won	won
988	wind	wound	wound
989	wish	wished	wished
990	withdraw	withdrew	withdrawn
991	work	worked	worked
992	worry	worried	worried
993	worship	worshipped	worshipped
994	wring	wrung	wrung
995	write	wrote	written
996	yawn	yawned	yawned
997	yell	yelled	yelled
998	yield	yielded	yielded
999	zinc	zincked	zincked
1000	zoom	zoomed	zoomed

TENSES

Present Simple

Use of the Past Simple

We use the present simple to **express habits, facts, thoughts and feelings**. It is also used with **general statements** and actions that are repeated. It is formed with the base form of the verb, except the third person singular where you have to add an "s".

Key words: **often, always, never, every day, month,..., usually, sometimes, generally, normally, rarely, seldom, whenever, on Mondays, Tuesdays,...**

Examples

- I know Jyothi mam.
- He understands it.
- They love swinging.
- My father works in a bank.
- I usually wake up at 6.00 AM.
- He plays cricket everyday.
- Earth is bigger than Mercury.
- I want coffee.

Past Simple

Use of the Past Simple

The Past Simple is used to write and talk about completed actions that happened in a time before the present. It is the basic form of the past tense in English. Study the following information how to form the simple past and how to form the negation and questions.

Key words: **yesterday, last week (month, Monday, October,...), in 1984, ago**

Examples

I completed my degree in 2015.

They went to a movie yesterday.

My husband was born in 1998.

I **met** my wife in 1983.

We **went** to Spain for our holidays.

They **got** home very late last night. When I was a boy I **walked** a mile to school every day.

We **swam** a lot while we were on holiday.

They always **enjoyed** visiting their friends. I **lived** abroad for ten years.

He **enjoyed** being a student.

She **played** a lot of tennis when she was younger.

Simple Future

Use of the Simple Future

1. to talk about future actions we can't influence or control.
2. to foretell future actions or to express hopes, expectations, fears, offers, promises, refusals,...
Key words: I'm sure, I believe, I expect, I hope, I suppose, I think, I'm afraid, I wonder, I fear, I worry, I promise, I guess or perhaps, possibly, surely, probably, maybe
3. with I / we for spontaneous reactions or making promises
I shall is sometimes used instead of I will.

Key words: **tomorrow, next week (month, year, summer, Monday, weekend,...), in 2020...**

- I will complete my post graduation next year.
Robert will read various kinds of books.
- They will play football in that field.
- April will prefer coffee to tea.
- Bob will go to the library tomorrow.
- We will go shopping in that market this Monday.
- We will watch a movie in this Cineplex on next Friday.
- You will shop at that market tomorrow.
- I will sing different kinds of songs, especially modern.
- I will attend a program of my varsity on Friday.
- Jeff will travel around the world in March.
- They will play hockey in that field on Thursday.
- The poet will write a romantic poem for this program.
- The lyricist will write a realistic song.
- Will you go to the concert of realistic songs?
- I will not attend the program because of my busy schedule.
- Robin will join us in the meeting.
- I will help him to do the task.
- We will go to enjoy the musical drama.
- I will arrange all the necessary materials for the program.

Present continuous

Use of the Present Progressive

The Present Progressive is also called present continuous. It is used to indicate actions happening at the time of speaking or used for planned future actions.

Key words: **look, listen, now, at the moment, still, at present, don't disturb, observe, see,**

- I am writing articles on different topics.
- He is reading various kinds of books.
- They are playing football now.
- She is drinking coffee.
- He is going to the library.
- We are coming for shopping in this market.
- We are watching a movie in this Cineplex.
- You are shopping in that market.
- I am singing different kinds of songs, especially modern.
- I am listening to melodious songs.
- He is traveling around the world.
- They are playing cricket in that field.
- The poet is writing romantic poems.
- The lyricist is writing realistic songs.
- Are you listening to realistic songs?
- I am not quarreling with you.
- Are you coming to our home?
- I am helping him to do the task.
- My mom is cooking beef with cabbage.
- Are you watching cricket on television?

Past continuous

Key words: while, when

- I was writing articles on different topics.
- He was reading various kinds of books.
- They were playing football in that field.
- She was drinking coffee in that coffee shop.
- He was studying in the library.
- We were shopping in this market last week.
- We were watching a movie in this Cineplex yesterday.
- You were shopping in that market.
- I was singing different kinds of songs, especially modern.
- I was listening to melodious songs last evening.
- He was traveling around the world.
- They were playing hockey on that field last week.
- The poet was writing a romantic poem.
- The lyricist was writing a realistic song for the program.
- Were you enjoying the concert of realistic songs?
- I was not watching the cricket match on television.
- He was practicing to sing the song for the program.
- I was helping him to do the task.
- We were enjoying the program thoroughly.
- I was shopping at the Dhaka International Trade Fair with my elder brother.

Future Tenses

There are four different ways in English to talk about the future. You can use the simple future, the going to - future, the present progressive and the present pimple to write or talk about future actions. There is often only a little difference between the future tenses, especially between the going to - future and the present progressive. It also depends on the country and region and on the communication what future tense is used. In written English the simple future is usually used while in spoken English we use the going to - future more often.

Use of the Simple Future Tense

1. to talk about future **actions we can't influence or control**.
2. to **foretell** future actions or to express **hopes, expectations, fears, offers, promises and refusals**.

Key words: I'm sure, I believe, I expect, I hope, I suppose, I think, I'm afraid, I wonder, I fear, I worry, I promise, I guess or perhaps, possibly, surely, probably, maybe

3. with I / we for **spontaneous reactions** or making promises.

I shall is sometimes used instead of I will.

Use of the going to - Future

1. to talk about future things you **intend to do, plan or decided to do**.

Examples:

Did you know that Sarah is in hospital? No, I didn't. I'll visit her this afternoon.
(spontaneous reaction »»» will - future)

Yes, I'm going to visit her next month.
(planned action »»» going to - future)

2. to **foretell** future actions for which we have **proofs** that they are going to happen.

Use of the Present Progressive in the future

To talk about future things that are **fixed, planned or definitely decided**.

The speaker must refer to the future and not to the present.

Examples:

I am visiting my grandparents tomorrow.

What are you doing next Friday?

Use of the Present Simple in the future

To talk about **times of arrivals** and **departures** of traffic and **times of events**.

Examples:

The train leaves at 10.20.

The bus goes at 8.30.

When does the concert begin?

Present Perfect

The Present Perfect Simple is used, if an action happened in the past and there is a connection to the present. This action has just stopped or is still going on. There's no exact time expressed when the action happened.

Key words: **already, just, yet, ever, never, for, since, so far, up to now, not yet, lately, recently**

Past Perfect

Use of the Past Perfect

When you tell a story it's sometimes necessary to tell about actions that had happened before the past tense. To express the time when these actions happened you have to use the past perfect.

How to form the Past Perfect

We form the past perfect simple with **had (not) + 3rd form of the verb**

Key words: **after, before**

Future Perfect Tense

Future Perfect Tense represents an action which will have been occurred at some time in the future. If two actions take place in the future, the first one is Future Perfect Tense and the second one is Simple Present Tense.

Examples of Future Perfect Tense:

- I will have written articles on different topics before you come.
- Robert will have read various kinds of books.
- They will have played football in that field before you reach.
- April will have gone to the coffee shop before she comes here.
- Bob will have gone to the library before he comes to the class.
- We will have shopped in that market before you come home.
- We will have watched a movie in this Cineplex before you come.
- You will have shopped at that market before we come.
- I will have sung different kinds of songs before you join us.
- I will have attended the program before I come here.
- Jeff will have traveled around the world before he comes to Bangladesh.
- They will have played hockey in that field before you reach.
- The poet will have written a romantic poem before the program starts.
- The lyricist will have written a realistic song for the film.

- Will you have gone to the concert of the realistic songs before I come?
- I will not have attended the program because of my busy schedule.
- Robin will have joined us at the meeting before you reach.
- I will have helped him to do the task before the class starts.
- We will have enjoyed the musical drama before the game show starts.
- I will have arranged all the necessary materials before the program starts.

The tense of a verb tells you when a person did something or when something existed or happened. In English, there are three main tenses: the **present**, the **past**, and the **future**.

The present

The present tense is also called the **present simple** or **simple present**.

The past

The past tense (e.g. *I was, he talked, we had, they worked*) is also called the **past simple** or **simple past**. As its description implies, it's used to talk about things or situations which happened in the past, that is, before the present time of speaking. Its main uses are as follows:

to refer to an event or situation which happened once and is now finished (*I **met** Lisa yesterday; we **ate** a huge breakfast this morning; they **walked** ten miles that day; you **told** me that before*).

to describe a situation that lasted for a longer time in the past but is now finished (*he **went** to college for four years; my family **lived** in Oxford in the 1980s; I **loved** her for ages but never **told** her*).

to talk about an event that happened regularly or repeatedly but is now over (*she **called** for help over and over again; we **ate** out every night last week; I **phoned** him three times today*).

Find out [how to form the past simple tense](#).

The future

The future tense (e.g. *I shall [or will] go; he will talk; we shall [or will] have; they will work*) is used to refer to things that haven't yet happened at the present time of speaking, but which are due, expected, or likely to occur in the future. Here are the main situations in which the future is used:

to give or ask for information about the future (*you **will be** in California tomorrow; how long **will** the journey **take**?; OK, I **ll write** that report on Thursday*).

to talk about things that we think are likely or possible to happen in the future, but which aren't completely certain (*I think she **ll retire** soon; he **won't** [will not] **stay** married to her for long; you **ll** never **lose** weight, you like food too much*).

to refer to conditional situations, namely things that will or may happen if something else occurs (*if it's hot I **ll go** swimming later; you **ll get** stressed out if you work all the time*).

to make promises or threats, or to state decisions at the time of speaking (*Fine, I'll **call** you soon; Are you going into town? We'll **give** you a lift; I'll never **speak** to you again*).

The future tense is formed with *will* (or *shall*) and the infinitive of the verb without 'to'. Learn more about [when to use will or shall](#).

Continuous and perfect tenses

There are two further types of tense: the **continuous** and the **perfect**. These tenses are sometimes referred to as **aspects** rather than tenses. The term [aspect](#) is used in grammar to talk about the form of a verb that shows, for example, whether the action happens once or repeatedly, is completed or still continuing.

Continuous

These tenses (also called **progressive** tenses) are used to talk about actions that continue for a period of time.

They are formed with the relevant tense of the [auxiliary verb](#) *to be* and the [present participle](#) of the main verb.

There are three main continuous tenses:

the **present continuous** (*I am working*)

the **past continuous** (*I was working*)

the **future continuous** (*I will be working*)

Perfect

Perfect tenses are typically used to talk about actions that are completed by the present or a particular point in the past or future. They are formed with the relevant tense of the auxiliary verb *to have* and the [past participle](#) of the main verb. There are three main perfect tenses:

the **present perfect** (*I have worked*)

the **past perfect** (*I had worked*)

the **future perfect** (*I will have worked*)

Perfect continuous

There is a final set of tenses which combine features of the perfect and continuous tenses. They are formed and used as follows:

the **present perfect continuous** (*I have been working*): used to talk about how long something has continued up till now (*I have been working there for a week*)

the **past perfect continuous** (*I had been working*): used to talk about something which continued up to a particular moment in the past but is now completed (*I had been working there for a week before I resigned*)

the **future perfect continuous** (*I will have been working*): used to talk about something which is expected to end by a particular time in the future (*By December, I will have been working there for 6 months*)

Definition of Present Perfect Continuous Tense:

Present Perfect Continuous tense represents the work which started in the past and is still running. It uses “have been/has been” and “ing” is added with the verb.

Examples of Present Perfect Continuous Tense:

- I have been writing articles on different topics since morning.
- He has been reading the book for two hours.
- They have been playing football for an hour.
- She has been finding the dress since morning.
- He has been studying in the library for three hours.
- We have been shopping at this fair for two hours.
- We have been watching a movie in this Cineplex for two hours.
- You have been shopping in that market for three hours.
- I have been singing different kinds of songs, especially modern.
- I have been listening to melodious songs for an hour.
- He has been traveling around the world for a month.
 - They have been playing cricket in that field for five hours.
 - The poet has been writing romantic poems for several hours.
 - The lyricist has been writing realistic songs since the beginning of his career.
 - Have you been listening to realistic songs since morning?
 - I have not been watching the cricket match for an hour.
 - Have you been preparing the assignment for two hours?
 - I have been helping him to do the task for an hour.
 - My mom has been cooking for three hours.
 - I have been watching the concert for an hour.

Examples of Past Perfect Continuous Tense

(5/5, 14 votes)

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-
-

Definition of Past Perfect Continuous Tense:

Past Perfect Continuous Tense represents an ongoing action that started and continued for some time in the past. To indicate time reference “for” and “since” are used and it describes when the action started and how long it continued in the past.

Examples of Past Perfect Continuous Tense:

- I had been writing articles on various topics for three hours.
- He had been reading different kinds of books since morning.
- They had been playing football in that field before it started to rain.
- Jane had been gossiping in the coffee shop for two hours.
- Jeff had been studying in the library before he came to the class.
- We had been shopping in that shop before we came home.
- We had been watching a movie in this Cineplex for three hours.
- You had been shopping in that market before you came home.
- I had been singing different kinds of songs for an hour.
- I had been listening to melodious songs for two hours.
- Tom had been traveling around the world since the month of December.
- They had been playing hockey on that field for three hours.

- The poet had been writing romantic poems since morning.
- The lyricist had been writing realistic songs since the beginning of his career.
- Had you not been enjoying the concert for three hours?
- I had not been watching the cricket match on television for two hours.
- Richard had been practicing to sing the song since morning.
- I had been helping him to do the task before I started the program.
- We had been enjoying the program thoroughly for three hours.
- I had been shopping with my elder brother in the fair since morning.

MODALS

Among those 24 helping verbs 13 verbs are called model Auxiliary which do not have s forms - ing forms, or- ed participles. where as

Can - could, may - might, will - would, shall - should, have the past forms are

special in these.

Can - Can not

Will - Will not

May -May not

Shall -Shall not

Could -Could not

Would -Would not

Might -Might not

Should -Should not

Must -Must not

Used to -Did not use to

Need -Need not

Ought to -Ought not to

Dare -Dare not

Some Charecters of Modal verbs

Modal verbs (or) Auxiallary:

A modal or a modal auxiallary is a word such as 'can' or 'would' which is used with a main verb to express ideas such as possibility intention or necessity.

1) a) They must leave now

b)He can solve it.

2)a)They must not leave now

b) He can solve it.

3) They do not have the infinitive (or) 'ing' forms.

b) You Can Speak in English

4) They have a single form throughout the present Tense, Whatever be the person.

Ex. I can write, you can write, they can write.

5) Interrogative sentences are formed by Interchanging the subject and the modal verb.

EX: 1) Can you write? A) I can write

2) Will they come. A) They will come.

3) Should we continue? A) We should continue

Use of Can

Occasion No. 1

To express one's ability in the present. can means "be able to". know how to

Ex. I can speak in English

She can sing songs

Occasions 2 : To take and give Permission

1) Can I use your pen?

Yes, you can use.

No. you can't.

2) Can I see the file?

3) Can we play with your bat?

Occasions 3: To ask one's ability

Ex. 1) Can you speak in English?

2) Can he lift the box?

3) Can they win the game?

Use of 'Could' (It is the past form of 'Can')

Occ.No.1 **It is used to say some one had a skill or ability in the past.**

- EX. 1) He could swim well when he was young.
2) In my younger days I could run very fast.

Occ. No.2 **To ask polite Questions.**

- EX. 1) Could I talk to chairman please?
2) Could you please post this letter?
3) Could you please give me your book once?

Occ. No. 3 **It is used as the past tense of can in Indirect speech.**

- Ex. Gita said "I can write the poem"
Gits said that she could write the poem.

Occ. No.4 To say that there was a possibility of something happening in the past - although it did not happen infact.

- EX 1) I could have easily solved the problem.
2) You could have got a job last years.

Use of 'Will'

Occ. No.1 **To indicate the future (or) to talk about the future action.**

- EX. 1)She will speak in English
2) I will complete the course
3)They will win the game.
4) You can phone me this evening. I will be at home

Occ. No.2 **To say something is certain to happen in the future.**

- Ex. 1) The price of petrol will go up
2) India will win the test match.

Occ.No.3 In making requests.

Ex. 1) Will you please open the window?

2) Will you please come to my house once?

Use of 'Would' (It is the past form of the 'will')

Occ.No.1 To say something that happened regularly in the past but not now.

EX. 1) We would go to the temple every Sunday.

2) He would always come late in 10th class.

Occ.No.2 It is used in Indirect Speech

Ex. 1) He said "I will help you"

2) He said that he would help me

Occ.No.3 For asking polite requests

Ex. 1) Would you like to have a Cup of Coffee?

2) I would like to ask you one question.

3) Would you like some Coffee?

Note: Would you like to = Do you like to

Use of "Shall"

Occ.No.1 To indicate future actions. That are certain to happen.

1) I shall be leaving as soon as I am ready

Occ.No.2 In written laws and agreements with 'not'

Ex. 1) We shall not allow you

2) They shall not leave without my permission.

Occ.No.3 When you are offering something to do.

Ex. 1) Shall I bring a Cup of Coffee?

2) Shall I open the window?

Occ. No.4 In getting permission (or) one's willingness

EX. 1) Shall I phone you this evening?

2) Shall we go for a walk?

Occ. No.5 **To make promises (or) resolutions**

Ex. 1) I shall do what you suggested

2) We shall complete the work.

Use of "Should" (It is the past form of 'Shall')

OccNo.1 **It is often used to express duty, obligation or necessity.**

EX. 1) I think you should go to bed earlier

2) I should go home now.

3) He should work harder.

4) You should obey your parents.

OccNo.2 **To expect something to happen**

EX. 1) He should be at the library.

2) The lecture should be interesting.

OccNo.3 **To say an action is unacceptable or undesirable.**

EX. 1) You should not come late.

2) They should not shout.

OccNo.4 **To say that something was desicrable in the past but it did not happen in fact.**

EX. 1)She should not have made such mistake.

2) We should have gone to receive them.

Use of "May"

Occ.No.1 **To ask permission**

EX. 1) May I come in Sir?

2) May I use your mobile once?

Exercise-1

1. To be a polite person you _____ to sacrifice your ego.
 - a. had
 - b. have
 - c. has
 - d. must
2. This is impossible, it _____ be a mistake.
 - a. may
 - b. shall
 - c. could
 - d. must
3. _____ you stand on your head for more than a minute.
 - a. may
 - b. should
 - c. would
 - d. can
4. You _____ take your umbrella. It is not raining.
 - a. may not
 - b. should not
 - c. could not
 - d. need not
5. Rahul _____ repay all his loan tomorrow.
 - a. have to
 - b. has to
 - c. had to
 - d. will have to
6. as your reports are not good, you _____ to have a healthy life style.

- a. can
- b. will
- c. shall
- d. must

7. _____ I help you sir?

- a. can
- b. might
- c. should
- d. may

8. you _____ obey your parents.

- a. can
- b. ought to
- c. shall
- d. may

9. you _____ touch that plate, it's too hot.

- a. should
- b. may
- c. mustn't
- d. cannot

10. The company _____ go bankrupt if they don't find a lot of money quickly.

- a. should
- b. might
- c. shall
- d. must

11. I have got no idea where he is try the classroom. He _____ be in there.

- a. might
- b. can't

- c. will
- d. must

12. Why did you do the dishes? You really _____ have bothered

- a. mustn't
- b. needn't
- c. couldn't
- d. wan't

13. You _____ not come early. I mean you _____ starts to work at 10'o clock

- a. should, might
- b. need, should
- c. need, may
- d. can, could

14. Speaks slowly let you _____ awake the child.

- a. would
- b. could
- c. should
- d. must

15. My book is not it's place someone _____ taken it.

- a. must
- b. would
- c. must have
- d. cannot

16. We _____ talk about it last week.

- a. will have to
- b. have to
- c. has to
- d. had to

17. I was afraid that I _____ be late.

- a. should
- b. might
- c. cannot
- d. must not

18. People _____ waste food.

- a. could
- b. shall not
- c. should not
- d. might not

19. I am not sure whether I _____ be free tomorrow or not.

- a. should
- b. may
- c. will
- d. can

20. What _____ you like to have?

- a. should
- b. would
- c. shall
- d. must

21. To be a polite person you _____ to sacrifice your ego.

- a. had
- b. have
- c. has
- d. must

Exercise-2

1. _____ I smoke here? (may/can).
2. He _____ help you if you ask him. (will/shall).
3. Rahul _____ drive a car at the age of 12. (can/could)
4. you _____ do exercise daily. (should/might/can)
5. This _____ not be true? (may/can/might)
6. The patients _____ consult a doctor. (could/should/d/may)
7. _____ god help him? (may/should/would)
8. One _____ keeps one's promise. (should/must/could)
9. we _____ not live without water. (can/could/shall)
10. _____ you live happily and long ! (may/can/might)
11. _____ I go out, sir? (can/may/shall)
12. you _____ speak English. (can/shall/will)
13. you _____ do your duty cheerfully. (should/must/can)
14. I _____ like to see that girl. (would/should/may)
15. We _____ obey your parents. (should/must/out to)
16. The work _____ time and patience. (needs/need dares/dare)
17. Ramu _____ walk in the morning. (could/use to/can)
18. She did not touch the switches last she _____ receive a shock. (might/should/could)
19. She _____ dance well when she was young. (used to/should/will)
20. If only they _____ keep quite. (would/might/will).

VOICE

What Is Voice in Grammar? (with Examples) Voice is **the term used to describe whether a verb is active or passive**. In other words, when the subject of the verb is doing the action of the verb (e.g., "The dog bit the postman."), the verb is said to be in the active voice.

What are the types of voice in English grammar?

There are two (2) types of voices in English. They are: **The active voice and. The passive voice.**

The Subject Changes in Each Voice

Before we explore a wealth of examples, let's review some [active writing tips](#). You'll notice that, in the passive voice examples below, there are a few key words. Examples include:

- is - is roamed; is viewed
- was - was changed; was run
- were - were eaten; were corroded

Pay special attention to the subject in each sentence. Is the subject performing the action denoted by the verb? If so, chances are you have a nice, clear sentence, written in active voice.

In the passive voice, however, the subject is no longer performing the action of the verb. Rather, it's being acted upon by the verb. Put another way, the subject of a sentence in the passive voice is no longer the "doer" of the action, but the recipient of the action. Meanwhile, what was the subject of a sentence in the active voice (the "doer") becomes the "agent" in the equivalent passive voice sentence.

Active and Passive Voice Comparison

As you read through the following example sentences, you'll start to become an active voice expert.

Active Voice	Passive Voice
Harry ate six shrimp at dinner.	At dinner, six shrimp were eaten by Harry.
Beautiful giraffes roam the savannah.	The savannah is roamed by beautiful giraffes.
Sue changed the flat tire.	The flat tire was changed by Sue.
We are going to watch a movie tonight.	A movie is going to be watched by us tonight.
I ran the obstacle course in record time.	The obstacle course was run by me in record time.
The crew paved the entire stretch of highway.	The entire stretch of highway was paved by the crew.
Mom read the novel in one day.	The novel was read by Mom in one day.
I will clean the house every Saturday.	The house will be cleaned by me every Saturday.

The company requires staff to watch a safety video every year.	The staff are required by the company to watch a safety video every year.
Tom painted the entire house.	The entire house was painted by Tom.
The teacher always answers the students' questions.	The students' questions are always answered by the teacher.
The choir really enjoys that piece.	That piece is really enjoyed by the choir.
A forest fire destroyed the whole suburb.	The whole suburb was destroyed by a forest fire.
The two kings are signing the treaty.	The treaty is being signed by the two kings.
The cleaning crew vacuums and dusts the office every night.	Every night, the office is vacuumed and dusted by the cleaning crew.
Larry generously donated money to the homeless shelter.	Money was generously donated to the homeless shelter by Larry.
The wedding planner is making all the reservations.	All the reservations are being made by the wedding planner.
Susan will bake two dozen cupcakes	Two dozen cookies will be baked by Susan

for the bake sale.	for the bake sale.
The science class viewed the comet.	The comet was viewed by the science class.
The director will give you instructions.	Instructions will be given to you by the director.
Thousands of tourists visit the Grand Canyon every year.	The Grand Canyon is visited by thousands of tourists every year.
The homeowners remodeled the house to help it sell.	The house was remodeled by the homeowners to help it sell.
The saltwater corroded the metal beams.	The metal beams were corroded by the saltwater.
The kangaroo carried her baby in her pouch.	The baby was carried by the kangaroo in her pouch.

Active and Passive Voice Rules, Example, Exercise for Competitive Exam

Active and Passive Voice Rules for All Tenses

Here, we are listing out the Active and Passive Voice Rules for all tenses. You will come to know how an auxiliary verb is used to change a sentence from Active to Passive voice.

Active and Passive Voice Rules for Present Simple Tense

Here in this table, we are elaborating Rules of Active and Passive Voice with examples for Present Simple.

Active Voice	Passive Voice (Auxiliary Verb – is/am/are)
Subject + V1+s/es+ object	Object+ is/am/are+ V3+ by + subject
Subject + Do/does+ not + V1 + Object	Object + is/am/are+ not + V3+ by Subject
Does+ Subject+ V1+Object+?	Is/am/are + Object+ V3+ by subject +?

Active and Passive Voice Example with Answers of Present Simple Tense

Active: He reads a novel.

Passive: A novel is read.

Active: He does not cook food.

Passive: Food is not cooked by him.

Active: Does he purchase books?

Passive: Are books purchased by him?

Active: They grow plants.

Passive: Plants are grown by them.

Active: She teaches me.

Passive: I am taught by her.

Active and Passive Voice Rules for Present Continuous Tense

Below we will explain the Rules of Active and Passive Voice with examples for Present Continuous tense.

Active Voice	Passive Voice (Auxiliary Verb- is/am/are + being)
Subject + is/am/are+ v1+ ing + object	Object+ is/am/are+ being+ V3+ by + subject
Subject + is/am/are+ not+ v1+ ing+ object	Object + is/am/are+ not + being+V3+ by Subject
Is/am/are+ subject+v1+ing + object+?	Is/am/are + Object+ V3+ by subject +?

Active and Passive Voice Exercises of Present Continuous Tense

Active: Esha is singing a song.

Passive: A song is being sung by Esha.

Active: Kritika is not chopping vegetables.

Passive: Vegetables are not being chopped by Kritika.

Active: Is Ritika buying a table?

Passive: Is a table being bought by Ritika?

Active: They are serving poor people.

Passive: Poor people are being served by them.

Active: She is disturbing Dinesh.

Passive: Dinesh is being disturbed by her.

Active and Passive Voice Rules for Present Perfect Tense

You can understand passive voice for present perfect tense from the list which are given below.

Active Voice	Passive Voice (Auxiliary Verb- has/have +been)
Subject + has/have+ v3+ object	Object+ has/have+ been+ V3+ by + subject
Subject + has/have+ not+ v3+ object	Object + has/have+ not + been+V3+ by Subject
Has/have+ subject+ v3 + object+?	Has/Have + Object+ been+V3+ by subject +?

Active and Passive Voice Example with Answers of Present Perfect Tense

Active: Nitesh has challenged her.

Passive: She has been challenged by Nitesh.

Active: Radhika has not written an article.

Passive: An article has not been written by Radhika.

Active: Have they left the apartment?

Passive: Has apartment been left by them?

Active: She has created this masterpiece.

Passive: This masterpiece has been created by her.

Active: I have read the newspaper.

Passive: The newspaper has been read by me.

Active and Passive Voice Rules for Past Simple Tense

Here in the below table, you can check Active and Passive Voice Rules for past simple tense.

Active Voice	Passive Voice (Auxiliary Verb- was/were)
Subject + V2+ object	Object+ was/were V3+ by + subject
Subject +did+ not+v1+ object	Object + was/were+ not +V3+ by Subject
Did+ subject+V1+ object+?	Was/were + Object+ V3+ by subject +?

Active and Passive Voice Exercises of Past Simple Tense

Active: Reema cleaned the floor.

Passive: The floor was cleaned by Reema.

Active: Aisha bought a bicycle.

Passive: A bicycle was bought by Aisha.

Active: Naman called my friends.

Passive: My friends were called by Naman.

Active: I saved him.

Passive: He was saved by me.

Active: Miraya paid the bills.

Passive: The bills were paid by Miraya.

Active and Passive Voice Rules for Past Continuous Tense

We can easily convert sentences from Active to Passive Voice according to given rules below.

Active Voice	Passive Voice (Auxiliary Verb- was/were + being)
Subject + was/were + v1+ing+ object.	Object+ was/were +being+V3+ by + subject
Subject +was/were+ not+v1+ing + object	Object + was/were+ not +being+V3+ by Subject
Was/were+ Subject + V1+ing + object+?	Was/were + Object+ being+v3+ by+ subject+?

Active and Passive Voice Examples with Answers of Past Continuous Tense

Active: Nitika was painting the wall.

Passive: The wall was being painted by Nitika.

Active: Manish was repairing the car.

Passive: The car was being repaired by Manish.

Active: Were you reciting the poem?

Passive: Was the poem being recited?

Active: She was baking the cake.

Passive: The cake was being baked by her.

Active: She was watching me.

Passive: I was being watched by her.

Active and Passive Voice Rules for Past Perfect Tense

There are certain Active and Passive Voice Rules for Past perfect tense, with these only you can convert any sentence in Passive Voice.

Active Voice	Passive Voice (Auxiliary Verb- had +been)
Subject + had + v3+ object.	Object+ had+been +V3+ by + subject
Subject +had+ not+v3+ object	Object + had+ not +been+V3+ by Subject
Had+ Subject + V3+ object+?	Had + Object+ been+v3+ by+ subject+?

Active and Passive Voice Exercises of Past Perfect Tense

Active: Misha had cleaned the floor.

Passive: The floor had been cleaned by Misha.

Active: Vidhi had not received the parcel.

Passive: The parcel had not been received by Vidhi.

Active: Vishal had solved the doubt.

Passive: The doubt had been solved.

Active: Had they caught the thief?

Passive: Had the thief been caught by them?

Active: I had paid fifty thousand.

Passive: Fifty thousand had been paid by me.

Active and Passive Voice Rules for Future Simple Tense

You can check Active Voice and Passive Voice Rules chart for future simple tense.

Active Voice	Passive Voice (Auxiliary Verb- will+ be)
Subject + will+ v1+ object.	Object+ will+ be +V3+ by + subject
Subject +will + not+ V1+object	Object + will+ not +be+V3+ by Subject
Will+ Subject + V1+ object+?	Will + Object+ be +v3+ by+ subject+?

We can better understand Rules of Active and Passive Voice with examples for future simple tense.

Active and Passive Voice Examples with Answers of Future Simple Tense

Active: Kriya will sew the bag.

Passive: The bag will be sewed by Kriya.

Active: Disha will not arrange the things.

Passive: The things will not be arranged by Disha.

Active: Will you mop the floor?

Passive: Will the floor be mopped by you?

Active: They will post the letter.

Passive: The letter will be posted.

Active: Reena will save money.

Passive: Money will be saved by Reena.

Active and Passive Voice Rules for Future Perfect Tense

Here, we are sharing the Active Voice and Passive Voice Rules chart for future perfect tense.

Active Voice	Passive Voice
Subject + will+ have +v3+ object.	Object+ will+ have+ been +V3+ by + subject
Subject + will+ have +not+v3+ object.	Object + will+ have +not+been+v3+ subject
Will+ Subject+have+v3+ object+?	Will + object+have+been+v3+by +subject+?

Active and Passive Voice Exercises of Future Perfect Tense

Active: They will have brought the toy.

Passive: The toy will have been brought by them.

Active: Nimesh will not have changed the table cover.

Passive: The table cover will not have been changed by Nimesh.

Active: Will she have written the notes.

Passive: Will the notes have been written by her?

Active: They will have won the match.

Passive: The match will have been won by them.

Active: Vijay will have washed a shirt.

Passive: A shirt will have been washed by Vijay.

There is no Passive Voice formation for these tenses-

- 1.) Present Perfect Continuous Tense
- 2.) Past Perfect Continuous Tense
- 3.) Future Perfect Continuous Tense
- 4.) Future Continuous Tense

So, Candidates, now you must have got all the information for making changes in a sentence with Active and Passive Voice Rules of all tenses. Practice set and examples of Active and Passive Voice will help you to clear the fundamentals and score well in competitive exams

Reported speech is often also called indirect speech in English.

When we use reported speech, we are referring to something that was said either by ourselves or by someone else in the past.

An example of this might be 'he said that he was going shopping.'

When we use reported speech, we are usually talking about the past (because obviously the person who spoke originally

spoke in the past). The verbs therefore usually have to be in the past too

For example:

☐ Direct speech: I've lost my umbrella.

☐ Reported speech: He said (that) he had lost his umbrella.

Indirect Speech / Reported Speech:

Indirect speech (sometimes called reported speech) doesn't use quotation marks to enclose what the person said.

In reported speech, the tense usually changes. This is because when we use reported speech, we usually talk about a time in

the past (because obviously the person who spoke originally spoke in the past). The verbs therefore usually have to be in the

past too.

For example:

Direct speech Indirect speech Ramesh said, "I am going to university today." Ramesh said that he was going to university

that day.

. Changes in pronouns:

Pronouns and possessive adjectives usually change from first or second person to third person, except when the speaker is

reporting his/her own words or is included in the conversation.

e.g.: "I have forgotten the combination of my safe", he said. He said he had forgotten the combination of his safe.

Changes in verbal tenses:

When the reporting verb (the main verb) is in the present tense, the verb of the words we are reporting

doesn't change:

e.g.: She says: "It is a lovely day" She says it is a lovely day.

But when the reporting verb is in the past tense, some verbal changes are required:

Direct speech Indirect speech Present simple Past simple Present continuous Past continuous Present

perfect (continuous) Past perfect (continuous) Simple past Past perfect or simple past Past continuous

Past perfect continuous Past perfect (continuous) Past perfect (continuous) Future simple (will)

Conditional (would) Future continuous Conditional continuous Future perfect Conditional perfect

Conditional Conditional

Changes in expressions of time and place:

Direct speech Indirect speech Today That day Tonight That night Yesterday The day before /the

previous day The day before yesterday Two days before Tomorrow The day after / the following day

/the Next day The day after tomorrow In two days time / two day after Next week / month / year
The

following week / month The week / month after Last week / month / year The week / month before

The previous week / month A week / month / year ago A week / month before Now The / in that

moment Tomorrow morning / afternoon / evening The following morning / afternoon Yesterday

morning /afternoon The previous morning / afternoon Here There Come Go Thus so

Types of methods or sentences

1. Affirmative sentences or statements 2. Interrogative sentences or questions 3. Imperative sentences

or (order, request and advice) 4. Exclamatory sentences

☐ AFFIRMATIVE SENTENCES OR STATEMENTS Statements are positive and negative sentences. While changing into reported speech, the following points must be kept in mind.

1. If the reporting verb is 'said', it will remain the same. 2. If the reporting verb is 'said to', it will become

told. 3. Conjunction 'that' is used in statements.

Direct speech Direct speech He said to me, "I am a student of this college" He said to me, "he was a

student of that college." She said, "I have many friends here." She said, "she had many friends there."

Padma said, "I am going to university today." Padma said, "she was going to university that day." Krishna

said, "Deepak has finished his homework." Krishna said, "Deepak had finished his homework." The

teacher said to me, "You were late yesterday." The teacher said to me, "I had been late the day before

yesterday." Alex said, "It is quite good to make reported Speech pdf assignment" Alex said, "It was quite

good to make reported Speech pdf assignment"

☐ INTERROGATIVE SENTENCES OR QUESTIONS

Yes/no questions: Yes / no questions are made with auxiliary verbs. While reporting this type, the following points must be kept in mind.

1. If the reporting verb is 'said / said to', it will become asked. 2. Conjunction 'if / whether' is used in statements.

Direct speech Indirect speech I said to him, "do you speak English?" I asked him if he spoke English. We

said to them, "are you dusting the room?" We told them if there were dusting the room. He said to me,

"have you been here for an hour?" He told me whether i had been there for an hour. They said to him, "did you send the letter?" They asked me if he had sent the letter. I said to them, "have we been waiting

here I asked them if they had been waiting there Since morning?" Since morning?"

WH- questions When we report this kind of questions, 1 The interrogative word remains so, it is not

changed. 2 No conjunction is used. 3 The subject-verb inversion. 4 The question mark disappears.

Direct speech Indirect speech She said to me, "how are you?" She asked me how I was. They said to her,

"who is your guardian?" They asked her who her guardian was. He said, "what have I done?" He asked

what he had done. We said to them, "what did you bring for us?" We asked them what they brought for

us. I said to him, "where were you yesterday?" I asked him where he had been the previous day. We

said to them, "why are you standing here now?" We asked them why they were standing there then.

1 IMPERATIVE SENTENCES or (order, request and advice) Imperative sentence makes a request, command and a piece of advice. These imperatives are generally made with bare infinitive verbs (the verbs which are in bold in the following).

For example 1 Post the letter. 2 Take the medicine properly. 3 Ascertain everything before you do. While

changing reported speech, reporting verb 'said to' may become requested, advised, and commanded

according to the kind of sentence; conjunction 'to' is added.

Direct speech Indirect speech He said to me, "Please post this letter." He requested me to post that

letter. I said to him, "Consult the doctor." I advised him to consult the doctor. The teacher said to the

boys, "Don't make a noise." The teacher ordered the boys not to make a noise. I said to my younger

brother, "Study English well." I advised my younger brother to study English well. The manager said to

her, "Type this letter now." The manager ordered her to type that letter then.

☐ EXCLAMATORY SENTENCES A sentence that expresses strong feelings is called exclamatory sentence.

While changing into reported speech, ☐ Reporting verb 'said to' may become 'exclaimed'. ☐

Conjunction 'that' is used. ☐ While removing the interjection in reported speech, an expression which

refers to it should be used.

DIRECT AND INDIRECT SPEECH RULES

There are two ways of reporting what a person says.
The direct and the Indirect speech.

The indirect speech is also called reported speech.

Direct speech

Direct speech is a sentence in which the exact words spoken are reproduced in speech marks

(also known as quotation marks or inverted commas).

There are two parts in direct speech.

1. **Reporting part (who spoke to whom)**
2. **Reported part (what is spoken generally in inverted commas)**

Ex. Raju said to Ramu “I am on the way.”

Raju said to Ramu --- reporting part

“I am on the way.” --- reported part

Indirect Speech / Reported Speech

Indirect speech (sometimes called reported speech) doesn't use quotation marks to enclose what the person said.

Indirect speech gives the substance of the speaker's actual words.

Ex. Raju told Ramu that he was on the way.

Example on Process of Conversion from Direct to Indirect Speech

- a) **Direct: Radha said, “I am very busy now.”**
- b) **Indirect: Radha said that she was very busy then.**

1. All inverted commas or quotation marks are omitted and the sentence ends with a full stop.
2. Conjunction ‘that’ is added before the indirect statement.
3. The pronoun ‘I’ is changed to ‘she’. (*The Pronoun is changed in Person*)

4. The verb 'am' is changed to 'was'. (*Present Tense is changed to Past*)
5. The adverb 'now' is changed to 'then'.

Observe the changes

Ex. Raju said to Ramu "I am on the way."

Raju told to Ramu that he was on the way.

Rv----- Said to – told

Pronoun -----I – he

Verb-----am – was

Omission of quotation marks---- inverted commas

Pointer words---- time or place

Rules

- 1. Reporting Verb**
- 2. Pronoun**
- 3. Tense**
- 4. Punctuations**
- 5. Time & place**
- 6. Modals**

Rule 1 – Direct To Indirect Speech Conversion – Reporting Verb

There are 4 kinds of sentences in English language.

- 1. Assertive sentence**
- 2. Interrogative sentence**
- 3. Imperative sentence**
- 4. Exclamatory sentence**

As per the sentence type we modify the reporting verb

Assertive sentence (conjunction ---that--- to be used)

Said – said

Sait to- told

Say – say

Says – says

Say to – tell

Says to – tells

Interrogative sentence (conjunctions ---if/ whether/ Questionword)

Say / say to/ ask --- ask/ question/ enquire/ interrogate/ want to know.

Says / says to / ask --- asks/ questions/ enquires/interrogates/ wants to know.

Said/ said to / asked --- asked/ questioned/ enquired / interrogated / wanted to know.

Imperative sentence

Say---- order, request, advise, command

Says---- orders, requests, advises, commands

Said / said to ---ordered, requested, advised, commanded, begged

Let sentences/ suggestion/ proposals

Said/ said to ---- suggested / proposed

Exclamatory sentence (that is the conjunction)

Said / said to --- exclaimed + with + joy/ sorrow/ wonder.

Says(s)/ say(s) to --- exclaims(s) + with + joy/ sorrow/ wonder.

Rule 1 – Direct Speech to Indirect Speech conversion – Reporting Verb

1. When The reporting verb of direct speech is in past tense then all the present tenses are changed to corresponding past tense in indirect speech.

Direct : She **said**, 'i **am** happy'

Indirect : She **said** (that) she **was** happy

1. In indirect speech, **tenses do not change** if the words used within the quotes (‘’) talk of a **habitual action or universal truth**.

Direct: He said, ‘we **cannot live** without air’.

Indirect: He said that we **cannot live** without air.

1. The **tenses of direct speech do not change** if the reporting verb is in the **future tense or present tense**.

Direct: She says/will say, ‘she is going’

Indirect: She says/will say **she is going**.

Rule 2 – Direct Speech to Indirect Speech conversion – Present Tense

Present simple--- Past simple

Present continuous--- Past continuous

Present perfect (continuous) ---Past perfect (continuous)

Simple past ---Past perfect

Past continuous ---Past perfect continuous

Past perfect (continuous) Past perfect (continuous)

- **Simple Present** Changes to **Simple Past** (**is am are--- was / were**)

Direct: “I **am** unwell”, she said.

Indirect: She said that she **was** unwell.

- **Present Continuous** Changes to **Past Continuous**

Direct: “I **am playing** the guitar”, she explained.

Indirect: She explained that she **was playing** the guitar.

- **Present Perfect** Changes to **Past Perfect**

Direct: He said, “she **has finished** her homework”.

Indirect: He said that she **had finished** her homework.

Rule 3 – Direct Speech to Indirect Speech conversion – Past Tense & Future Tense

Simple Past Changes to Past Perfect

Direct: She said, “Irvin **arrived** on Sunday.”

Indirect: She said that Irvin **had arrived** on Sunday.

- **Past Continuous** Changes to **Past Perfect Continuous** (**was / were --- had been**)

Direct: “We **were playing** basketball”, they told me.

Indirect: They told me that they **had been playing** basketball.

- **Future Changes to Present Conditional (will --- would)**

Direct: She said, “I **will be** in Scotland tomorrow.”

Indirect: She said that she **would be** in Scotland the next day.

- **Future Continuous Changes to Conditional Continuous**

Direct: He said, “**I’ll be disposing** of the old computer next Tuesday.”

Indirect: He said that he **would be disposing** of the old computer next Tuesday.

Rule 4 – Direct Speech to Indirect Speech Conversion – Interrogative Sentences

- **No conjunction is used**, if a sentence in direct speech begins with a question (**what/where/when**) as the “question-word” itself acts as a joining clause.

Direct: “**Where** do you live?” asked the boy./ **The boy asked, “Where do you live?”**

Indirect: The boy **enquired where** I lived.

- If a direct speech sentence **begins with an auxiliary verb/helping verb**, the joining clause should be **if or whether**.

Direct: She said, ‘**will** you come for the party’?

Indirect: She asked **whether we would** come for the party.

- Reporting verbs such as ‘said/ said to’ changes to enquired, asked, or demanded

Direct: He **said to** me, ‘what are you wearing’?

Indirect: He **asked** me what I was wearing.

Rule 5 – Direct Speech to Indirect Speech Conversion – Changes in Modals

While changing direct speech to indirect speech the modals used in the sentences changes like:

1. Can becomes Could
2. Will -----Would
3. Shall----- Should
4. May----- Might
5. Must----- Had to/ would have to
6. Has to, have to -----Had to
7. Would----- Would
8. Could -----Could

9. Might----- Might

Check the examples:

- Direct : She said, ‘She **can** dance’.
- Indirect: She said that she **could** dance.
- Direct: She said, ‘I **may** buy a dress’.
- Indirect: She said that she **might** buy a dress.
- Direct: Rama said, ‘I **must** complete the assignment’.
- Indirect: Rama said that he **had to** complete the assignment.

There are Modals that **do not change** like (Could, Would, Should, Might, Ought to)

- Direct: She said, ‘I should clean the house’
- Indirect: She said that she should clean the house.

Rule 6 – Direct Speech to Indirect Speech Conversion – Pronouns

1. The **first person** (I/ me/ my/ mine/ myself/ we/ us/our/ ours/ ourselves) in the direct speech **changes as per the subject** of the speech.

Direct: He said, “I am in class Twelfth.”

Indirect: He says that he was in class Twelfth.

1. The **second person** (you, your, yours, yourself) of direct speech **changes as per the object** of reporting speech.

Direct: She says to them, “You have done your work.”

Indirect: She tells them that they have done their work.

1. The **third person** (He, Him. His, Himself, She, Her, Hers, Herself, It, Its, Itself, They, Them, Their, Theirs, Themselves) of direct speech **doesn't change**.

Direct: He says, “She dances well.”

Indirect: He says that she dances well.

Rule 7 – Direct Speech to Indirect Speech Conversion – Requests, Command, Wish, Exclamation

- Indirect Speech is supported by some verbs like requested, ordered, suggested and advised. Forbid-forbade is used for negative sentences. Therefore, **the imperative mood in the direct speech changes into the Infinitive in indirect speech.**

Direct: She said to her ‘Please complete it’.

Indirect: She **requested** her **to complete** it.

Direct: Hamid said to Ramid, ‘Sit down’.

Indirect: Hamid **ordered** Ramid **to sit** down.

1. In **Exclamatory sentences** that express (grief, sorrow, happiness, applaud) **Interjections are removed** and the sentence is **changed to an assertive sentence**.

Direct: She said, ‘Alas! I am undone’.

Indirect: She exclaimed sadly that she was broke.

Rule 8 – Direct Speech to Indirect Speech Conversion – Punctuations

1. In a direct speech the words actually spoken should be in (‘’) quotes and always begin with a capital letter.

Example: She said, “I am the Best.”

1. Full stop, Comma, exclamation or question mark, are placed inside the closing inverted commas.

Example: They asked, “Can we sing with you?”

1. **If direct speech comes after the information about who is speaking, a comma is used** to introduce the speech, placed before the first inverted comma.

Direct speech example: He shouted, “Shut up!”

Rule 9 – Direct Speech to Indirect Speech Conversion – Change of Time

1. In direct speeches, the words that express nearness in time or place are changed to words that express distance in indirect speech. Such as :
 - Now becomes then
 - Here becomes there
 - Ago becomes before
 - Thus becomes so
 - Today becomes that day
 - Tomorrow becomes the next day
 - This becomes that
 - Yesterday becomes the day before
 - These become those
 - Hither becomes thither
 - Come becomes go
 - Hence becomes thence
 - Next week Or month becomes following week/month

Examples:

Direct: He said, ‘His girlfriend came yesterday.’

Indirect: He said that his girlfriend had come the day before.

1. The **time expression does not change** if the **reporting verb is in the present tense or future tense**.

Examples:

Direct: He says/will say, 'My girlfriend came yesterday.'

Indirect: He says/will say that his girlfriend had come yesterday.

CONCORD

Concord is **a state of peaceful agreement**. ... In grammar, concord refers to the way that a word has a form appropriate to the number or gender of the noun or pronoun it relates to. For example, in 'She hates it', there is concord between the singular form of the verb and the singular pronoun 'she'.

30 Examples To Help You Master Concord

*What is concord in writing? We have put together this list of 30 **examples to help you master concord**.*

What Is Concord?

When we use the word 'concord' in everyday speech, it means 'agreement or harmony between people or groups' ([Oxford Dictionary](#)).

When we use the word in the context of grammar, it has a similar meaning: grammatical agreement between two parts of a sentence.

An important language skill to master is subject-verb concord.

The Basics Of Concord

Subject-verb concord is when the subject of a sentence and the [verb](#) of a sentence agree.

Simply, if the subject of the sentence is singular, the verb must be singular. If the subject of a sentence is plural, the verb must be plural.

Look at these examples.

30 Examples To Help You Master Concord

1. The **pages** (subject) **is** (verb) held together by a staple.

2. The **pages** (subject) **are** (verb) held together by a staple.

Number 2 is correct, because the subject, 'pages', and the verb, 'are', are both plural. They agree.

It's easy, yes? Let's gear up and try something more difficult.

A phrase in between the subject and the verb

Look at these examples:

3. The message between the lines **is** that we need to finish before Monday.

4. The message between the lines **are** that we need to finish before Monday.

The temptation here is to look at the word in front of the verb (the plural 'lines') and choose the verb that agrees with it (the plural 'are'). This is wrong. The subject of the sentence is not 'lines'. It's 'message'. So, because the subject, 'message', is singular, we use the singular verb 'is'. The phrase 'between the lines' is a prepositional phrase (starting with a preposition), which is why it's not the subject of the sentence.

Try your hand at these:

5. The case of champagne bottles **are** for the year-end party.

6. The case of champagne bottles **is** for the year-end party.

The correct answer is number 6. 'Case' is singular, so use the singular verb 'is'.

7. The sentiment in our offices **is** that our bonuses were measly this year.

8. The sentiment in our offices **are** that our bonuses were measly this year.

The correct answer is number 7. 'Sentiment' is singular, and the singular verb 'is' agrees with it.

Two subjects connected by either/or, or neither/nor

If you have two singular subjects that are connected by either/or, or neither/nor, use the singular verb. Look at this:

9. Neither Sibongile nor Ted **has** the keys to the stationery cupboard.

10. Either Mary or Shandu **is** manning the info desk at the conference.

Even though you're discussing two people, only one of them (singular) is taking action, so the verb is singular.

What do you do when one of the subjects is plural and the other isn't? Look at these examples:

11. Neither Sibongile (singular) nor the personal assistants (plural) **have** the keys to the stationery cupboard.

12. Either the stewards (plural) or Mary (singular) **is** manning the info desk at the conference.

Do you see how the verb agrees with the subject closest to it? However, the second sentence sounds awkward, so rather write sentences like this with the second subject being plural, and then make the verb plural. Sentence number 12 should rather be rewritten as:

13. Either Mary or the stewards **are** manning the info desk at the conference.

Two subjects connected by 'and'

When you have two subjects connected by 'and', use the plural form of the verb.

14. Tshepiso and Sbo **are** responsible for the exchange server.

15. Elize and Raveshan **are** our new project managers.

There are two exceptions to the rule. The first (see number 13) is when a compound subject connected with 'and' is seen as a singular subject due to popular use. The second is when the subjects connected by 'and' are the same person or entity (see number 14).

16. Pap and wors **is** my favourite meal.

17. The creator and distributor of the software **is** Energex Ltd.

Plural subjects that call for singular verbs

Use a singular verb when you have a subject that conveys a single unit of distance, time, or money.

18. Ninety-five cents **is** a great bargain for a SIM card.

19. One hundred kilometres **is** a gruelling daily commute.

20. Twenty minutes **is** all I have to prepare for the meeting.

Other subjects that call for singular verbs

The following words need singular verbs: each, everyone, everybody, anyone, anybody, somebody, nobody, someone, none, and no-one. Look at these examples:

21. Each of our staff members **has** to fill in an evaluation form.

22. Anyone who **wants** a day off in lieu of overtime must still fill out a leave form.

23. Someone **has** left a coffee cup on the glass of the photocopy machine.

24. None of us **wants** to admit to being behind on filing.

Subjects that are collective nouns

Look at these examples:

25. The board **wants** to make the decision by next Thursday.

26. The staff **is** in a meeting.

27. The team **is** due to fly out today.

The board, staff, and team are made up of many individual members, but each forms a collective, singular subject. Thus, a singular verb is used. Be careful not to make this mistake, though:

28. The staff **is** in a meeting to discuss their appraisals.

Now, you have a singular subject (staff), a singular verb (is), and a plural pronoun (their) in the same sentence. To improve concord, rather rewrite the sentence in one of the following ways:

29. The **staff is** in a meeting to discuss appraisals.

30. The staff **members are** in a meeting to discuss **their** appraisals.

8. conversation skills

Why are conversational skills important?

Conversations are **key to language development**, the exchange of thoughts and ideas and listening to each other. People learn by hearing each other's thoughts while observing facial and body expressions that show emotions.

What are the conversational skills for effective communication?

Your **body language should help convey your words**. Other factors you should consider are things like the tone of your voice, your hand gestures, and ensuring eye contact. A person is going to be encouraged to speak openly with you if you are relaxed and have a friendly tone.

What is difference between conversation and communication?

Conversation is an exchange of words, while communication is the transformation of thoughts and words into meaningful action. Conversation typically involves what you wish to share with another; communication focuses more on what you wish to accomplish. In order to communicate effectively, we must: Listen actively.

How do you make a good conversation?

10 Ways to Have Better Conversations

1. Don't multitask. "Be present. ...
2. Don't pontificate. ...
3. Use open-ended questions. ...
4. Go with the flow. ...
5. Try not to repeat yourself. ...
6. Stay out of the weeds. ...
7. Listen. ...
8. Be brief.

Tips for improving conversational skills

- Listen actively to others. Listening shows that we are interested in the other person and what they have to say. ...
- Look for nonverbal cues. ...
- Hold eye contact. ...
- Have empathy. ...
- Pay attention to details. ...
- Offer interesting insights. ...
- Talk slowly. ...
- Use the right words.

1. Conversation about a brief conversation between 2 old friends meeting by chance at a cafe

Sarah: Hello Jason, how are you, it's been a long time since we last met?

Jason: Oh, hi Sarah I'm have got a new job now and is going great. How about you?

Sarah: Not too bad.

Jason: How often do you eat at this cafe?

Sarah: This is my first time my friends kept telling me the food was great, so tonight I decided to try it. What have you been up to?

Jason: I have been so busy with my new job that I have not had the time to do much else, but otherwise, me and the family are all fine.

Sarah: Well, I hope you and your family have a lovely meal.

Jason: Yes you too.

2. Conversation about two people asking each other what they do for a living.

David: Hello, my name is David It's nice to meet you.
Jenny: Hi, I'm Jenny. It's my please to meet you.
David: Am sorry. what was your name again?
Jenny: Jenny.
David: So Jenny, What do you do for a living?
Jenny: I work at the local school teaching English. what do you for a living?
David: I'm also an English teacher, but am currently out of work.
Jenny: Sorry to hear that. It has been really nice talking to you.
David: Yes. It was a great pleasure meeting you.

3. Conversation about two friends meeting by chance at the movies.

Bob: Hi Jason, it's great to see you again.
Jason: Wow, it's great seeing you, How long has it been? It must be more than 6 months. I'm doing good. How about you?
Bob: Not too bad.
Jason: What movie are you and the family going to see?
Bob: I came here to see the Simpsons movie. How about you?
Jason: I'm going to watch Terminator.

4. Airport conversation between 3 people

Checking in desk: Welcome. Please can I see your tickets?
Mr Mrs Jones: Yes here you are.
Checking in desk: Is it just you two traveling or is there anyone else?
Mr Mrs Jones: No. It's just the two of us.
Checking in desk: Do you both have your passports with you?
Mr Mrs Jones: Yes. Here they are.
Checking in desk: I will be going to ask some questions. Just answer with a simple yes or a no.
Mr Mrs Jones: OK, no problem.
Checking in desk: As anyone you don't know asked you to take anything on the plane for them?
Mr Mrs Jones: No.
Checking in desk: Have you have sole possession of all your luggage since you packed?
Mr Mrs Jones: Yes.

Checking in desk: Have you at any time left your luggage unattended while being in the airport?

Mr Mrs Jones: No.

Checking in desk: Do you have any weapons or firearms in your possession?

Mr Mrs Jones: No.

Checking in desk: Have you any flammable material in your luggage?

Mr Mrs Jones: No.

Checking in desk: Do you have any perishable food items in your bags or suitcases?

Mr Mrs Jones: No.

Checking in desk: That's good. Can you put your luggage here please

Mr Mrs Jones: OK.

Checking in desk: What seat would you like an aisle seat or a window?

Mr Mrs Jones: Can I have 2 seats near the emergency exit.

Checking in desk: Wait I will check for you. Yes that's OK, I am placing you two in 21A and 21B. The gate number is A22. You can start boarding the plane in 30 minutes and the plane will take off in 1 hour.

Mr Mrs Jones: Can you tell me how to get to gate A22?

Checking in desk: yes, go straight ahead and turn left at the end turn right and A22 is there follow the signs for your gate number on the bottom of ticket

Mr Mrs Jones: Thank you for all your help.

Talking on the telephone

Making contact

Hello / Good morning / Good afternoon

This is Jason Brown speaking

Could I speak to Jane please

I'd like to speak to

I'm trying to contact

Introducing yourself in a work environment

Good morning, Mc Donalds how can I help you?

Hello, the Grand Royal Hotel. Sarah Brown speaking what can I do for you?

Hello, this is John from Manchester college.

Hello, my name's Peter . I'm calling from Microsoft .

Asking for the caller's name

Who's calling, please?

Can I have your name, please?

Saying who you want

Can I have the accounts department? I'd like to speak to

Could I speak to Linda, please?

Is David there, please?

I'm calling about the dog you have for sale .

Responding

I'll put you through. Hold the line, please.

I'm sorry he/ she is not available.

I'm afraid he/ she's busy at the moment.

I'm afraid he/ she's away/ not in at the moment/ in a meeting.

Reason for calling

I'm ringing to I'd like to



I need some information about

Leaving and taking a message

Can I leave a message? Can I take a message?

Would you like to leave a message?

Please tell him/ her

Could you ask him/ her to call me? Could you tell him/ her I called?

Asking for repetition

I'm sorry, but I didn't catch your name/ your number. Sorry, I didn't hear that.

Could you repeat it, please?

Could you say it again? I'm afraid I didn't understand. Could you spell that, please?

Could you speak up?

SELF INTRODUCTION

Good morning to all/ sir/s and madam/s

I am very happy /pleased /to introduce my self

I am -----/ my name is

I am from-----/ I hail from-----/ I was born and brought up/

I belong to----- I am a resident of

Coming to my family, my father's name is-----

he is -----.

My mother's name is -----

she is-----.(house maker / home manager/ employee)

My

I have ----brother/s and ----- sister/s

They are doing their-----.

At present I am pursuing my----/ I am studying my-----/ I am doing my-----

--

I completed my degree in the year----- with-----aggregate from-----
college.

I completed my intermediate education in the year with----aggregate from---
college.

I completed my SSC in the year----- with-----aggregate from-----college.

My achievements are-----

My strengths are -----

My strengths are -----

I am interested to ----- when I am free

My hobbies are -----

My goal is -----

My aim is-----

My life ambition is -----

Thank you sir/madam/all to give me this opportunity / I thank you to pay your
valuable time in listening to me.

SELF INTRODUCTION MODEL DATA

Hello sir/madam,

It's my pleasure to speak with you. I am (Your Name). Basically, I belong to (City Name). I have been living in (City Name) for (No. of years/months) now. I stay here with my family. Besides my parents, there is a younger brother in my family. Currently, I am exploring job opportunities in the (Domain Name) as I have recently finished (Degree Name) from (University Name).

I am very interested in the (Domain of your interest). That was the reason I chose to pursue higher studies in (Program Name). Post that, my internship experience and other practical projects in the college further boosted my interest in (Field name) as a full-time career option.

Not only am I passionate about the field I graduated in (Mention field), I am also inclined towards creative activities such as dancing, painting, acting, etc. I have always been an active student in school and college. I have participated in many cultural events during my school and college days and have won many awards.

In my free time, I enjoy going out with friends and trying new cuisines. I also enjoy watching movies, listening to music, reading, working out, and going on road trips.

I am looking forward to knowing more about this opportunity and I will be happy to answer more questions.

B.V.Raju College
Vishnupur, Bhimavaram

TIME TABLE

(2017-2018)

8:00 to 9:00

U. Madhavi & Ch. Gangadhar

	U.M	Ch.G	U.M	Ch.G	U.M	Ch.G
Mon	"	"	"	"	"	"
Tue	"	"	"	"	"	"
Wed	"	"	"	"	"	"
Thurs	"	"	"	"	"	"
Fri	"	"	"	"	"	"
Sat	"	"	"	"	"	"

U. Madhavi
HOD
H.O.D.
Department of English
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Vishnupur, Bhimavaram-534 202

Principal
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VISHNUPUR, BHIMAVARAM-534 202

B.V.Raju College
Vishnupur, Bhimavaram
Attendance (M.Sc Organic Chemistry) 2017-2018

s.no	Name of the student	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1	B.Soma srilakshmi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2	D.N.S.Sairama Krishna	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
3	G.V.Satyanarayana	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4	G. Ramesh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
5	G.S.N.Durga Prasad	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6	G. Durga Bhavani	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7	G. Siva venkata satish	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
8	I. Hari rama Krishna	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
9	K. Kishore	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
10	K. Siva Rama Krishna	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
11	K. Vijaya kumari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12	K.Ramya	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
13	M. Tejaswari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
14	M. Srimannarayana	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
15	M. N.Sai Malleswari	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
16	N.V. Rajya lakshmi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
17	N. Purna Chandra Rao	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
18	P. Sai sekhar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
19	P. Tarun Kumar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20	P. Meghana	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
21	P. sanjeev Kumar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22	P. Bhavani lakshmi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
23	P. Satish	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
24	SK. Bhasha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
25	S. Dhana sravani	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
26	T. Veeranjanyulu	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
27	U. Babji	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

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B.V. RAJU COLLEGE
VISHNUPUR::BHIMAVARM
DEPARTMENT OF M.Sc., CHEMISTRY
PERSONAL COUNSELLING

Each student is customized personally and identified the drawbacks. Those students who are facing difficulty in under

1. Understanding the concepts
2. Medium of instruction
3. Facing the interview
4. Stage fear
5. Health issues
6. Understanding derivation part in some subjects due to biological back ground.

Special training is given to them so that they can overcome go hand in hand with other students in the class. The fundamental motive of customization is to fill confidence in every student before they passed out.


HOD


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Vishnupur, BHIMAVARAM-534 202

Academic year 2017-2018

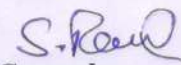
STUDENT LIST

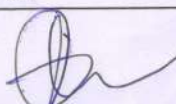
S. No.	Register No.	Name of the Student
I-M.Sc. I-SEMESTER		
1	1785333001	A Swetha
2	1785333005	D Naganjenyulu
3	1785333006	E Venkateswara Rao
4	1785333012	K V N Manikanta
5	1785333014	M Satya sai
6	1785333020	N M S S Rama Krishna
7	1785333023	N Johan Raju
II-M.Sc. III-SEMESTER		
8	1685333003	G V V Satyanarayana
9	1685333012	K Ramya
10	1685333026	P Veeranjanyulu

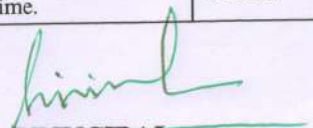
B.V. RAJU COLLEGE
VISHNUPUR::BHIMAVARM
DEPARTMENT OF M.Sc., CHEMISTRY
Academic Year 2017-18
PERSONAL COUNSELLING
I M.Sc I & III SEMESTER

Name of the Mentor:

S. No	Date	Name	Regd. No.	Problem	Suggestion	Action Taken	Result
1	18-07-17	A Swetha	1785333001	She has some problem in understanding chemical reactions in Organic chemistry subject	Suggested her to practice some basic reactions in the subject then start the syllabus to study	Suggested some reference books having basics.	There is some improvement
2	18-07-17	D Naganjenyulu	1785333005	He need extra time for preparing chemical reactions of Organic Chemistry subject	Suggested him to utilize remedial hours for practicing chemical reactions.	Given some time in remedial hour	Problem is clear
3	18-07-17	E Venkateswara Rao	1785333006	He had some problem in understanding derivation part in general chemistry because of biology back ground.	Suggested to practice the derivation part and know the basics required for derivations by consulting the concern faculty.	Faculty explained the basics required for derivations to the student in free time.	There is some improvement
4	18-07-17	K V N Manikanta	1785333012	Because of medium problem he was unable to follow the subjects	Suggested him to utilize remedial hours for understanding the subjects in the simple manner	Given some time in remedial hour	There is some improvement
5	18-07-17	M Satya sai	1785333014	He need extra time for preparing chemical reactions of Organic Chemistry subject	Suggested him to utilize remedial hours for practicing chemical reactions.	Given some time in remedial hour	Problem is clear
6	18-07-17	N M S S Rama Krishna	1785333020	He had some problem in understanding derivation part in general chemistry because of biology back ground.	Suggested him to practice the derivation part and know the basics required for derivations by consulting the concern faculty.	Faculty explained the basics required for derivations to the student in free time.	There is some improvement
7	18-07-17	N Johan Raju	1785333023	He had some problem in understanding derivation part in general chemistry because of biology back ground.	Suggested him to practice the derivation part and know the basics required for derivations by consulting the concern faculty.	Faculty explained the basics required for derivations to the student in free time.	There is some improvement
8	18-07-17	G V V Satyanarayana	1685333003	He wants the explanation of all the subjects in telugu also.	Suggested to read English news paper regularly	Took care in the classes	Improved a little bit
9	18-07-17	K Ramya	1685333012	She expressed that she has stage fear and afraid for attending interviews	Suggested to give Seminars in the class to overcome the problem	Seminars are conducted.	There is some improvement
10	18-07-17	P Veeranjanyulu	1685333026	He comes late to the college regularly because he comes from faraway place so misses the first class.	To meet the concern faculty in lunch break to cover the missed topic	Informed to the concern faculty to solve his problem by taking class in free time.	Problem was cleared.


Counselor


HOD


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Vishnupur, BHIMAVARAM-534 202

B.V.RAJU COLLEGE

DEPARTMENT OF M.Sc., CHEMISTRY

BRIDGE COURSE FOR M.Sc., STUDENTS FROM BIOLOGY (BT.BC.C) BACKGROUND

This course is specially designed for the non mathematical students of M.Sc., Organic Chemistry and Analytical Chemistry. In both M.Sc., Organic and Analytical specializations mathematical parts are present in General Chemistry paper as well as in Physical Chemistry paper. In General Chemistry Quantum Chemistry, Group theory of molecules are present which requires mathematical understanding. In Physical Chemistry paper Thermodynamics, electrochemistry, Chemical Kinetics are present which requires the knowledge of mathematical concepts. In these topics differentiation, integration, matrices, power series and polynomial functions like Legendre's, Laguerre and Hermite polynomials are present. So for the understanding of the students every year the department is conducting the Bridge course for the non mathematical students of Life Science background.

This is more useful for them to understand the concepts.

B.V.RAJU COLLEGE

DEPARTMENT OF M.Sc., CHEMISTRY

BRIDGE COURSE FOR M.Sc., STUDENTS FROM BIOLOGY (BT.BC.C) BACKGROUND

SYLLABUS

Differentiation: Definition, derivatives of standard functions, addition, multiplication and quotient rule

Differential equations: Definition, order of differential equations, solutions of first order and second order differential equations

Integration: Definition, definite and indefinite integrals, integration of standard functions, integration by parts, area under curve.

Matrices: Definition, types of matrices, determinant of a matrix, addition and multiplication of matrices, character of a matrix, similarity transformation, conjugation of matrices.

Vectors: Definition, addition, scalar and vector multiplication of vectors, angle between the vectors.

Power series and special functions Legendre's polynomial function and associated Legendre's polynomial function, Hermite polynomial polynomial function and its solution, Laguerre polynomial and associated Laguerre polynomial.


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DEPARTMENT OF M.Sc. CHEMISTRY

BRIDGE COURSE TIME TABLE

	1	2	3	4	B R E A K	5	6	7
MON						"		
TUE						"		
WED						"		
THU						"		
FRI						"		
SAT						"		

Name of the faculty: Mrs.J.Padmavathi

Duration : 10 days

Head of the Department
Dept. of M.Sc. Org. Chemistry,
B.V.R.C. Bhimavaram


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B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202


B.V.RAJU COLLEGE

VISHNUPUR:: BHIMAVARAM

DEPARTMENT OF M.Sc., CHEMISTRY

BRIDGE COURSE STUDENTS LIST - 2017-18

S.No.,	Register No.,	Name of the student
1	1785333009	K.Sai Teja
2	1785333010	K.Divya Lakshmi
3	1785333011	K.Bala Geetha
4	1785333020	N.M.S.Siva Ramakrishna
5	1785333023	N.Johan Raju
6	1785333024	N.Himabindu
7	1785333026	P.Kamala Devi


Signature of HOD
Head of the Department
Dept. of M.Sc. Org. Chemistry,
B.V.R.C. Bhimavaram


B.V.RAJU COLLEGE

VISHNUPUR:: BHIMAVARAM

DEPARTMENT OF M.Sc., CHEMISTRY

BRIDGE COURSE STUDENTS LIST - 2017-18

S.No.,	Register No.,	Name of the student	Signature
1	1785333009	K.Sai Teja	K. Saiteja.
2	1785333010	K.Divya Lakshmi	K. Divya Lakshmi
3	1785333011	K.Bala Geetha	K. Bala Geetha
4	1785333020	N.M.S.Siva Ramakrishna	N.M.S Siva Rama Krishna
5	1785333023	N.Johan Raju	N. Johan Raju.
6	1785333024	N.Himabindu	N. Himabindu
7	1785333026	P.Kamala Devi	P. Kamala Devi


Signature of HOD
Head of the Department
Dept. of M.Sc. Org. Chemistry
B.V.R.C. Bhimavaram

B.V.RAJU COLLEGE

VISHNUPUR :: BHIMAVARAM

DEPARTMENT OF M.Sc., CHEMISTRY

BRIDGE COURSE STUDENTS GRADES - 2017-18

S.No.,	Register No.,	Name of the student	Semester I	Semester II
1	1785333009	K.Sai Teja	A	B+
2	1785333010	K.Divya Lakshmi	A	B
3	1785333011	K.Bala Geetha	A	B+
4	1785333020	N.M.S.Siva Ramakrishna	B+	B
5	1785333023	N.Johan Raju	B+	C
6	1785333024	N.Himabindu	A	A
7	1785333026	P.Kamala Devi	B+	B+

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**B.V.RAJU COLLEGE
VISHNUPUR, BHIMAVARAM
DEPARTMENT OF M.Sc. CHEMISTRY
REMEDIAL CLASS WORK**

ACADEMIC YEAR: 2017-18

Academic year : 2017 - 2018

Semester : I

2 paper : P₁ : General Chemistry

3

S.No	Name of the student	01/09/17	07/09/17	12/09/17
1.	A. Swetha	P	P	P
2.	B. Kiran Bhaskar	P	A	A
3.	D. Naganjaneyulu	A	P	P
4.	M. Satya Sai	A	P	P
5.	N. Harikrishna	A	P	P
6.	N. Johan Raju	P	P	P
7.	P. Kamala Devi	A	P	P

16/09/17	21/09/17	26/09/17	05/10/17	10/10/17
P	P	P	P	P
P	P	P	P	A
P	P	P	A	P
A	P	P	P	P
P	P	P	A	P
P	A	P	P	P
P	P	P	A	P

Topics Covered	Name of the student	01/09/17	07/09/17	12/09/17	16/09/17	21/09/17	26/09/17	05/10/17	10/10/17
1) Eigen values & Eigen function	A. Swetha	A. Swetha	A. Swetha	A. Swetha	A. Swetha	A. Swetha	A. Swetha	A. Swetha	A. Swetha
2) Hermitian Operator	B. Kiran Bhaskar	B. Kiran Bhaskar	B. Kiran Bhaskar	B. Kiran Bhaskar	B. Kiran Bhaskar	B. Kiran Bhaskar	B. Kiran Bhaskar	B. Kiran Bhaskar	B. Kiran Bhaskar
3) Particle in one dimensional box	D. Naganjaneyulu	D. Naganjaneyulu	D. Naganjaneyulu	D. Naganjaneyulu	D. Naganjaneyulu	D. Naganjaneyulu	D. Naganjaneyulu	D. Naganjaneyulu	D. Naganjaneyulu
4) Particle in 3D box	M. Satya Sai	M. Satya Sai	M. Satya Sai	M. Satya Sai	M. Satya Sai	M. Satya Sai	M. Satya Sai	M. Satya Sai	M. Satya Sai
5) IR Spectra of Diatomic molecule	N. Harikrishna	N. Harikrishna	N. Harikrishna	N. Harikrishna	N. Harikrishna	N. Harikrishna	N. Harikrishna	N. Harikrishna	N. Harikrishna
6) Fermi Resonance	N. Johan Raju	N. Johan Raju	N. Johan Raju	N. Johan Raju	N. Johan Raju	N. Johan Raju	N. Johan Raju	N. Johan Raju	N. Johan Raju
7) Rotational & Vibrational Raman Spectra	P. Kamala Devi	P. Kamala Devi	P. Kamala Devi	P. Kamala Devi	P. Kamala Devi	P. Kamala Devi	P. Kamala Devi	P. Kamala Devi	P. Kamala Devi
8) Charge transfer spectra									

FR



B V RAJU COLLEGE

Vishnupur, Bhimavaram

Responsibilities of Mentor

A Mentor Is . . .

- **A trusted guide or friend**
Young people today do not get much of an opportunity to be friends with adults, especially adults who are going to listen to them.
- **A caring, responsible adult**
He or she provides access to people, places and things outside the mentee's routine environment.
- **A positive role model**
A mentor may be a positive role model. A role model is someone the youth aspires to be like, whereas a mentor is someone who offers to help the youth be whoever he or she wants to be. Today, youth have many role models; however, they are not necessarily positive role models.

Key Qualities of a Good Mentor

- Good listener;
- Persistent;
- Committed; and
- Patient.

The mentor may have taken on one of the following inappropriate roles:

A parent/legal guardian

The role of a parent or legal guardian (governed by law) is to provide food, shelter and clothing. It is not the mentor's role to fulfill these responsibilities. If the mentor believes his or her mentee is not receiving adequate support, he or she should contact the mentor program coordinator rather than trying to meet the needs of his or her mentee.

A social worker

A social worker is a licensed professional with the necessary skills and training to assist in family issues. If a mentor believes there is something wrong in the mentee's home life, the mentor should share this concern with the mentor program coordinator and not assume the role of a social worker and attempt to solve the problem.

A psychologist

A mentor is not a formal counselor or therapist. A psychologist or psychiatrist is a licensed professional.

The three Primary Tasks of a Mentor

Establish a positive, personal relationship with mentee:

- Establish mutual trust and respect;
- Maintain regular interaction and consistent support; and
- Make your meetings enjoyable and fun.

Help mentee to develop or begin to develop life skills:

- Work with your mentee to accomplish specific program goals (e.g., drop-out prevention, general career awareness); and
- Instill the framework for developing broader life-management skills, (e.g., decision-making skills, goal-setting skills, conflict resolution, money management).

Assist mentee in obtaining additional resources:

- Provide awareness of community, educational and economic resources available to youth and their families, and how to access these resources. Act as a resource broker as opposed to a resource provider;
 - Act as a guide and/or advocate, coach and/or model; and
 - Avoid acting as a professional case manager. View the role of a mentor as a friend rather than a counselor.
-

B V RAJU COLLEGE

Vishnupur, Bhimavaram

STUDENT MENTORING SCHEME**List Of Students allotted**

Academic Year :: 2017-18

Name of the Mentor : S. Ramesh

Branch :- Organic Chemistry Year :- II M.Sc. Semester :- III & IV

S.No.	Regd.No	Name of the student
1	1685333001	BOKKA SOMA SRILAKSHMI
2	1685333002	DASIREEDI NAGA SATYA SAI RAMA KRISHNA
3	1685333003	GONABOYINA VENKATA SATYANARAYANA
4	1685333004	GONTLA RAMESH
5	1685333005	GUDIMETLA SAI NAGA DURGA PRASAD
6	1685333006	GUDURI DURGA BHAVANI
7	1685333007	GUNDUBOYINA SIVA VENKATA SATEESH
8	1685333008	INUKONDA HARI RAMA KRISHNA
9	1685333009	KADALI KISHORE
10	1685333010	KARINKI SIVA RAMA KRISHNA
11	1685333011	KARRI VIJAYA KUMARI
12	1685333012	KONDA RAMYA
13	1685333013	MATTA TEJASWARI
14	1685333014	MERIGIMUVVALA SRIMANNARAYANA
15	1685333015	MOPIDEVI NAGA SAI MALLESWARI
16	1685333016	NAGIREDDY VENKATA RAJYA LAKSHMI
17	1685333017	NAMANA PURNA CHANDRARAO
18	1685333018	PALAKA SAI SEKHAR
19	1685333019	PEDDINTI TARUN KUMAR
20	1685333020	PENUMATSA MEGHANA
21	1685333021	PILLI SANJEEV KUMAR
22	1685333022	PONNALA BHAVANI LAKSHMI
23	1685333023	PUSALA SATISH
24	1685333024	SHAIK BASHA
25	1685333025	SUNKARA DHANA SRAVANI
26	1685333026	TALARI VEERANJANEYULU
27	1685333027	UPPULURI BABAJI



B V RAJU COLLEGE

Vishnupur, Bhimavaram

STUDENT MENTORING SCHEME

Academic Year :: 2017-18

Ref. No.

Date: 03-07-2017

Dear Sir /Madam,

You are appointed as a mentor for the Student mentoring Scheme and entrusted with responsibilities of a mentor to advise about 30 students.

You will be the mentor for these students during the second year. One of the mentor of each class is designated as a Class mentor.

For any advice or further details pertaining to this scheme, you are requested to contact your coordinator, Mr. /Ms. Narayana Raju, HOD

As a part of this scheme, the mentors have to individually interact with every student for about an hour initially with a view to customize personal requirement and fill the data in the profoma (Annexure-V). This customization enables the administration to identify the individual Academic as well as other co-curricular interests and make available the necessary facilities to enable the students to acquire integrated development.


As this scheme is for a very noble cause and would be of immense help to the student in improving their academic standards and other developmental activities, I request you to extend full cooperation to make the scheme a success.

Responsibilities of the mentor /Class mentors are given in Annexure-I.

The list of student allotted to you is give in Annexure-II

With regards,

yours sincerely,



HOD

To,
MR.MS..... S. Ramesh
Department: H.S. Chemistry
B V RAJU COLLEGE, Vishnupur
BHIMAVARAM- 534202.

B V RAJU COLLEGE

Vishnupur, Bhimavaram





STUDENT MENTORING SCHEME

Academic Year :: 2017-18

Name of the Mentor : S. Ramesh

Branch :- Organic Chemistry
Year :- II

Semester:- III & IV

S.No.	Month	Date of Mentoring	Conducted (YES/NO)	Date of submission of report	Signatures		
					Mentor	HOD	Mentor Co-ordinator
1.	August	22/08/17	YES	23/08/2017	S. Ramesh		unray
2.	September	23/09/2017	YES	26/09/2017	S. Ramesh		unray
3.	December	28/12/17	YES	30/12/2017	S. Ramesh		unray
4.	February	20/02/2018	YES	22/02/18	S. Ramesh		unray

B V RAJU COLLEGE

Vishnupur, Bhimavaram

STUDENT MENTORING SCHEME

Student Attendance Sheet.....

Academic Year :: 2017-18

Name of the Mentor : S. Ramesh

Branch :- II M.Sc. Year :- II
Organic Chemistry

Semester:- III

DATE of Counseling:- 22/08/2017

S.No.	Regd.No	Name of the student	Student Sign
1	1685333001	BOKKA SOMA SRILAKSHMI	B.S. Shilakshmi
2	1685333002	DASIREEDI NAGA SATYA SAI RAMA KRISHNA	D.S.S. Rama Krishna
3	1685333003	GONABOYINA VENKATA SATYANARAYANA	Absent
4	1685333004	GONTLA RAMESH	Go Ramesh
5	1685333005	GUDIMETLA SAI NAGA DURGA PRASAD	Gr. Sai naga durga Prasad
6	1685333006	GUDURI DURGA BHAVANI	Gr. Durga Bhavani
7	1685333007	GUNDUBOYINA SIVA VENKATA SATEESH	Absent
8	1685333008	INUKONDA HARI RAMA KRISHNA	I.H. Hari Rama Krishna
9	1685333009	KADALI KISHORE	K. Kishore
10	1685333010	KARINKI SIVA RAMA KRISHNA	K.S. Rama Krishna
11	1685333011	KARRI VIJAYA KUMARI	K.V. Kumari
12	1685333012	KONDA RAMYA	K. Ramya
13	1685333013	MATTA TEJASWARI	M. Tejaswari
14	1685333014	MERIGIMUVVALA SRIMANNARAYANA	M. Srinannarayana
15	1685333015	MOPIDEVI NAGA SAI MALLESWARI	Discontinued
16	1685333016	NAGIREDDY VENKATA RAJYA LAKSHMI	N.V.R. Lakshmi
17	1685333017	NAMANA PURNA CHANDRARAO	N. PURNA CHANDRA RAO
18	1685333018	PALAKA SAI SEKHAR	P. Sai Sekhar
19	1685333019	PEDDINTI TARUN KUMAR	P. Tarun Kumar
20	1685333020	PENUMATSA MEGHANA	P. Meghana
21	1685333021	PILLI SANJEEV KUMAR	P. S. Kumar
22	1685333022	PONNALA BHAVANI LAKSHMI	P. Bhavani Lakshmi
23	1685333023	PUSALA SATISH	P. Satish
24	1685333024	SHAIK BASHA	S. Basha
25	1685333025	SUNKARA DHANA SRAVANI	S. DHANA SRAVANI
26	1685333026	TALARI VEERANJANEYULU	T. Veeranjaneyulu
27	1685333027	UPPULURI BABAJI	J. Babaji

B V RAJU COLLEGE

Vishnupur, Bhimavaram

Mentor's Report During the Period of.....

Regd. No's: From 1685333001 to 1685333027

Date: 22/08/2017

1. Absentees (Regd.Nos)	
1685333003, 007	
2. Reg. Nos. of students having shortage of Attendance	
NIL	
3. Slow learners/Failures in Internal Test	
Subject	Regd. Nos
① Organic Reaction Mechanism - I & Pericyclic reactions	1685333009, 012
② Organic Spectroscopy - I	1685333014
③ Modern organic Synthesis - I	1685333003, 012, 026
④ Natural products	1685333003, 008, 009, 012, 019, 026
4. Enquiries/Issues (if any) & Replies	
→ In this meeting I advised all the students to read reference books for all subjects.	
→ I observed all the students coming to the college regularly.	
→ Some of the students are facing difficulty to remember the organic reactions. I suggested them some tips & told them to practice more time with examples.	
5. Other Information	

Note: Reports to be submitted to the at the end of Every session..

Date: 22/08/2017

S. Reddy
MENTOR

B V RAJU COLLEGE

Vishnupur, Bhimavaram

STUDENT MENTORING SCHEME

Student Attendance Sheet.....

Academic Year :: 2017-2018

Name of the Mentor : S. Ramesh

Branch :- II M.Sc.

Year :- II

Semester:- II

organic
chemistry

DATE of Counseling:- 23/09/18

S.No.	Regd.No	Name of the student	Student Sign
1	1685333001	BOKKA SOMA SRILAKSHMI	B.S. Srilakshmi
2	1685333002	DASIREEDI NAGA SATYA SAI RAMA KRISHNA	D.N.S.S. Rama Krishna
3	1685333003	GONABOYINA VENKATA SATYANARAYANA	G.V. Satyanarayana
4	1685333004	GONTLA RAMESH	G. Ramesh
5	1685333005	GUDIMETLA SAI NAGA DURGA PRASAD	G. Sai naga durga prasad
6	1685333006	GUDURI DURGA BHAVANI	G. Duruga bhavani
7	1685333007	GUNDUBOYINA SIVA VENKATA SATEESH	G. SIVA Venkata sateesh
8	1685333008	INUKONDA HARI RAMA KRISHNA	I.H. Rama Krishna
9	1685333009	KADALI KISHORE	K. Kishore
10	1685333010	KARINKI SIVA RAMA KRISHNA	K.S. Rama Krishna
11	1685333011	KARRI VIJAYA KUMARI	K.V. Kumari
12	1685333012	KONDA RAMYA	K. Ramya
13	1685333013	MATTA TEJASWARI	M. Tejaswari
14	1685333014	MERIGIMUVVALA SRIMANNARAYANA	M. Sriramannarayana
15	1685333015	MOPIDEVI NAGA SAI MALLESWARI	Dis continued
16	1685333016	NAGIREDDY VENKATA RAJYA LAKSHMI	N.V. R. Lakshmi
17	1685333017	NAMANA PURNA CHANDRARAO	N PURNA CHANDRARAO
18	1685333018	PALAKA SAI SEKHAR	P. Sai Sekhar
19	1685333019	PEDDINTI TARUN KUMAR	P. Tarun Kumar
20	1685333020	PENUMATSA MEGHANA	P. meghana
21	1685333021	PILLI SANJEEV KUMAR	P.S. Kumar
22	1685333022	PONNALA BHAVANI LAKSHMI	P. Bhavani lakshmi
23	1685333023	PUSALA SATISH	P. Satish
24	1685333024	SHAIK BASHA	S. Basha
25	1685333025	SUNKARA DHANA SRAVANI	S. DHANA SRAVANI
26	1685333026	TALARI VEERANJANEYULU	T. Veeranjaneyulu
27	1685333027	UPPULURI BABAJI	U. BABAJI

B V RAJU COLLEGE

Vishnupur, Bhimavaram

Mentor's Report During the Period of.....

Regd. No's: From 1685333001 to 027.....

Date: 23/09/2017

1. Absentees (Regd.Nos)	
NIL	
2. Reg. Nos. of students having shortage of Attendance	
NIL	
3. Slow learners/Failures in Internal Test	
Subject	Regd. Nos
① Organic Reaction mechanism & pericyclic reactions	1685333009
② Organic Spectroscopy-I	1685333014
③ Modern organic Synthesis-I	1685333009, 008, 026
④ Natural products	1685333003, 012
4. Enquiries/Issues (if any) & Replies	
→ Some students are facing organic mechanisms in organic synthesis & natural products papers.	
→ I suggested them some easy tips & told them to practice more time on that papers	
→ And I have given a time table for preparation of university examinations for slow learners.	
5. Other Information	

Note: Reports to be submitted to the at the end of Every session..

Date: 23/09/2017

S. Rao
MENTOR

B V RAJU COLLEGE

Vishnupur, Bhimavaram

STUDENT MENTORING SCHEME

Student Attendance Sheet.....

Academic Year :: 2017-18

Name of the Mentor : S. Ramesh

Branch :- B.Sc. Year :- II

Semester:- IV

organic chemistry
DATE of Counseling:-

28/12/17

S.No.	Regd.No	Name of the student	Student Sign
1	1685333001	BOKKA SOMA SRILAKSHMI	Absent
2	1685333002	DASIREEDI NAGA SATYA SAI RAMA KRISHNA	D.N.S.S. Ramakrishna
3	1685333003	GONABOYINA VENKATA SATYANARAYANA	G.V. Satyanarayana
4	1685333004	GONTLA RAMESH	G. Ramesh
5	1685333005	GUDIMETLA SAI NAGA DURGA PRASAD	G. Sai naga durga prasad
6	1685333006	GUDURI DURGA BHAVANI	G. Durga bhavani
7	1685333007	GUNDUBOYINA SIVA VENKATA SATEESH	G. Siva Venkata sateesh
8	1685333008	INUKONDA HARI RAMA KRISHNA	I. Hari Rama Krishna
9	1685333009	KADALI KISHORE	K. Kishore
10	1685333010	KARINKI SIVA RAMA KRISHNA	K.S. Rama Krishna
11	1685333011	KARRI VIJAYA KUMARI	K.V. Kumari
12	1685333012	KONDA RAMYA	K. Ramya
13	1685333013	MATTA TEJASWARI	M. Teja Swari
14	1685333014	MERIGIMUVVALA SRIMANNARAYANA	Absent
15	1685333015	MOPIDEVI NAGA SAI MALLESWARI	Dis continued
16	1685333016	NAGIREDDY VENKATA RAJYA LAKSHMI	N.V.R. Lakshmi
17	1685333017	NAMANA PURNA CHANDRARAO	Absent
18	1685333018	PALAKA SAI SEKHAR	P. Sai Sekhar
19	1685333019	PEDDINTI TARUN KUMAR	P. Tarun Kumar
20	1685333020	PENUMATSA MEGHANA	P. Meghana
21	1685333021	PILLI SANJEEV KUMAR	P.S. Kumar
22	1685333022	PONNALA BHAVANI LAKSHMI	P. Bhavani Lakshmi
23	1685333023	PUSALA SATISH	P. Satish
24	1685333024	SHAIK BASHA	S. Basha
25	1685333025	SUNKARA DHANA SRAVANI	S. DHANA SRIVANI
26	1685333026	TALARI VEERANJANEYULU	T. Veeranjaneyulu
27	1685333027	UPPULURI BABAJI	U. Babaji

B V RAJU COLLEGE

Vishnupur, Bhimavaram

Mentor's Report During the Period of.....

Regd. No's: From 1685333001 to 027.....

Date: 28/12/17

1. Absentees (Regd.Nos)	
<u>1685333001, 014, 017</u>	
2. Reg. Nos. of students having shortage of Attendance	
<u>NIL</u>	
3. Slow learners/Failures in Internal Test	
Subject	Regd. Nos
① Organic Reaction mechanism - II & photo chemistry	—
② Organic spectroscopy - II	<u>1685333012</u>
③ Organic Synthesis - II	<u>1685333014</u>
④ Bio organic chemistry	<u>1685333003, 013</u>
4. Enquiries/Issues (if any) & Replies	
→ Some students are from very long distance they are coming late frequently and I motivated them & explain the importance of missing classes.	
→ I found that some students are preparing for CSIR-NET. So I have guided them and provide the old question papers & other material.	
5. Other Information	

Note: Reports to be submitted to the at the end of Every session..

Date: 28/12/17

S. Rao
MENTOR

B V RAJU COLLEGE

Vishnupur, Bhimavaram

STUDENT MENTORING SCHEME

Student Attendance Sheet.....

Academic Year :: 2017-18

Name of the Mentor : S. Ramesh

Branch :- M.Sc.

Year :- II

Semester:- IV

organic
chemistry

DATE of Counseling:- 20/02/18

S.No.	Regd.No	Name of the student	Student Sign
1	1685333001	BOKKA SOMA SRILAKSHMI	B.S. Srilakshmi
2	1685333002	DASIREEDI NAGA SATYA SAI RAMA KRISHNA	D.N.S. Rama Krishna
3	1685333003	GONABOYINA VENKATA SATYANARAYANA	G.V. Satyanarayana
4	1685333004	GONTLA RAMESH	G. Ramesh
5	1685333005	GUDIMETLA SAI NAGA DURGA PRASAD	G. Sai naga durga prasad
6	1685333006	GUDURI DURGA BHAVANI	G. Durga bhavani
7	1685333007	GUNDUBOYINA SIVA VENKATA SATEESH	G. Sunduboyina sateesh
8	1685333008	INUKONDA HARI RAMA KRISHNA	I. Hemakrishna
9	1685333009	KADALI KISHORE	K. Kishore
10	1685333010	KARINKI SIVA RAMA KRISHNA	K.S. Rama Krishna
11	1685333011	KARRI VIJAYA KUMARI	K.V. Kumari
12	1685333012	KONDA RAMYA	K. Ramya
13	1685333013	MATTA TEJASWARI	M. Tejaswari
14	1685333014	MERIGIMUVVALA SRIMANNARAYANA	M. Srinannarayana
15	1685333015	MOPIDEVI NAGA SAI MALLESWARI	Discontinued
16	1685333016	NAGIREDDY VENKATA RAJYA LAKSHMI	N.V.R. Lakshmi
17	1685333017	NAMANA PURNA CHANDRARAO	N. PURNA CHANDRA RAO
18	1685333018	PALAKA SAI SEKHAR	P. Sai Sekhar
19	1685333019	PEDDINTI TARUN KUMAR	P. Tarun Kumar
20	1685333020	PENUMATSA MEGHANA	P. Meghana
21	1685333021	PILLI SANJEEV KUMAR	P.S. Kumar
22	1685333022	PONNALA BHAVANI LAKSHMI	P. Bhavani lakshmi
23	1685333023	PUSALA SATISH	P. Satish
24	1685333024	SHAIK BASHA	S. Basha
25	1685333025	SUNKARA DHANA SRAVANI	Absent
26	1685333026	TALARI VEERANJANEYULU	T. Veeranjaneyulu
27	1685333027	UPPULURI BABAJI	U. BABAJI

B V RAJU COLLEGE

Vishnupur, Bhimavaram

Mentor's Report During the Period of.....

Regd. No's: From 1685333001 to 1685333027

Date: 20/02/18

1. Absentees (Regd.Nos)	
1685333025	
2. Reg. Nos. of students having shortage of Attendance	
NIL	
3. Slow learners/Failures in Internal Test	
Subject	Regd. Nos
① Organic Reaction mechanism-II & photo chemistry	—
② organic spectroscopy II	1685333012
③ modern organic synthesis -II	1685333009, 012, 014
④ bioorganic chemistry	1685333012
4. Enquiries/Issues (if any) & Replies	
→ Some students are asked to arrange the revision classes. So I revised the important topics on Synthesis.	
→ I have given a time table for preparation of Final examinations.	
5. Other Information	

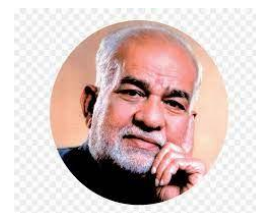
Note: Reports to be submitted to the at the end of Every session..

Date: 20/02/2018

S. Renu
MENTOR



BV RAJU COLLEGE
VISHNUPUR, BHIMAVARAM
DEPARTMENT OF ENGLISH



ENGLISH CLUB EVENTS

5.1.3

2017-2018

S.NO	NAME OF THE EVENT	DATE	RESOURCE PERSON/JUDGE
1.	VOCAB TEST	28.7.2017	U.MADHAVI, U.RAJU
2.	ROLE PLAY	18.8.2017	P.MADHURA SUBHASHINI, D.PRIYADHARSHINI, S.SYAMALA DEEPTHI
3.	DEBATE	24.1.2018	D.PRIYADARSHINI, S.SYAMALA DEEPTHI
4.	POETRY DAY	2.3.2018	U.MADHAVI, U.RAJU, P.Ch. GANGADHAR
5.	GUEST LECTURE IMPORTANCE OF COMMUNICATION SKILLS	7.7.2017	DR V RAMA DEVI
6.	VERBAL TEST TRAINING	25 TH TO 30.11.2017	U.RAJU, U.MADHAVI, K.WILLIAM KERY, P.CHANDRA GANGADHAR
7.	SPOKEN ENGLISH (FOR M.SC)	3.7.2017	U.MADHAVI, P.CHANDRA GANGADHAR

VOCAB TEST

(2017-2018)

Scanned with CamScanner

Scanned with CamScanner

Scanned with CamScanner

B.V.Raju College
Vishnupur, Bhimavaram

ENGLISH CLUB

CIRCULAR

Vishnupur,
25 July 2017.

Our English club is conducting a competition, 'VOCAB TEST' on 28-07-2017 from 3:00 pm to 5:00 pm in our college. Hence, all the competitors are requested to be in the room no. 208 without fail.

V. Madhavi
HOD

[Signature]
Academic In-charge

[Signature]
Principal



B.V.Raju college
Vishnupur, Bhimavaram

ENGLISH CLUB

Vishnupur,
24 July 2017.

To
The principal,
B.V.Raju college,
Vishnupur.

Respected sir,

Sub: Request to permit us to conduct VOCAB TEST on 28-07-2017.

As you directed us, the department of English planned an activity named 'VOCAB TEST' to make the students build their vocabulary that is the main cause of effective communication skills. Hence, we request you to grant permission to organise the programme on 28-07-2017 in our college library.

Thanking you sir.

Yours faithfully,
English Club.

U. Madhavi
HOD

[Signature]
Academic In-charge

[Signature]
Principal



B.V.RAJU COLLEGE
VISHNUPUR, BHIMAVARAM

DEPARTMENT OF ENGLISH
English Club

28 July 2017

Name of the activity: **VOCABULARY TEST**

Students were provided with vocabulary to make them enhance their vocabulary knowledge which is the paramount of importance than all grammar to improve communication skills and language skills.

They were given a month of time to practice and at last they were given a test on the basis of the given vocabulary.

S.NO	Name Of The Participant	Group
1	P. Geetha	B.Sc & B.Com
2	N.Venella	
3	V/Srodevo	
4	A.Soni	
5	M.Hasini	
6	P. Spandana	
7	G.J. Riyanka	
8	Sh. Kumar Jain	
9	N.Surendra	
10	V.Bharath	
11	K.Priyadarshini	
12	M. Sushmasri	
13	G. Madhavi	
14	P.Harichandhana	
15	Y. Yamini	
16	M.Sitha Maha Lakshmi	
17	M.V.Phanindra	
18	K.Durga	
19	a. Valli	
20	P.Gowri	
21	P.Sravani	
2	J.Satyanarayana	
23	R.Priyanka	
24	V.Anusha	
25	K.Kanka Rathnam	

26	T.Baby Rani	
27	T.Jyothi	
28	P..D Bhavani	
29	K.Idya	
30	M.Navya	
31	K. Idya Devi	
32	M.Venkata Raju	
33	K.Ramyasree	
34	A.Dhararani	
35	G.Sindhu	
36	B.Gowthami	
37	A. Roshini	
38	G. Hemadurga	
39	B.Umeshwari	
40	Ch.Ymounika	
41	G.Sushmitha	
42	T.Alekya	
43	J.Maheswari	
44	P.Lakshmi	
45	P.Rohini	
46	P.Gyathri	
47	K.V.V.Durga	
48	M.Sravani	
49	A.Prasanna	
50	Ch.Durga	
51	N.Janaki	
52	J.S Sravani	
53	N.Ramyasri	
54	K.Teya	
55	J.Swathi	
56	B.Neeraja	
57	A.Swathi	
58	S.Namratha	
59	G.N.Sireesha	
60	V.D.Varshini	
61	K.Yagna	
62	K.Demeshwari	
63	N.Mounika	
64	N.Bhavani	
65	T.Rama Lakshmi	
66	Ch.Phanisree	
67	B.Sireesha	
68	A.Indhu	
69	G.Hema	

70	B.Styasri
71	K.Praveenya
72	Ch.Mounika
73	G.Harika
74	Renuka
75	A.Karuna
76	B.Lahari
77	M.Adharshini
78	G.Sindhu
79	Sk.Hasini
80	Sk.Jaheena
81	K.Ns.Jayalakshmi
82	K.Anusha
83	S.Priyanka
84	D.Navyasi
85	D.Poojitha
86	K.Likitha
87	B.Keethana
88	G.Girija
89	Ch.Lakshmi
90	N.Gowthami
91	P.Renuka
92	M.Vijayag.Jagadeesh
93	K.Guneddika
94	K.Aya
95	R.Vasvi
96	A.Lashmi
97	Ch.V.Latha
98	M.Jayasri
99	D.Harini
100	A.Harika
101	T.Lakshmi
102	B.Iswarya
103	P.Siva
104	I.Nagendra
105	T.Gurudhatta
106	S.Bala
107	L.Sai
108	G.Balasree
109	B.Shithi
110	G.Manikanta
111	K.Vasantha
112	Sahithya
113	I.Gayathri

114	K.Satyavani
115	M.Lavanya
116	V.Alisha
117	S.N.Kumar
118	Ch.Amrutha
119	Y.Ramyasri
120	M.Manju
121	R.Tanuja
122	M.Rukmini
123	T.Asha
124	G.Yamini
15	J.Hema
126	R.Lakshmi
127	T.Jahnavi
128	M.Prasanthi
129	T.Kalyani
130	K.Swarna
131	G.Jyothi
132	V.Kiran
133	P.Deepika
134	N.Divya
135	M.Alia
136	P.Saidurga
137	K.Pavani
138	K.Deepika
139	E.Bogeswari
140	R.Sridevi
141	S.Rama
142	E.Karthika
143	K.Ramyan.Sai
144	S.Srividhya
145	Ss.Tanusha
146	V.Bhanani
147	G.Bavani
148	G.Sukanya
149	Swetha Deepika
150	T.Jyothi
151	R.Prasanna
152	Y.Smyuktha
153	S.Pravallika
155	D.Vasavi
156	S.Ramya
157	M.Sushmitha
158	G.Rajeswari

159	G.Ramadevi	
160	S.Banu	
161	K.Srivani	
162	G.Sravanya	
163	K.Hema	
164	D.Nagadurga	
165	G.Prasanna	
166	G.Prasanna	
167	Ch.Gayathri	
168	N.Nandini	
169	P.Shutha	
170	P.Shathosha	
171	K.Devi	
172	P.Kranthi	
173	Y.Tanuja	
174	S.Priyanka	
175	S.Neneptha	
176	P.Chakri	
177	Ch.Ramadevi	

Prize winners

S.No	Name of the Prize winners	Section	Prize
1	T.Alekya	I Bt Bc C	1ST PRIZE
1	G.Jagadeesh	I Mecs.A	2ND PRIZE
2	K.Vidyadevi	I Mscs	
3	K.Ramyasri	I Mpcs	
4	M.Venkataraju	I Mpcs	
5	S.Neneptha	I Mb Bt	
6	P.Chakrimani	I Mb Bt	
7	Ch.Ramadevi	I Mb Bt	
8	G.Manikanya	I Bcom	
9	P.Siva Pavan	I Bt Bc	
10	K.Ayay Sai	Iimb Bt	

Judges

S.No	Name of the judge	signature
1	U.Madhavi	U. Madhavi
2	U.Raju	U. Raju

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event Vocab test

Date: 28/07/2017

1. Name of the resource person/ activity Vocab test
2. Are you satisfied with the performance of resource person / judge Yes / No / NA
3. Rate the activity / seminar/ guest lecture conduction/work shop 1 2 3 4 5 ✓
4. Do you want to conduct similar program Yes / No
5. Suggestions / comments (If any)

Splendid

6. What kind of program should be conducted through the department / college in future you expect

Spoken English

Name : K. Ramya Sree

Roll No : 086

Group: I MPES

signature: K. ramya Sree

Date: 28/07/2017

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event Vocab Test

Date: 28/07/2017

1. Name of the resource person/ activity Vocab Test
2. Are you satisfied with the performance of resource person / judge ☒ Yes / No / NA
3. Rate the activity / seminar/ guest lecture conduction/work shop

1	2	3	4	5
---	---	---	---	---
4. Do you want to conduct similar program ☒ Yes / No
5. Suggestions / comments (if any)

Excellent

6. What kind of program should be conducted through the department / college in future you expect

Role phy

Name : Gr. Mani kanya

Roll No : 025

Group: 1 B.Com

signature: Gr. Manikanya

Date: 28/07/2017

B.V.Raju college

Vishnupur: BVRM

Department of ENGLISH

Student feedback form

Name of the Event Vocab test

Date: 28.07.2017

1. Name of the resource person/ activity

2. Are you satisfied with the performance of resource person / judge ☒ Yes / No / NA ☒

3. Rate the activity / seminar/ guest lecture conduction/work shop 1 2 3 4 5

4. Do you want to conduct similar program Yes / No

5. Suggestions / comments (If any)

Excellent

6. What kind of program should be conducted through the department / college in future you expect

debate

Name : K. Nidya devi

Roll No : 11311109143

Group: 1 MSGS

signature: Nidya devi.k

Date: 28.07.2017

ROLE PLAY

(2017-18)

B.V.Raju College
Vishnupur, Bhimavaram

ENGLISH CLUB

Circular

Vishnupur,
13 August 2017.

Our English club is conducting a competition, 'ROLEPLAY' on 18-08-2017 from 11am to 1:00pm in our college. Hence, all the competitors are requested to be in the room no. 302 without fail.

S. Madhavi
HOD

[Signature]
Academic In - charge

[Signature]
Principal



B.V.Raju college
Vishnupur, Bhimavaram

English Eclat

Vishnupur,
12 August 2017.

To
The principal,
B.V.Raju college,
Vishnupur.

Respected sir,

Sub: Request to permit us to conduct **ROLEPLAY** on 18-08-2017.

As you directed us, the department of English planned an activity named '**ROLEPLAY**' to make the students build their communication skills. Hence, we request you to grant permission to organise the programme on 18-08-2017.

Thanking you sir.

Yours faithfully,
Department of English.

U. Madhavi
HOD

[Signature]
Academic In - charge

[Signature]
Principal



B.V. RAJU COLLEGE
VISHNUPUR, BHIMAVARAM

DEPARTMENT OF ENGLISH
ENGLISH CLUB

18 August 2017

Name of the activity: ROLEPLAY

Role play, an activity designed by English club for the purpose of language skills development and to create an environment among the students to have eager to speak among themselves, was conducted in seminar hall.

Prior to this the selection for final Role play activity, at class room level it was conducted and classroom winner selected.

S.No	Name Of He Student	Section	signature of the student
1	Satya Durga.M	I MPC	Satya durga.M
	Navya.N		Navya.N
2	Sravani.P		Sravani.P.
	Sukanya.P		Sukanya.P.
3	R.Lakshmi		P. Lakshmi
	Umeswari.R		Umeswari.R
4	Ajaysai.K	I MPSC	Ajaysai.K
	Phaneendra.M		Phaneendra.M
	Majoy.P		P. Majoy
	Ganesh.B		Ganesh.B
	Venkat.M		Venkat.M
	Harika.A		Harika.A.
5	M.Navya		M. Navya
	R.Priyanka		R. Priyanka
	D.Harini		D. Harini
	Shabreen		Shabreen.
	M.Anusha		M. Anusha
6	S.Raju	I MSCS	S. Raju
	S.Surya		S. Surya
	L.Yaswanth		L. Yaswanth.
7	G.Girija		G. Girija
	Ch.Sravani		Ch. Sravani
	M.Nandini		M. Nandini

8	J.Swathi	I MECS-A	J. Swathi
	A.Kaveri		A. Kaveri
	G.Divya		G. Divya
	G.Sirisha		G. Sirisha
9	B.Revant	I MECS-B	B. Revanth
	I.Bhaskar		I. Bhaskar
10	A.Veena		A. Veena
	K.Teja		K. Teja
11	Y.Kasi	I Mb Bt	Y. Kasi
	P.Jaswanth		P. Jaswanth
12	M.Chandu		M. Chandu
	N.Vijay		N. Vijay
13	P.Monisha	I BtBc	P. Monisha
	M.Dharani		M. Dharani
14	P.Geethika		P. Geethika
	V.Anusha		V. Anusha
15	.Meghana	I Bcom	. Meghana
	S.Rasmitha		S. Rasmitha
16	B.Niraja		B. Niraja
	T.HarshaVardhini		T. Harsha Vardhini
17	N.Bhavani	II MPCS	N. Bhavani
	N.Mounika		N. Mounika
18	V.Jansi Durga		V. Jansi Durga
	P.Mahathi		P. Mahathi
19	S.Hemanthi	I Mb Bt	S. Hemanthi
	S.Hemanthi		S. Hemanthi
20	U.Sravani		U. Sravani
	M.Kavya		M. Kavya
21	N.Pooja	I BtBc	N. Pooja
	Sk.Halima		Sk. Halima
22	L.Likitha		L. Likitha
	Neneptha		Neneptha
23	Ch.Sravya	I Bcom	Ch. Sravya
	T.Alekya		T. Alekya
24	D.Aishwarya		D. Aishwarya
	V.Anusha		V. Anusha
25	H.Ramya	II MPCS	H. Ramya
	S.Nikhila		S. Nikhila
26	G.Priyanka		G. Priyanka
	M.Lavanya		M. Lavanya
26	B.Lathasri	II MPCS	B. Lathasri
	P.Santhosi		P. Santhosi
	E.Karthika		E. Karthika
	E.Mounika		E. Mounika
26	S.Puja	II MPCS	S. Puja

	G.Duga		G. Durga.
	G.Nagaraju		G. Nagaraju.
	H.Harish		H. Harish.
27	M.Haritha	II BCOM	M. Haritha
	K.Lakshmi		K. Lakshmi.
	I.Nagendra		I. Nagendar.
	G.Amya		G. Ramya.
	T.Prahathi		T. Prathathi
	G.Pavan		G. Pavan
	V.Gopalairan		V. Gopalairan.
	T.Gurudatha		T. Gurudatha
	P.Vijay		P. Vijaya.
28	Nikhila	II MPCS	Nikhila.
	E.Bhogeswari		E. Bhogeshi.
	A.Shalini		A. Shalini.
	L.Pavani		L. Pavani
29	G.Balasree	II MSCS	G. Balasree
	P.Sunandha		P. Sunandha.
	L.Pravallika		L. pravallika.
	G.Madhavi		G. Madhavi.
	R.Malleswari		R. Malleswari
	K.Prasanna		K. Prasadanna.
30	Ch.Chaitanya	II MECS - A	Chaitanya
	G.Durga		G. Durga
	K.Devi		K. Devi
	K.Harika		K. Harika
	J.Mounika		J. Mounika
	G.Nagavalli		G. Nagavalli
31	R.Tanuja	II MECS - B	R. Tanuja
	V.Havani		V. Havani
	S.Anusha		S. Anusha
	M.Vijaya Lakshmi		M. Vijaya Lakshmi.
32	R.Sridevi	II MPC	R. Sridevi
	S.Rama		S. Rama
	B.Divyasri		B. Divyasri
	G.Rajeswari		G. Rajeswari.

B. Maneesha

II MECS - A

Maneesha

N. Ramyasree

II BT

Ramya Sree.

P. Mahalakshmi

II MPCS

Mahale

K. V.V. Durga

II MGCS

K. Durg

P. Anuradha

II MPCS

Anuradha

Prize winners

S.No	Name of the participant	Section	Prize	
1	R.Malleswari	II MSCS	1st	
	K.Prasanna			
2	G.Ramya	II BCOM	2nd	
	-I.Nagendra			
3	R.Sridevi	II MPC	2nd	SECOND YEAR
	S.Rama			
4	Ch.L.R.Chaitanya	II MECS-A	2nd	
	B.Maneesha ✕			
1	N.Ramyasree ✕	I BT BC C	1st	
	T.Alekya			
2	G.Girija	I MSCS	2nd	
	Ch.Sravani			
	M.Nandini			
3	M.V.S.Chandu	I MECS - B	2nd	
	N.Vijaykumar			

Judges:

S.No	Name of the student	Signature
1	P.Madhura Subhashini	P. Madhura
2	D.S.Pyadarshini	D.S. pyadarshini
3	P.Syamala Deepthi	p.s. symptt.

P. Madhura
HOD

[Signature]
Academic In - charge

[Signature]
Principal



Handwritten signature or initials in green ink.

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event role Play

Date: 18th Aug 2017

1. Name of the resource person/ activity ✓
2. Are you satisfied with the performance of resource person / judge Yes / No / NA ✓
3. Rate the activity / seminar/ guest lecture conduction/work shop 1 2 3 4 5 ✓
4. Do you want to conduct similar program Yes / No ✓
5. Suggestions / comments (If any)

I Enjoy a lot

6. What kind of program should be conducted through the department / college in future you expect

Group Discussion

Name : Gr. Ramya

Roll No : 163118200021

Group: 11 Bcom

signature: Gr. Ramya

Date: 18th Aug 2017

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event Role play

Date: 18th August

1. Name of the resource person/ activity ✓
2. Are you satisfied with the performance of resource person / judge Yes / No / NA ✓
3. Rate the activity / seminar/ guest lecture conduction/work shop 1 2 3 4 5 ✓
4. Do you want to conduct similar program Yes / No ✓
5. Suggestions / comments (if any)
It is very useful and it really
improved my communication skills.

6. What kind of program should be conducted through the department / college in future you expect

Vocabulary Test

Name : R. Sridevi

Roll No : 163117101046

Group: II MPC

signature: Sridevi

Date: 18th August 2017

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event Roleplay

Date: 18th August 2017

1. Name of the resource person/ activity ✓
2. Are you satisfied with the performance of resource person / judge Yes / No / NA ✓
3. Rate the activity / seminar/ guest lecture conduction/work shop 1 2 3 4 5 ✓
4. Do you want to conduct similar program Yes / No ✓
5. Suggestions / comments (If any)

It is Very Good

6. What kind of program should be conducted through the department / college in future you expect

Essay Writings

Name : S. Rama

Roll No : 163117101047

Group: II MPC

signature: Rama.S

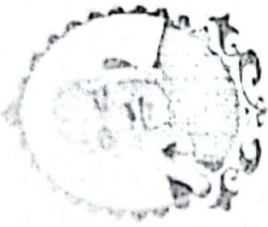
Date: 18th August 2017



VISHNU
UNIVERSAL LEARNING

PADMASRI DR B.V. RAJU INSTITUTE OF COMPUTER EDUCATION

* VISHNUPUR, BHIMAVARAM-2, W.G.DIS, (A.P)



English Club

Certificate

This is to certify that Mr. / Mrs. N. Ramya Sree [I - BT Bc cl] has

First Prize..... in the event Role Play..... in

the Inter-Collegiate Literary events conducted by ENGLISH CLUB held on 18.08.2017.....

at Padmasri Dr. B.V. Raju Institute of Computer Education, Bhimavaram.

U. Madhavi
Co-ordinator

[Signature]
Academic Incharge

[Signature]
Principal

DEBATE

(2017-2018)

B.V.Rajucollege
Vishnupur, Bhimavaram

ENGLISH CLUB

Vishnupur,
20 January 2018

To
The principal,
B.V.Rajucollege,
Vishnupur.

Respected sir,

Sub: Request to permit us to conduct DEBATE on 24-1-2018.

As you directed us, the department of English planned an activity named 'Debate' to make the students build their Public speaking skills and communication skills, and lose fear of public speaking. Hence, we request you to grant permission to organise the programme on 24-1-2018

Thanking you sir.

Yours faithfully,
Department of English

C. Madhavi
HOD

[Signature]
Academic In - charge

[Signature]
Principal



B.V.Raju College
Vishnupur, Bhimavaram

ENGLISH CLUB

Circular

Vishnupur,
21 January 2018.

Our English club, named "English eclat", is conducting a competition, 'DEBATE' on 24-01-2018 from 11am to 1:00pm in our college. Hence, all the competitors are requested to be in room no.303 without fail.

V. Madhavi
HOD

[Signature]
Academic In - charge

[Signature]
Principal



English Eclat

24 January 2018

Name of the activity: Debate

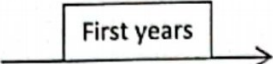
Debate, an activity designed by English club for the purpose of language skills development and to create an environment among the students to have eager to speak among them, was conducted in seminar hall.

Prior to this the selection for final Role play activity, at class room level it was conducted and classroom winner selected.

S.No	Name Of The Student	Section	Student signature
SECOND YEAR			
1	Ch.Chaitanya	II MECS-A	ch. chaitanya
	P.Lakshmi		P.Lakshmi
	Ch.Mounika		Ch. Mounika
	G.Sravanya		G.Sravanya
2	R.Malleswari	II MSCS	Malleswari.R.
	K.Rasana		K. Rasana
3	V.Sreedhari	II MB BT	Sreedhari.V
	P.Tejasri		P.Teja Sri
4	B.Jyothi	II BCOM	B. Jyothi
5	G.Pryanka	II BT BC C	G. Priyanka.
	T.Agnes		T. Agnes
FIRST YEAR			
1	M.Kavyasree	I MB BT	M.kavyasree
	L.Likhitha		L.Likhitha
	Neneptha		Neneptha

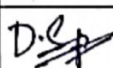
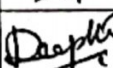
2	R.Priyanka	I MPCS	R. Priyanka
	P.Sonaali		Sonali. P
	G.Hemalatha		G. Hemalatha
3	G.Sindhu	I MSCS	G. Sindhu
4	T.Alekya	I BT BCC	T. Alekya
	N.Ramyaasree		N. Ramya Sree
5	B.Neeraja	I MECS-A	B. Neeraja
6	M.Dharani	I MECS-B	M. Dharani
	K.V.DURGA		Durga. K


Prize Winners


<div>First years</div> 	S.No	Name Of The Student	Section	Prize
	1	K.V.V.Durga	I MECS-B	First
	2	P.Sonali	I MPCS	Second
	3	R.Priyanka	I BT BC C	
	4	N.Ramyasree		
	5	S.Neneptha	I MB BT	Third
6	G.Sindhu	I MSCS		

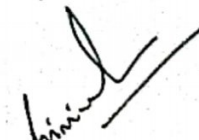
Second years	S.No	Name Of The Student	Section	Prize
	1	V.SRIDHARI	II MB BT	First
	2	R.TEJASREE		Second
	3	CH.CHAITANYA	II MECS – A	Third
	4	P.SMYUKTHA	II MPCS	
	5	R.D.MALLESWARI	II MSCS	

Name of the Judges

S.No	Name Of The Judge	Signature
1	D.S.PriyaDarshini	
2	S. SyamalaDeepthi	


HOD


Academic In – charge


Principal





VISHNU
UNIVERSAL LEARNING

PADMASRI DR B.V. RAJU INSTITUTE OF COMPUTER EDUCATION

* VISHNUPUR, BHIMAVARAM-2, W.G. DIS, (A.P) *



English Club

Certificate

This is to certify that Mr. / Mrs. N. Ranya Sree (I.B.T.C.C.) has

Won 2nd Prize in the event Debate in

the Inter-Collegiate Literary events conducted by **ENGLISH CLUB** held on 24.01.2018

at Padmasri Dr. B.V. Raju Institute of Computer Education, Bhimavaram.

Co-ordinator

Academic Incharge

Principal
Principal

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event Debate

Date: 24/01/2018

1. Name of the resource person/ activity Debate
2. Are you satisfied with the performance of resource person / judge Yes / No / NA
3. Rate the activity / seminar/ guest lecture conduction/work shop 1 2 3 4 5
4. Do you want to conduct similar program Yes / No
5. Suggestions / comments. (if any)

I enjoyed a lot

6. What kind of program should be conducted through the department / college in future you expect

Spoken english

Name : Nenepta

Roll No : 113117141393

Group: 1 MB BT

signature: Nenepta

Date: 24/01/2018

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event English Debate

Date: 24/01/2018

1. Name of the resource person/ activity English Debate
2. Are you satisfied with the performance of resource person / judge Yes / No / NA ✓
3. Rate the activity / seminar/ guest lecture conduction/work shop 1 2 3 4 5 ✓
4. Do you want to conduct similar program Yes / No
5. Suggestions / comments (If any)

We loved it

6. What kind of program should be conducted through the department / college in future you expect

Spoken english

Name : P. Teja Sri

Roll No : 410

Group: 11 MBBT

signature: P. Teja Sri

Date: 24/01/2018

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event Debate

Date: 24/01/2018

1. Name of the resource person/ activity Debate
2. Are you satisfied with the performance of resource person / judge Yes / No / NA
3. Rate the activity / seminar/ guest lecture conduction/work shop

1	2	3	4	5
				✓
4. Do you want to conduct similar program Yes / No
5. Suggestions / comments (if any)

We enjoyed a lot

6. What kind of program should be conducted through the department / college in future you expect

Elocution

Name : N. Ramya Sree

Roll No : 173117121219

Group: I BT BC C

signature: N. Ramya Sree

Date: 24/01/2018

POETRY DAY

2017-18

B.V.Raju College
Vishnupur, Bhimavaram

Details of the Poetry writing conducted

Name of the event	Poetry writing
Date	02-03-2018
Time	4-5 pm
Place	208
Mode of conduction	Offline
Participants	I & II year Degree students
Conducted by	Department of English
Event co-ordinator	U.Madhavi
Feedback collected	Yes

B.V.Raju College
Vishnupur, Bhimavaram

ENGLISH CLUB

Vishnupur,
26 February 2018.

To
The Principal,
B.V.Raju college,
Vishnupur.

Sub: Request to permit us to conduct Poetry writing activity on 02-03-2018.

Respected Sir,

As you directed us, the department of English planned an activity named **Poetry writing activity** to make the students to develop their written skills. Hence, we request you to grant permission to organize the activity on 02-03-2018.

Thanking you sir.

Yours faithfully,
English Department.

V. Madhavi
HOD

[Signature]
Academic In-Charge

[Signature]
Principal



B.V.Raju College
Vishnupur, Bhimavaram

ENGLISH cIRCULAR

Circular

Vishnupur,
27February 2018.

Our English department is conducting a competition, Poetry writing activity on 02-03-2018 from 4:00 pm to 5:00pm. Hence, all the participants are requested to be in roomno.208to explain it without fail.

V. Madhavi
HOD

[Signature]
Academic In-Charge

[Signature]
Principal



B.V.Raju college
Vishnupur, Bhimavaram

English Department

2 March 2018.

Name of the activity: Poetry writing activity

S.No	Section	Name	Poetry Name
1	I MECS-B	K.V.V.Durga	Loves towards you
2	I MPCS	P.Sonali	Life line
3	I BTBC	N.Ramyasree	Candle life
4	I BTBC	T.Alekya	Mother love is Awestone
5	I MB BT	S.Neneptha	Make me feel my love
6	I MSCS	G.Sindhu	My Super Hero
7	I MB BTBC	V.Sridhari	Oh my friend

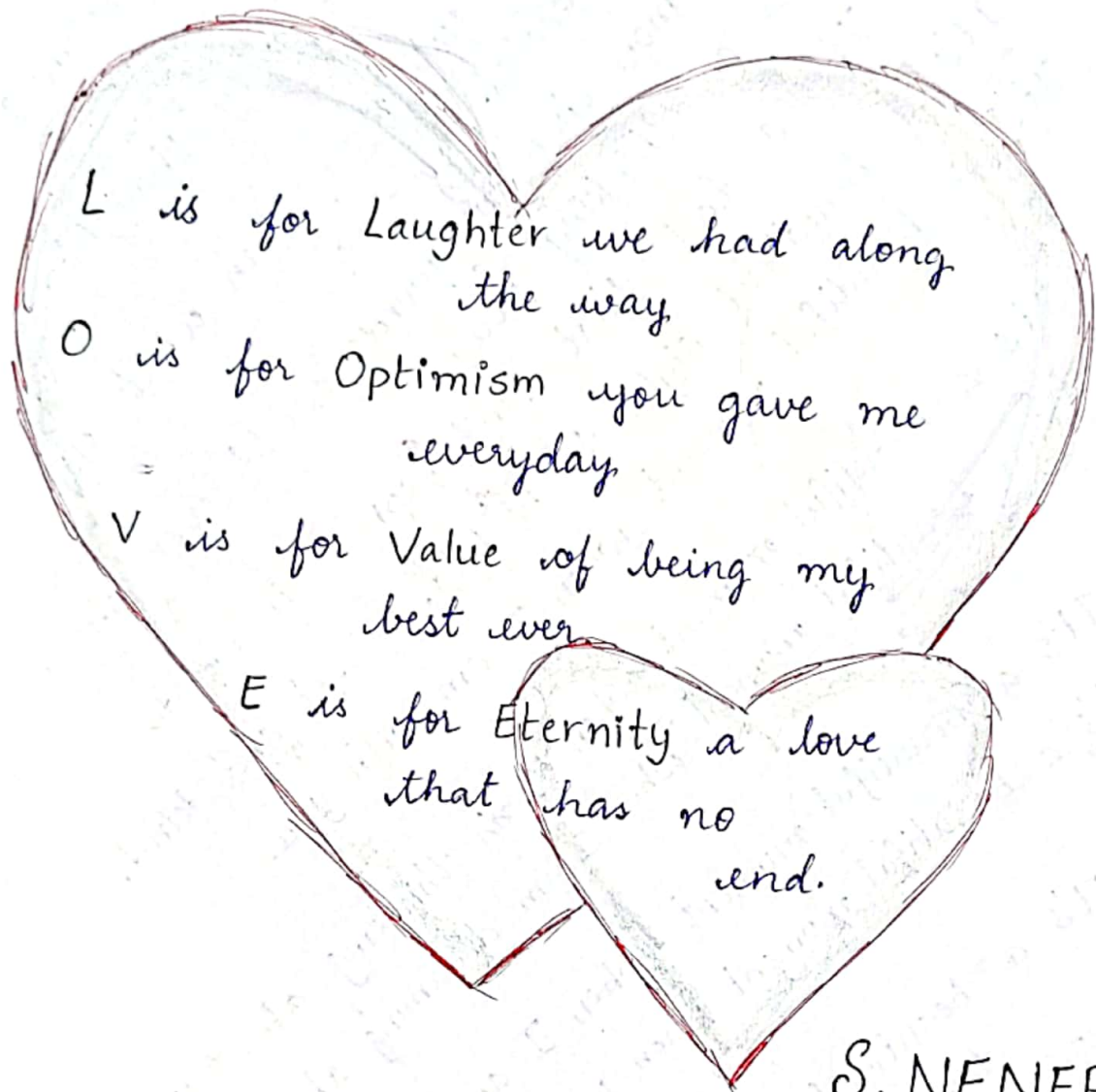
8	II MB BT	R.Tejasree	Wash Your Hands
9	II MSCS	R.Malleswari	Greet All of Stage Frigate
10	II MECS - A	P.Samyuktha	Beauty of Nature
11	II MPCS	R.D.Malleswari	Make me feel my love
12	II MSCS	K.Prasanna	Your Best

Name of the judges

S.no	Name of the winner	Attained to position
<u>1</u>	U.Madhavi	U.Madhavi
<u>2</u>	U.Raju	U.Raju
<u>3</u>	P.C.Gangadhar	P.C.Gangadhar

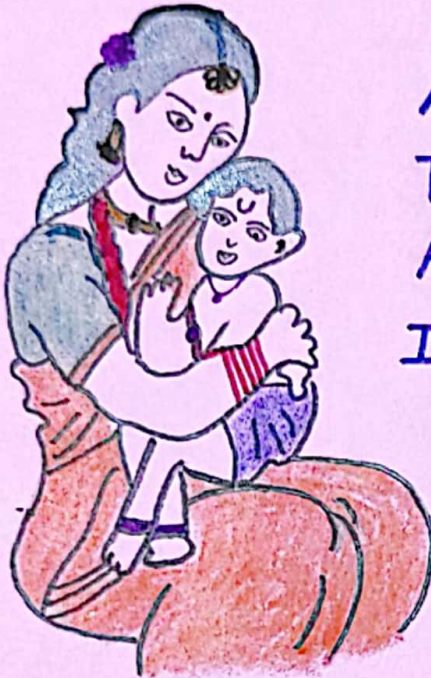
Winners

S.no	Name of the winner	Section	Attained to position
<u>1</u>	T.Alekya	I BTBC	first
<u>2</u>	R.Malleswari	II MSCS	second
<u>3</u>	S.Neneptha	I MB BT	three



S. NENEPTHA
I-MB

MOTHERS LOVE IS AWESOME



A Mother's love is eternal
The kind that won't ever die
A Mother's love is nutritional
It is the fruit that feeds our soul

It is endless and unselfish
She loves us just the same
Simply for who we are
A Mother's love is unbreakable

A Mother's love is precious
Without them where would we be?
There's no love like a mother's
Her heart is filled with care

T. Alekhya
1st BT

WASH YOUR HANDS

Wash wash wash your hands

May your hands

Be always clean

To touch your face

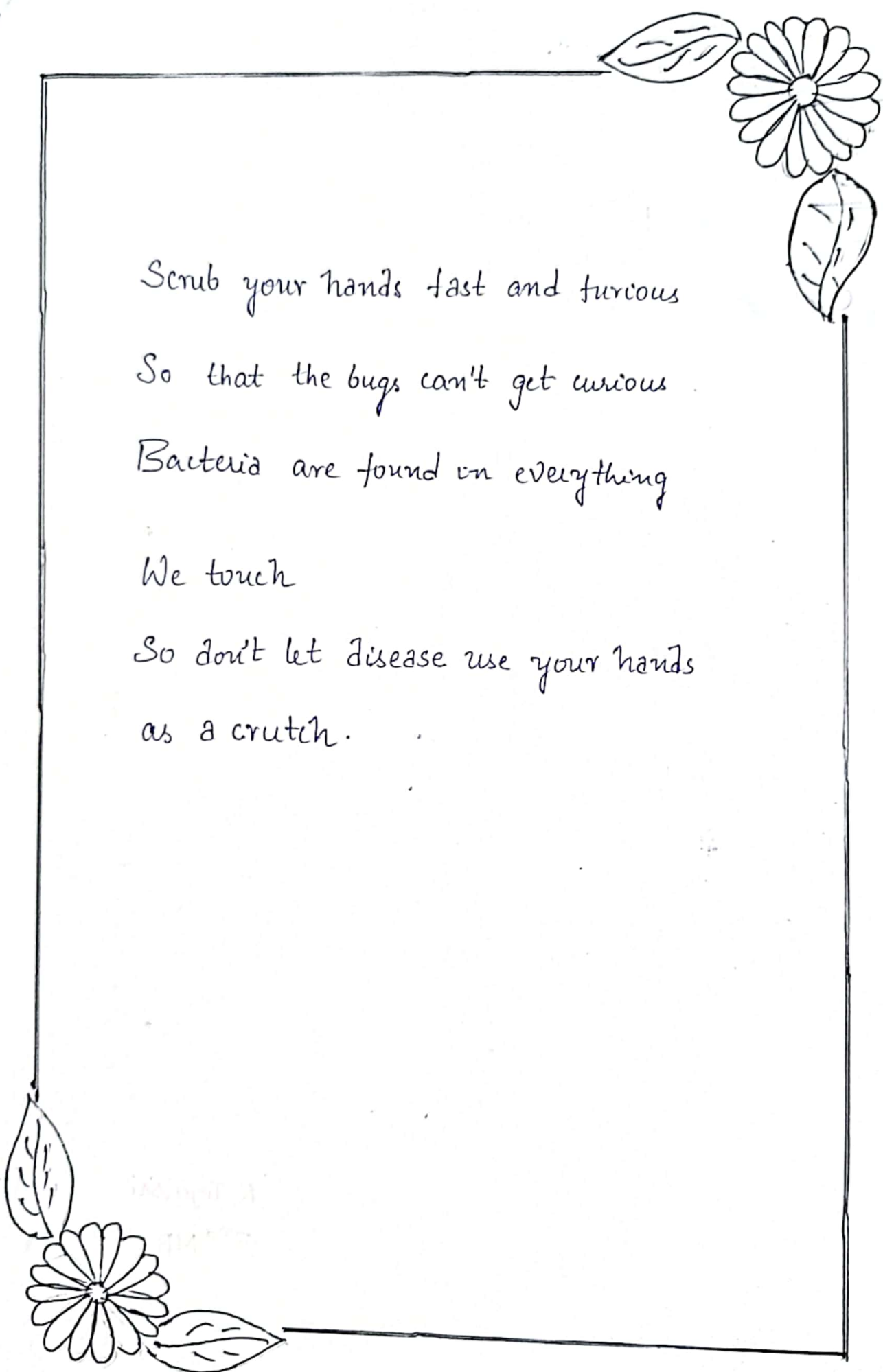
But no hurry to face untidy phase

Soap and water does the trick

To keep them clean every time

to pick

We wash our hands in a dancing mode.

A hand-drawn rectangular border with decorative elements at the corners. The top-right corner features a flower with many petals and two leaves. The bottom-left corner features a flower with many petals and two leaves. The text is written inside the rectangle.

Scrub your hands fast and furious

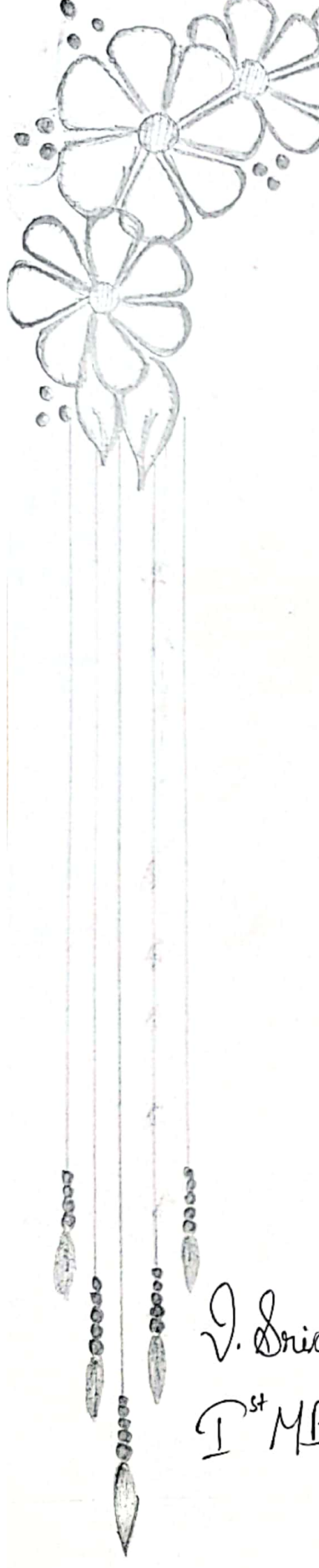
So that the bugs can't get curious

Bacteria are found in everything

We touch

So don't let disease use your hands

as a crutch.



Oh My Friend...

Oh my friend!


Your smile was like a grace
Though it cannot be replaced
Your laughter so loud
It echoed through the crowd
Your perfume scent so sweet
Without it I feel incomplete
Your presence was warm
I feel secure in her arms
You are the brightest
Among the rest
Millions of smiles
But you're the best
As I cry on your shoulder
You became my bolder,
As I hugged you tighter
Oh my friend!

You're always there

J. Dridhari

Ist MB

When the light in my life is gone,
Giving me the shine of happiness
That what I need for my life,
Love, caring, living together...
Defines the life in a simple line!!



Life Line

When I first Saw you ... I felt nothing

But Surprisingly...

I don't know how I got habituated to you....

Now I can't even divert myself from you....

Your presence can make me Smile...

Your Smile can make my heart ~~full~~

Your actions can make me elated.....

You are an Idol of my life....

You are the cause of my happiness ...

Now matter how broke I am

Hearing your name can make me blush.

you are my everything.....

But Sadly..... I am your nothing....

What sin have I done,

I am this much far from you?

Is there a way that I could reach you?

But, I definitely know that

I can't reach you.....

I can't meet you.....

and I can't talk to you.....

Why I am so into you....?

Why can't I wake up from your thoughts?

Don't tell me that It isn't love....

But, Life goes on because I LOVE you♥....

Your Best

If you always try your best
Then you'll never have to wonder
About what you could have done
If you'd summoned all your thunder

And if your best
Was not as good
As you hoped it would be,
You still could say,
"I gave today
All that I had in me".

MY SUPER HERO

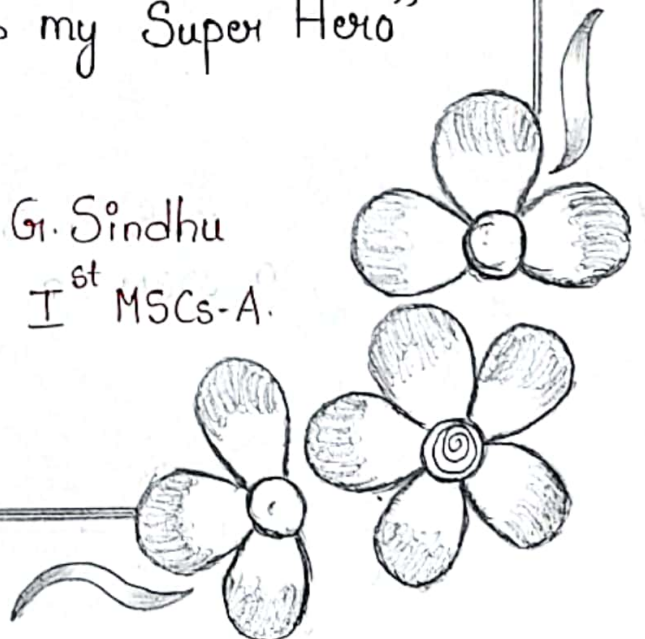
* Dad, you never let me down

Being by my side in everything
Helping me to keep my spirit high
In all the up's and down's.

* you are not a spiderman
Neither a batman
But you are my superhero
Whom I call as Dad.

* you are my protector
you are my Care taker and
you are my provider
That's why I call you as my "Super Hero"

Gr. Sindhu
Ist MSCs-A.



CANDLE - LIFE

There is a candle in your heart.....

Candle gives a light.....

To remove darkness.....!

Life have more colours.....

To remove darkness.....!

When candle melting itself.....

It gives bright light.....!

You can filled your life.....

With bright light.....!

You have so many dreams.....

So, what can you do.....?

Your life has a beautiful meaning.....

You can fulfill with wonderful moments.....

Before sacrifice your life.....!

LOVE TOWARDS YOU♡♡

Take my heart, I will give it with ease.

Take my hand, Don't leave me till the end of the magical world.

Take my thoughts wheather I am far away or closer to you.

Take my arms and hold me so tight.

Take these feelings & make them real:

Take these life, its only yours.

Love towards you, its not a simple thing its god's gift.

Love is not a simple word, its a magical world for every one.

Love is not just a part of life, love is a life.

I loved with a love that was more than a love.

GET RID OF STAGE FRIGHT

Are you feared of coming on to the dais?
If not, then why can't you come here
Are you afraid of speaking in front of people?
If not, then why can't you speak over there

May be your hands and legs are trembling
But don't get panic in that situation
Your Mom and dad are with you
Stage is like your mom which weighs you
Mic is like your dad which holds you tight

Don't care about the one who insults you
Care about the one who praises you
May be the one who wounded you
Is the one who claps for you.

"Stage" is the one who lifts you up
It is the one who makes you "star"

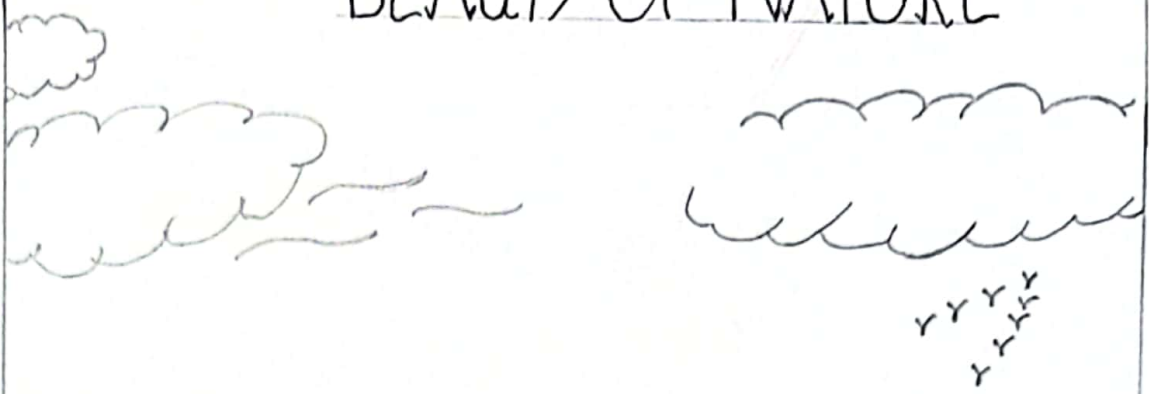
Keep in mind that stage fright is
Usually worse before the
performance and often goes
away once you get started.

R. Mallieswari

II MSCS



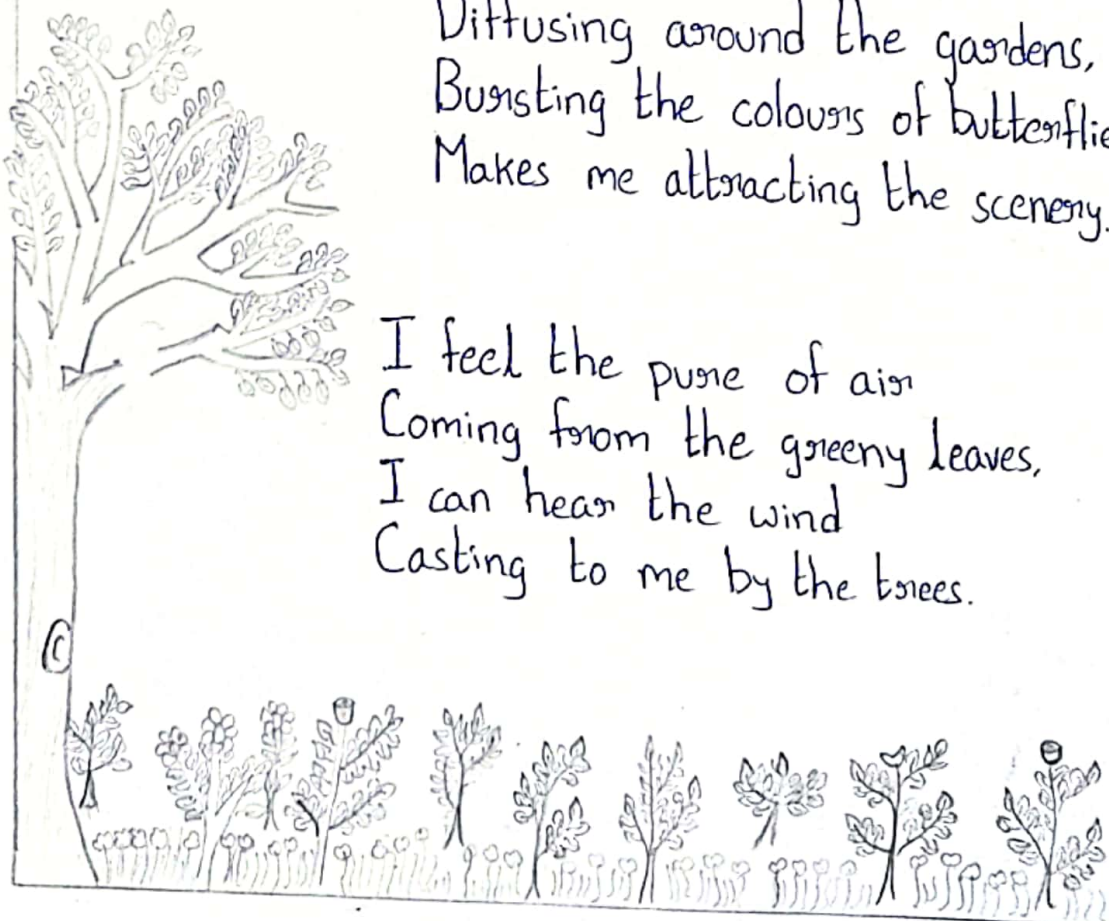
BEAUTY OF NATURE



I love the beauty of nature
Merging my soul with the surroundings,
I love the sounds of birds
Chirping the whole forest.

I like the smell of flowers
Diffusing around the gardens,
Bursting the colours of butterflies
Makes me attracting the scenery.

I feel the pure of air
Coming from the greeny leaves,
I can hear the wind
Casting to me by the trees.



I feel the rain touching my skin
Getting the fleece become wide
I can see the water falls
Filling my heart with fruitfulness.

I hear the sounds of forest
Giving me a pleasant day,
Sitting here in the evening light
Glances my eyes to the view.



Make Me FEEL MY LOVE

You are my first thought in the morning

My last thought before I fall asleep

And almost every thought in between

I love you more than what you are expected

I love you more than my words could ever show

When I am thinking you;

It's a feel that can't express in words.

It's a beautiful sight to behold, so soft & kind.

It's a beautiful moment when I am with you.

It's a beautiful moment when I am thinking about you.....

It's a beautiful moment when I am dreaming about you.....

It's a beautiful moment when I am waiting for you.

It's a beautiful moment when you are accepting my love.....

It's a beautiful moment when our true love is proven to the world.....

B.V.Raju College
Vishnupur, Bhimavaram

Details of the Guest lecture conducted

Name of the event	Guest lecture
Date	07-07-2017
Time	11-1:30 pm
Place	Seminar hall
Mode of conduction	Offline
Participants	I year Degree students
Conducted by	Department of English
Event co-ordinator	U.Madhavi
Feedback collected	Yes

B.V.Raju College
Vishnupur, Bhimavaram

ENGLISH CLUB

Circular

Vishnupur,
06 July 2017.

Our English club is conducting, '**Guest lecture**' on 07-07-2017 from 11am to 1:00pm in our college. Hence, all the first year students are requested to be in seminar hall without fail.

U. Madhavi
HOD

[Signature]
Academic In – charge

[Signature]
Principal



List of the participated students

Sl No.	Name of the student	Section	Signature of the student
1	M. Ganesh	MECS-B	M. Ganesh
2	M. Manoj	MECS-B	M. Manoj
3	M. Gopal	MECS-B	M. Gopal
4	M. Manohar	MECS-B	M. Manohar
5	M. Ramya	MECS-B	M. Ramya
6	P. Sai Durga	MECS-B	P. Sai Durga
7	P. TASUJA	MECS-B	P. TASUJA
8	S. Balaji	MECS-B	S. Balaji
9	P. Harish	MECS-B	P. Harish
10	PM. Deepika	MECS-B	PM. Deepika
11	P. Chandana	MECS-B	P. Chandana
12	P. Vishnu	MECS-B	P. Vishnu
13	M. Sandeep	MECS-B	M. Sandeep
14	M. RAGHAVA	MECS-B	M. RAGHAVA
15	M. Suernitha	MECS-B	M. Suernitha
16	M. Lakshmi	MECS-B	M. Lakshmi
17	S. Ramya	MECS-B	S. Ramya
18	SK. Kuddush	MECS-B	SK. Kuddush
19	SK. AHMAD	MECS-B	SK. Ahmad
20	S. HASNI Koushna	MECS-B	S. HASNI Koushna
21	U. Varna	MECS-B	U. Varna
22	Y. Himaja	MECS-B	Y. Himaja
23	Y. Ramya Sri	MECS-B	Y. Ramya Sri
24	P. Bhallami	MECS-B	P. Bhallami
25	M. Supriya	MECS-B	M. Supriya
26	M. Sai Teja	MECS-B	M. Sai Teja
27	M. Barath	MECS-B	M. Barath
28	M. Sampurna	MECS-B	M. Sampurna
29	M. BALAJI	MECS-B	M. Balaji
30	M. Vijay bhar	MECS-B	M. Vijay Baki
31	P. Harish	MECS-B	P. Harish
32	P. Ester	MECS-B	P. Ester
33	ABD. Prabod	MECS-B	ABD. Prabod
34	AS. Sai Ganesha	MECS-B	AS. Sai Ganesha
35	R. Harika	MECS-B	R. Harika
36	J. Venay	MECS-B	J. Venay
37	M. Mohan kumar	MECS-B	M. Mohan kumar
38	P. yagna harika	MECS-B	yagna harika
39	P. Madhu	MECS-B	P. Madhu
40	C. Nitha	MECS-B	C. Nitha
41	G. Gauthri	MECS-B	G. Gauthri
42	SSV. Anusha	MECS-B	SSV. Anusha
43	P. BHAVANI	MECS-B	P. Bhavani

44	A. Sai durga	II MSCS	A. Saidu
45	R. Tejesh	1 st MECS	R. Tejesh
46	K. Sasmitha	II MSCS	K. Sasmitha
47	V. Kiran Kumar	II ECA	V. Kiran Kumar
48	Nagadi Lakshmi Kant	II MECS	Nagadi Lakshmi Kant
49	R. Pravalika	2 nd MSCS	R. Pravalika
50	N. Sravani	II MPES	N. Sravani
51	P. Divyasa	II MPC	P. Divya Sri
52	Ch. Chandrakala	II MSCS	Ch. Chandrakala
53	A. Anil Kumar	II MSCS	A. Anil Kumar
54	J. Atchya Lokesh	II MSCS	J. Atchya Lokesh
55	N. Lokitha	II MECS	N. Lokitha
56	V. Narsimha Raju	1 st MECS-B	V. Narsimha Raju
57	S. Bhargav Kumar	1 st MECS-B	S. Bhargav Kumar
58	N. Akila Sai	2 nd MSCS	N. Akila Sai
59	T. Jagadeesh	1 st MECS-B	T. Jagadeesh
60	D. HARITHA	2 nd MSCS	D. Haritha
61	K. Lakshmi Prasanna	2 nd MSCS	K. Lakshmi Prasanna
62	T. Ravi Kishore	1 st MECS-B	T. Ravi Kishore
63	P. Srinu	1 st MECS	P. Srinu
64	V. Jagadha	1 st MECS-B	V. Jagadha
65	P. Srinivas	I-MECSB	P. Srinivas
66	K. Jafnavi	II MPES	K. Jafnavi
67	S. Devi	1 st MECS	S. Devi
68	V. Sri Latha	1 st MECS-B	V. Sri Latha
69	D. Nikhila	2 nd MSCS	D. Nikhila
70	N. Sivani	II MSCS	N. Sivani
71	V. Hema	1 st MECS-B	V. Hema
72	K. Anupama	2 nd MSCS	K. Anupama
73	N. satya	2 nd MSCS	N. satya
74	P. Nagaraj	1 st MECS	P. Nagaraj
75	V. Durga	1 st MECS-B	V. Durga
76	G. Madhavi datta	2 nd MSCS	G. Madhavi datta
77	G. Bala Sri	2 nd MSCS	G. Bala Sri
78	K. Pravalika	2 nd MSCS	K. Pravalika
79	V.L.D. Bhavani	1 st MECS-B	V.L.D. Bhavani
80	K. Rishindra	2 nd MSCS	K. Rishindra
81	T. Lakshmi Kanchara	1 st MECS-B	T. Lakshmi Kanchara
82	K. Mounika	2 nd MSCS	K. Mounika
83	N. Sivani	2 nd MSCS	N. Sivani
84	N. Varma	2 nd MSCS	N. Varma
85	A. Sravani	II MSCS	A. Sravani
86	N. Rajeswari	2 nd MSCS	N. Rajeswari
87	N. Lokitha	II MSCS	N. Lokitha

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event Guest lecture

Date: 07/07/2017

1. Name of the resource person/ activity D. Rama Devi
2. Are you satisfied with the performance of resource person / judge Yes / No / NA
3. Rate the activity / seminar/ guest lecture ✓ conduction/work shop 1 2 3 4 5
4. Do you want to conduct similar program Yes / No
5. Suggestions / comments (if any)

yes

6. What kind of program should be conducted through the department / college in future you expect

yes

Name : M. GANESH

signature: M. Ganesh

Roll No : 163117102094

Date: 07/07/2017

Group: MECS-B

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event guest lecture

Date: 7/7/2017

1. Name of the resource person/ activity D. Rama Devi
2. Are you satisfied with the performance of resource person / judge Yes / No / NA
3. Rate the activity / seminar/ guest lecture conduction/work shop 1 2 3 4 5
4. Do you want to conduct similar program Yes / No
5. Suggestions / comments. (if any)

Yes

6. What kind of program should be conducted through the department / college in future you expect

Yes

Name : M. Ramya

Roll No : 163117137305

Group: MECS-B

signature: M. Ramya

Date: 7/7/2017

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event Guest lecture

Date: 07/07/2017

1. Name of the resource person/ activity P. Chandana
2. Are you satisfied with the performance of resource person / judge Yes / No / NA
3. Rate the activity / seminar/ guest lecture conduction/work shop

	1	2	3	4	5
			<input checked="" type="checkbox"/>		
4. Do you want to conduct similar program Yes / No
5. Suggestions / comments (if any)

Conduct more activities.

6. What kind of program should be conducted through the department / college in future you expect

Yes

Name : P. Chandana

Roll No : 163117137321

Group: MCCS-B

signature: P. Chandana

Date: 07/07/2017

B.V.Raju college

Vishnupur: BVRM

Department of English

Student feedback form

Name of the Event Guest lecture

Date: 07/07/2017

1. Name of the resource person/ activity D. Rama Devi
2. Are you satisfied with the performance of resource person / judge ☒ Yes ☒ No ☐ NA
3. Rate the activity / seminar/ guest lecture ☒ conduction/work shop

1	2	3	4	5
4. Do you want to conduct similar program ☒ Yes ☐ No
5. Suggestions / comments (if any)

Soft skills

6. What kind of program should be conducted through the department / college in future you expect

Yes

Name : M. Gopal

Roll No : 163117137303

Group: MECS B

signature: M. Gopal

Date: 07/07/2017

B.V.Raju College,
Vishnupur, Bhimavaram

**A report on guest lecture on communication skills importance dated 07 July
2017**

07July 2017 is the date when a guest lecture was given by Dr.V.Ramadevi on the topic of communication skills importance at B.V.Raju College. Dr.Ch.V.Srinivas addressed all the students with his charming words.

Afterwards the resource person took the morning session and strove greatly to enlighten what is fear of dark in the cores of their hearts as well as to enrich the knowledge of importance of communication skills in the present society.

In the whole session, she predominantly provided the student community with detailed tips for enhancing their skills by means of a ppt for two hours. Afterwards, she is fully absorbed in questionnaire and clarification session. A great number of students are also involved and raised their doubts in relation to developing language skills. Students were greatly bemused. Finally, at noon time, the session was concluded with high satisfaction.



B.V.RAJU COLLEGE
VISHNUPUR, BHIMAVARAM

Vishnupur,
01 July 2017

The Principal
Dr.D. Satyanarayana
Vishnu Institute of Technology
Vishnupur
Bhimavaram
West Godavari

Dear Sir,

Sub: A request to depute Dr.V. Ramadevi for delivering guest lecture.

We are planning to conduct a guest lecture in our college for our students on 07 July 2017. As a result, we request you to depute Dr.V.Ramadevi, Department of English as a resource person on the declared date.

Your response will be highly appreciated in this regard.

With best regards



Dr.Ch.V.Srinivas
Principal



07 July 2017

The Professor
Dr.V. Ramadevi
Vishnu Institute of Technology
Vishnupur
Bhimavaram
West Godavari

Dear Madam,

Sub: Letter of appreciation

I want to take this opportunity to thank you for your excellent job as a resource person for the guest lecture on "Communication skills importance" held on 07 July 2017, and was conducted by Department of English. We were impressed with your outstanding knowledge of Language skills.

Your role as a resource person for the guest lecture is really commendable and I appreciate it. I would not hesitate to ask your cooperation in future programs also.

With best regards



Dr.Ch.V.Srinivas
Principal





B.V. RAJU COLLEGE
DEPARTMENT OF ENGLISH

PLACEMENT TRAINING FOR UG STUDENTS

SYLLABUS FOR THE YEAR 2017-18

Topic No.	NAME OF THE TOPIC
1	Vocabulary and its usage in day-to-day life
2	Listening skills
3	Self-introduction
4	Tenses, modification sentences
5	Reading skills
6	JAM
7	Modals, 200 general sentences
8	Conversational skills
9	Role play and debate
10	Interview skills
11	Presentational skills
12	Mock interviews
13	Manners, mannerism
14	Group discussion

SYLLABUS FOR WRITTEN TEST
(GRAMMAR AND VOCABULAR BUILDING)

Topic No.	NAME OF THE TOPIC
VOCABULARY	
1	Synonyms
2	Antonyms
3	Phrasal Verbs (Identification of Meaning)
4	Word Formation (Suffixes and Pre-fixes)
GRAMMAR	
6	Articles
7	Prepositions
8	Tenses
9	Voice
10	Speech
11	Concord
12	Word order / Sentence rearrangement
13	Linkers
14	Reading Comprehension
15	Para jumbled



B.V. RAJU COLLEGE
DEPARTMENT OF ENGLISH

PLACEMENT TRAINING FOR UG STUDENTS (2017-18 Final Year Students)

FORENOON SCHEDULE (NOVEMBER 25TH TO 30TH)

Morning Session

Day	Topic	Duration	Faculty
25/11/2017	Vocabulary and its usage in day-to-day life	Two hours	U Raju
	Listening skills	One hour	U Madhavi
	Self-introduction	One hour	U Madhavi
26/11/2017	Tenses, modification sentences	Two hours	U Raju
	Reading skills	One hour	U Madhavi
	JAM	One hour	U Madhavi
27/11/2017	Modals - 200 general sentences	Two hours	U Raju
	Conversational skills	One hour	U Madhavi
	Role play and debate	One hour	U Raju
28/11/2017	Interview skills	Two hours	U Raju
	Presentational skills	One hour	U Madhavi
	Mock interviews	One hour	U Madhavi
30/11/2017	Manners, mannerism	Two hours	U Raju
	Group discussion	One hour	U Raju
	Feedback section from students	One hour	U Raju

Afternoon Session

Day	Topic	Duration	Faculty
25/11/2017	Synonyms	Two hours	K William Kery
	Antonyms		P Ch Gangadhar
	Phrasal Verbs (Identification of Meaning)		K William Kery
	Word Formation (Suffixes and Pre-fixes)		P Ch Gangadhar
26/11/2017	Articles	Two hours	K William Kery
	Prepositions		P Ch Gangadhar
	Tenses		K William Kery
27/11/2017	Voice	Two hours	P Ch Gangadhar
	Speech		K William Kery
28/11/2017	Concord	Two hours	P Ch Gangadhar
	Word order / Sentence rearrangement		K William Kery
	Linkers		P Ch Gangadhar
30/11/2017	Reading Comprehension	Two hours	K William Kery
	Para jumbled		P Ch Gangadhar

B V RAJU COLLEGE::VIHNUPUR, BHIMAVARAM

DEPARTMENT OF ENGLISH

LIST OF THE STUDENTS REGISTERED FOR ITP

HT NO	NAME	GROUP
153117101010	BEVARA REVATHI	MPC
153117101012	BONAM DHANA LAKSHMI	MPC
153117101015	CHEVURI CHIRANJEEVI VEERA BRAHMA VAS	MPC
153117101019	JALLI SRAVANTHI JONES	MPC
153117101020	JAYAMANGALA CHANDRA MOULI	MPC
153117101021	KALAVA CHANDRA LAKSHMAN RAO	MPC
153117101022	KANDARPA SURYA SAIVANI	MPC
153117101023	KANDUKURI MARY ESTERRANI	MPC
153117101024	KASIREDDY VIJAYA SAI RAMYA DURGA	MPC
153117101027	KOPPISETTI KALYANI	MPC
153117101029	KUDIPUDI PADMASRI	MPC
153117101030	KUNKATLA SIREESHA	MPC
153117101034	MANNE DURGA DEVI	MPC
153117101042	PEDAPUDI VASAVI KANYAKA PARAMESWARI	MPC
153117101043	PEDDISSETTI BHAGYASREE	MPC
153117101044	PETHALA VIJAY SAI KUMAR	MPC
153117101046	PULAGAM SAI SIVA RAMA KRISHNA	MPC
153117101048	SANABOINA JYOTHI	MPC
153117101053	TALAGALLA BINDHU BHAVANI	MPC
153117101055	TENALI SOWMYA	MPC
153117101056	TENALI SUSHMA	MPC
153117101057	VADUGU BHUVANESWARI	MPC
153117102062	ADABALA PAVANI SAI	MPCs
153117102063	ADDALA KIRAN BABU	MPCs
153117102065	AKULA SRI DURGA	MPCs
153117102066	ANGARA VAMSI	MPCs
153117102067	AREPALLI ADITYA SAI KRISHNA	MPCs
153117102068	BALAGAM KIRAN	MPCs
153117102069	BHAVARLAL BHARATH KUMAR SEIT	MPCs
153117102070	BONDA NAGA SURYA LAKSHMI CHANDANA	MPCs
153117102071	CHAMARTHI SWATHI	MPCs
153117102073	CHILAMKURTHI YUVA SAI SRI	MPCs

153117102074	CHINTHAGUNTA KUSUMA SAI	MPCs
153117102075	DAARLANKA AVINASH	MPCs
153117102078	DUGGIRALA MADHU MOUNIKA RANI	MPCs
153117102079	GADIRAJU DEEPIKA	MPCs
153117102082	GANTA SUBHASHINI	MPCs
153117102084	GONABOYINA KALYANI	MPCs
153117102085	GOVADA GAYATHRI DEVI	MPCs
153117102087	GRANDHI DUGA NAGA VENKATA SAI RAJASR	MPCs
153117102090	ILLA NAMRATHA	MPCs
153117102094	KOLLI SRAVANI	MPCs
153117102095	KOPPURAVURI LAVANYA	MPCs
153117102097	MANCHIGANTI NAVYA SUREKHA	MPCs
153117102098	MOHAMMED FARHEEN MEHNEEZ	MPCs
153117102099	MOHAMMED ZUHEENA	MPCs
153117102100	MUTHA KEDARESWARA SWAMY	MPCs
153117102102	NANDAM SIVADURGESWARI	MPCs
153117102104	PACHIGOLLA N V PADMA SAI LAKSHMIDEVI	MPCs
153117102105	PAILA UPENDRA	MPCs
153117102110	RAPARTHI VIJAYA LAKSHMI	MPCs
153117102112	SANAM SAI DIVYA	MPCs
153117102120	YEPUGANTI PADMA SWAROOPA	MPCs
153117109121	ADDALA MALLESWARI	MSCs
153117109124	BETHU BHARGAVI	MSCs
153117109125	BHAVANI MANTHENA	MSCs
153117109126	BHOGIREDDI KALYANI	MSCs
153117109128	CHEBOLU RAMYA BHARATHI	MSCs
153117109131	DANDU PRASANTHIKUMARI	MSCs
153117109132	DASARI NAGA RAJU	MSCs
153117109136	GANGIPAMULA SATYANARAYANA	MSCs
153117109141	IBBA POOJA KUMARI	MSCs
153117109147	KANDULA LAKSHMI PAVANI	MSCs
153117109149	KARRI JHANSI	MSCs
153117109151	KUNDURTHI SRUJANA	MSCs
153117109153	MEKALA SURESH	MSCs
153117109154	MOHAMMAD FARJANA	MSCs
153117109155	MOTUPALLI KOTA NAGA SATYA HEMANTH	MSCs
153117109156	NAGALLA SAI PAVAN YADAV	MSCs
153117109158	PACHIGOLLA SANTHI PRIYANKA	MSCs

153117109159	PEETHANI HARI PRIYA	MSCs
153117109160	PENTA NEERAJA	MSCs
153117109161	PONNALA KEERTHI	MSCs
153117109162	POTNURI ANUSHA DEVI	MSCs
153117109163	PUDI NAGA SAI RAMA KRISHNA	MSCs
153117109165	RAJANA JUHEE DEEPTHIKA	MSCs
153117109167	SAKHINETIPALLI MOUNIKA	MSCs
153117109169	SUNKARA PAVAN KUMAR	MSCs
153117109170	TALAGALLA SAI KUMARI	MSCs
153117109172	TATAVARTHI UMAMAHESWARI	MSCs
153117109175	UDI RAMALAKSHMI	MSCs
153117109176	VANDANAPU UMASHANKAR	MSCs
153117109177	VENDRA MOHAN CHANDRA BOSE	MSCs
153117109178	VITHALA SHANMUKHA MANI KSHEMANKAR	MSCs
153117109179	YELISETTI HARIKA	MSCs
153117121181	ADAPA JAYA SRI CHANDANA	BTBCC
153117121182	ANUSHA NARALASETTI	BTBCC
153117121183	BANDARU NAGA SRI VANI	BTBCC
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153117121186	CHILUVURI AMRUTHA VALLI SRAVANTHI	BTBCC
153117121187	CHITTURI BABY SRAVANI	BTBCC
153117121189	DAYANTRY VIJAYALAKSHMI	BTBCC
153117121190	DODDA SAI JYOTHI	BTBCC
153117121191	DOKKU ROSHINI	BTBCC
153117121194	GANNAMANI VENKATA LAKSHMI HARSHITA	BTBCC
153117121199	ILLA SIREESHA	BTBCC
153117121200	INJETI SUSHMA	BTBCC
153117121204	KANUMURI SARANYA	BTBCC
153117121205	KARRI ANNAPURNA	BTBCC
153117121206	KATHARI MANOJ KUMAR	BTBCC
153117121211	KOLLURI POORNIMA	BTBCC
153117121212	KONAKALLA HIMA BINDU	BTBCC
153117121213	KONDA SAILAKSHMI	BTBCC
153117121216	KOTHA JYOTHI SAI PHANINDRA KUMAR	BTBCC
153117121220	MALLADI DEEPTHI	BTBCC
153117121225	PALA SRINIVASU	BTBCC
153117121226	POTNURU SAI PRIYA	BTBCC
153117121227	RATANALA VASUDEVA BALARAM	BTBCC

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153117121232	UPPARAPALI SATYA LOHITHA	BTBCC
153117121233	VEGESNA RUKMINI DEVI	BTBCC
153117137242	BAISANI LAKSHMI SANTOSHI SUPRIYA	MECs
153117137245	BANDARU YAMINI SRI VARA PURNIMA	MECs
153117137247	CHATRATHI SAI SUBRAHMANYA SARMA	MECs
153117137251	CHUVVADA SAI PRAVALLIKA	MECs
153117137252	DANDU NAGA POORNIMA	MECs
153117137262	GEDALA BHARGAVI	MECs
153117137268	GRANDHI MONIKA DEVI	MECs
153117137269	GUBBALA RAVI DURGA RAO	MECs
153117137270	GULLAPALLI JYOTHI KUMARI	MECs
153117137272	GUNTURI REKHA SAI BHAVANI	MECs
153117137273	GUTTULA DURGA BHAVANI	MECs
153117137274	GUTTULA NAVYA KUMARI	MECs
153117137276	INDALA NAGA VENKATA SAI KIRAN	MECs
153117137277	IRRINKI TRIVENI	MECs
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153117137282	KOTHA SAI HARIKA	MECs
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153117137288	KARUMURI LAKSHMI HARIKA	MECs
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153117137293	KATTA YATENDRA KUMAR	MECs
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153117137304	MADDALA SIRISHA	MECs
153117137305	MADDULA SAI VENKAT KRISHNA MURTHY	MECs
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153117137316	NAGIREDDI SITARAMAYYA	MECs
153117137318	NARAHARISSETTI VENKATA TRINADH	MECs

153117137328	PENMETSA TANUJA	MECs
153117137333	RALLABANDI VEERA BABU	MECs
153117137335	ROMPICHARLA PRAVEEN	MECs
153117137341	SHAIK SABIHA TABASSUM	MECs
153117137343	SUDARSANAM SAI SRI NAVYA	MECs
153117137345	TOOMU DANUJASAI	MECs
153117137348	UPPALA PAVANI	MECs
153117137350	VANGA SUKANYA	MECs
153117137351	VASABHAKTHULA SYAMA	MECs
153117137352	VELAGANA SUDHA RANI	MECs
153117137355	VINJAMURI ANITHA	MECs
153117141361	CHELAMALASETTY D S NAGA PADMINI	MBBTBC
153117141362	CHALIKONDA NAGA VENKATA NARESH	MBBTBC
153117141364	CHITTI BHAVANI	MBBTBC
153117141365	CHODAVARAPU HEMALATHA	MBBTBC
153117141366	EARLAPATI RAMYA	MBBTBC
153117141368	GARAPATI SRI KRISHNA SWETHA	MBBTBC
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153117141383	MEDAPATI RAMYA VENKATA SATYAVATHI	MBBTBC
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153117141385	MELLA NAGA JYOTHI	MBBTBC
153117141387	PAMPANA DHANA KISHORE	MBBTBC
153117141388	PASUPULETI MOUNISHA MARUTHI PRASANN	MBBTBC
153117141391	PENUGONDA KOSHALA SRINATH	MBBTBC
153117141392	PERURI ASHOK KUMAR	MBBTBC
153117141393	PUROHIT LALIT KUMAR	MBBTBC
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153117141397	SARIKA VENKATA PEDDI LAKSHMI DEVI	MBBTBC
153117141398	SHAIK RAHIMUNNISA BEGUM	MBBTBC
153117141401	TATIKAYALA HEMA SAI NAGA DURGA	MBBTBC
153117141402	THUMPALA BHUVANESWARI	MBBTBC
153117141405	VELAGALA APARNA	MBBTBC
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153117141409	YAMIJALA LAKSHMI SAARVANI	MBBTBC

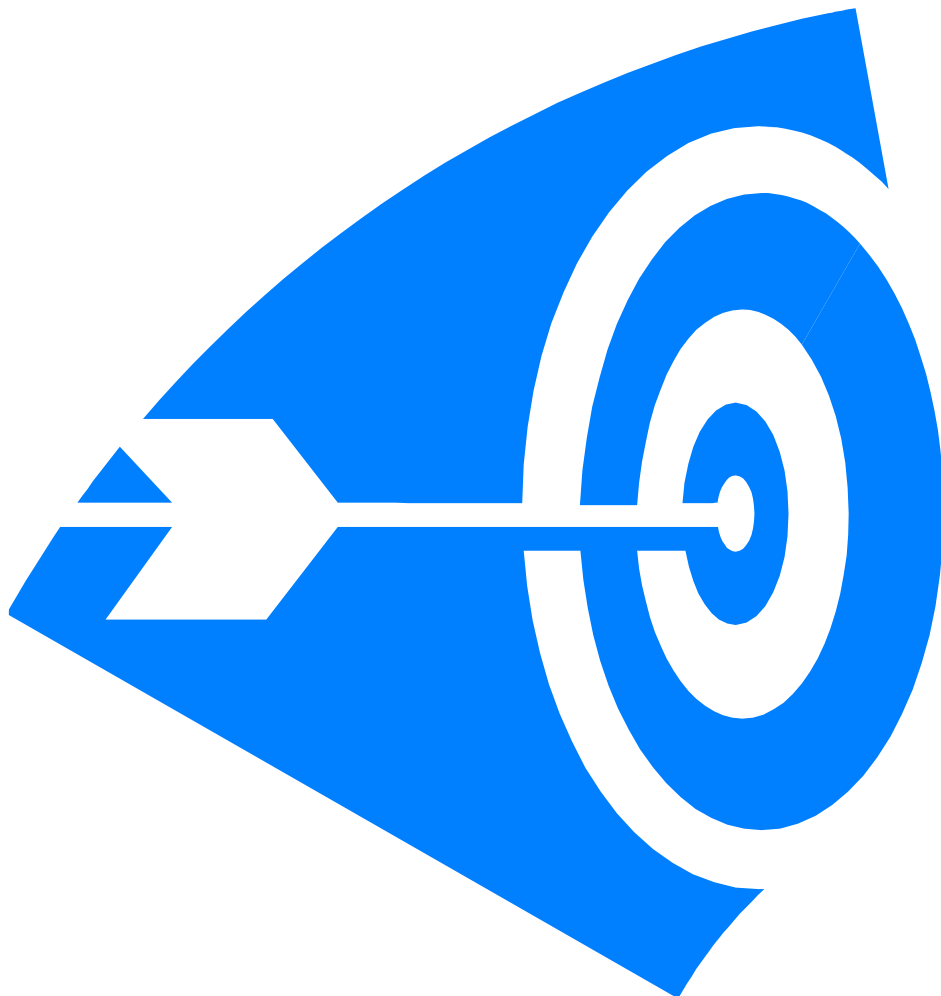
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153118200039	KONAKANCHI SIVA GAYATHRI	BCOM
153118200040	KOTHAPALLI SRI HARSHINI	BCOM
153118200041	KOTTAPALLI SIRISHA	BCOM
153118200042	KOYA AMBIKA	BCOM
153118200043	LADI MURALI KRISHNA	BCOM
153118200044	MEKA BHARGAV SUDHEER	BCOM
153118200046	MUMMIDIVARAPU VENKATA DURGA BHAVAN	BCOM
153118200047	NADIMPALLI DEEPIKA	BCOM
153118200049	NAGAMALLA BALU SAI	BCOM
153118200055	PANASAKARLA SATYA SAI VARDHAN	BCOM
153118200061	REPURI GOPALA KRISHNA	BCOM
153118200062	REVA DHANA RAJU	BCOM
153118200064	SANAPATHI PADMAJA	BCOM
153118200065	SHEIK IMRAN	BCOM
153118200066	SYED HAFEJUDDIN	BCOM
153118200067	THATAKUNTALA LOKESH	BCOM
153118200069	VADAPALLI AISHWARYA LAKSHMI	BCOM
153118200071	VEGESNA SRI HARI RAJU	BCOM
153118200072	YALLA RATNA SWAROOPA	BCOM

SPOKEN ENGLISH

2017-2018

**BV RAJU COLLEGE-
VISHNUPUR, BHIMAVARAM
SPOKEN ENGLISH**

Language is wine upon the lips



SHORT MATERIAL FOR THIRTY-DAYS PROGRAMME

SPOKEN ENGLISH

SYLLABUS

I VOCABULARY

II TENSES AND STRUCTURES

III VOICE

IV SPEECH

V MODALS

VI CONCORD

VII PREPOSITIONS

VIII ARTICLES

IX CONVERSATIONS

X SELF INTRODUCTION

B.V.Raju College
Vishnupur, Bhimavaram

TIME TABLE

(2017-2018)

8:00 to 9:00

U. Madhavi & Ch. Gangadhar

	U.M	Ch.G	U.M	Ch.G	U.M	Ch.G
Mon	"	"	"	"	"	"
Tue	"	"	"	"	"	"
Wed	"	"	"	"	"	"
Thurs	"	"	"	"	"	"
Fri	"	"	"	"	"	"
Sat	"	"	"	"	"	"

U. Madhavi
HOD
H.O.D.
Department of English
B.V. RAJU COLLEGE
Vishnupur, Bhimavaram-534 202

Principal
PRINCIPAL
PRINCIPAL
B.V. RAJU COLLEGE
VISHNUPUR, BHIMAVARAM-534 202

B.V.Raju College
Vishnupur, Bhimavaram
Attendance (M.Sc Organic Chemistry) 2017-2018

s.no	Name of the student	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1	B.Soma srilakshmi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2	D.N.S.Sairama Krishna	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
3	G.V.Satyanarayana	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4	G. Ramesh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
5	G.S.N.Durga Prasad	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6	G. Durga Bhavani	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7	G. Siva venkata satish	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
8	I. Hari rama Krishna	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
9	K. Kishore	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
10	K. Siva Rama Krishna	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
11	K. Vijaya kumari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12	K.Ramya	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
13	M. Tejaswari	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
14	M. Srimannarayana	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
15	M. N.Sai Malleswari	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
16	N.V. Rajya lakshmi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
17	N. Purna Chandra Rao	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
18	P. Sai sekhar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
19	P. Tarun Kumar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20	P. Meghana	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
21	P. sanjeev Kumar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22	P. Bhavani lakshmi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
23	P. Satish	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
24	SK. Bhasha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
25	S. Dhana sravani	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
26	T. Veeranjanyulu	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
27	U. Babji	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

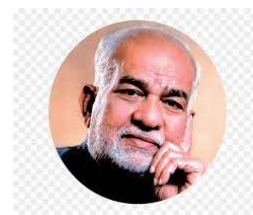
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VISHNUPUR, BHIMAVARAM

VISHNU CULTURAL AND LITERARY CLUB



2017-18

5.3.3

ACTIVITIES OF V.C.L.C. CONDUCTED FOR THE YEAR 2017-18

S.No.	NAME OF THE ACTIVITY	DATE OF CONDUCTION	REMARKS
1	ECO GANESHA IDOL MAKING	23-08-2017	---
2	SRUJANA MAGAZINE 2018	01-01-2018	---
3	CHEERIO – ANNUAL DAY	27-02-2018	---
4	WOMEN'S DAY	08-03-2018	---

---@---

ECO-VINAYAKA
(2017-2018)

B.V.RAJU COLLEGE
VISHNUPUR, BHIMAVARAM

VCLC 2017-18

NAME OF THE ACTIVITY: ECO FRIENDLY GANESHA IDOL MAKING COMPETITION – 2017

DATE: 23-08-2017

BRIEF REPORT

As a tradition of the college, in collaboration with the NSS Units of the college, VCLC conducts a competition among the student community who shows interest to explore their talents in making the Ganesha idols. The competition will be held on the working day before Ganesha Chaturdhi to all the interested students of the college.

S.No	NAME OF THE STUDENT	SECTION
1	G.Ramya Lakshmi	B.Com II
2	G.Ramya	
3	V.RENUKA	
4	K.PRIYANKA	
5	M.H.S KANCHANA	
6	CH.NAVEEN	
7	N.NANDINI	II MECS
8	P.N.V.HARISHA	
9	P.ESTHER RANI	
10	R.HARIKA	
11	D.NIKHILA	II MSCS
12	G.BALASREE	
13	G.GAYATHREE	
14	N.SIVANI	
15	S.RAHUL	
16	V.PAVITRA	
17	T.HARIKA	
18	N.V.GANESH	
19	R KRISHNA	

20	B.VIJAYALAKSHMI	B.Com II
21	M.JAGADEESH	
22	I.KAVYA	
23	P.RAMU	
24	A.ROSHINI	MECS
25	G.DIVYA	
26	B.SATISH	
27	G.HEMA	
28	K.MEGHANA	
29	G.SUKANYA	
30	K.ANUJA	BT BC C
31	CH.SRAVYA	
32	A.SOWJANYA	
33	A.BLESSY	
34	K.PRAMEELA	
35	N.RAMYASRI	
36	A.TARUN	MB BT II
37	I.KAVYASREE	
38	L.LIKITHA	
39	SRIDHARI	
40	CH. RAMYA	MB BT I
41	K.VINEETHA	
42	S.N.S.LAVANYA	
43	G. YAMINI	


Coordinator


Academic Incharge


Principal





Amravati



బివి రాజు డిగ్రీ కళాశాలలో మల్లీ వినాయక పురమలు తయారుచేసిన విద్యార్థులు
(23/8/17)

Posted on 24 Aug, 2017 in General | 0 Comments



బిమవరం డిగ్రీ కాలేజి,
మార్చి డిగ్రీ
(23/8/17..
04.30pm)

మల్లీ
వినాయక పురమలైన
వాడాలంటూ బివి రాజు
డిగ్రీ కళాశాల
విద్యార్థులు
తయారుచేసిన మల్లీ
వినాయక పురమలు
అందరినీ
ఆకట్టుకున్నాయి. ఈ
సందర్భంగా కళాశాల
ప్రిన్సిపాల్ సహా వి
శిష్ట వాళ్ళ మాట్లాడుతూ
స్వస్థత వనరులను

కాపాడుకుంటూ ప్రకృతిని భివంగా భావించాలని అన్నారు. అనంతరం 200 మంది విద్యార్థులు వివిధ
రకాల మల్లీ వినాయక పురమలను తయారుచేశారు. కార్యక్రమంలో ఎంఈ రాంబాబు, చంద్రగంగాధర్
గిద్దిరెడ్డిలు పాల్గొన్నారు.



18-19 pics ev

Amirach



బివి రాజు డిగ్రీ కళాశాలలో మట్టి వినాయక ప్రతిమలు తయారుచేసిన విద్యార్థులు
(23/8/17)

Posted on 24 Aug. 2017 in General | 0 Comments



భీమవరం డాట్ కామ్, న్యూస్ డెస్క్ (23/8/17.. 04.30pm)

మట్టి వినాయక ప్రతిమలానే వాడాలంటూ బివి రాజు డిగ్రీ కళాశాల విద్యార్థులు తయారుచేసిన మట్టి వినాయక ప్రతిమలు అందరినీ ఆకట్టుకున్నాయి. ఈ సందర్భంగా కళాశాల ప్రిన్సిపాల్ సిహెచ్ వి కేసివాస్ మాట్లాడుతూ స్వస్థితో వనరులను కాపాడుకుంటూ ప్రకృతిని దైవంగా భావించాలని అన్నారు. అనంతరం 200 మంది విద్యార్థులు వివిధ రకాల మట్టి వినాయక ప్రతిమలను తయారుచేశారు. కార్యక్రమంలో ఎంఈ రాంబాబు, చంద్రగంగాధర్ ఆదితరులు పాల్గొన్నారు.

himsach





B.V. RAJU COLLEGE

Creations



SRIJANA

2018

Volume - 2 English



Srijana

"A Great journey begins with a small step"

Dr.B.V.RAJU INSTITUTE OF COMPUTER EDUCATION
VISHNUPUR, BHIMAVARAM
SRUJANA MAGAZINE: 2018

Editorial

This is an occasion for us to pay our rich tributes to **Dr.B.V.RAJU GARU**, Yesteryears cement doyen, the former Chairman of Dr.B.V.Raju foundation and Sri Vishnu Educational Society. In fact this college, BVRICE, was established in the name of this great personality as his foster child to realize his great dreams we are happy to say that it is flourishing in leaps and bound with the vision and leadership of the present chairman Sri K.V.Vishnu Raju to fulfill his cherished dreams.

"A great journey begins with a small step". Sensing that a magazine is the imminent need for the students to explore their creativity this humble "hand written magazine" is launched. It comprises of *Short stories, Poetry pieces, Jokes, Paintings, Puzzles* etc, some of the topics are thought provoking and some make interesting reading. The articles contributed by the student to this magazine are quite encouraging. The co-operation received by all the faculty members is duly acknowledged. We hope that this little endeavor will blossom into a magnificent tree bearing fruits in the garden of BVRICE institution.

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Ch.S.V. Satyanarayana
Academic In-charge

P. Chandra Gangadhar
V.C.L.C. Co-Ordinator

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Lecture in Sanskrit

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U. Raju
Lecturer in English

CH. Chaitanya (2nd-MECS-A)
M.Prasanna (2nd-BTBCC)
Student Coordinator

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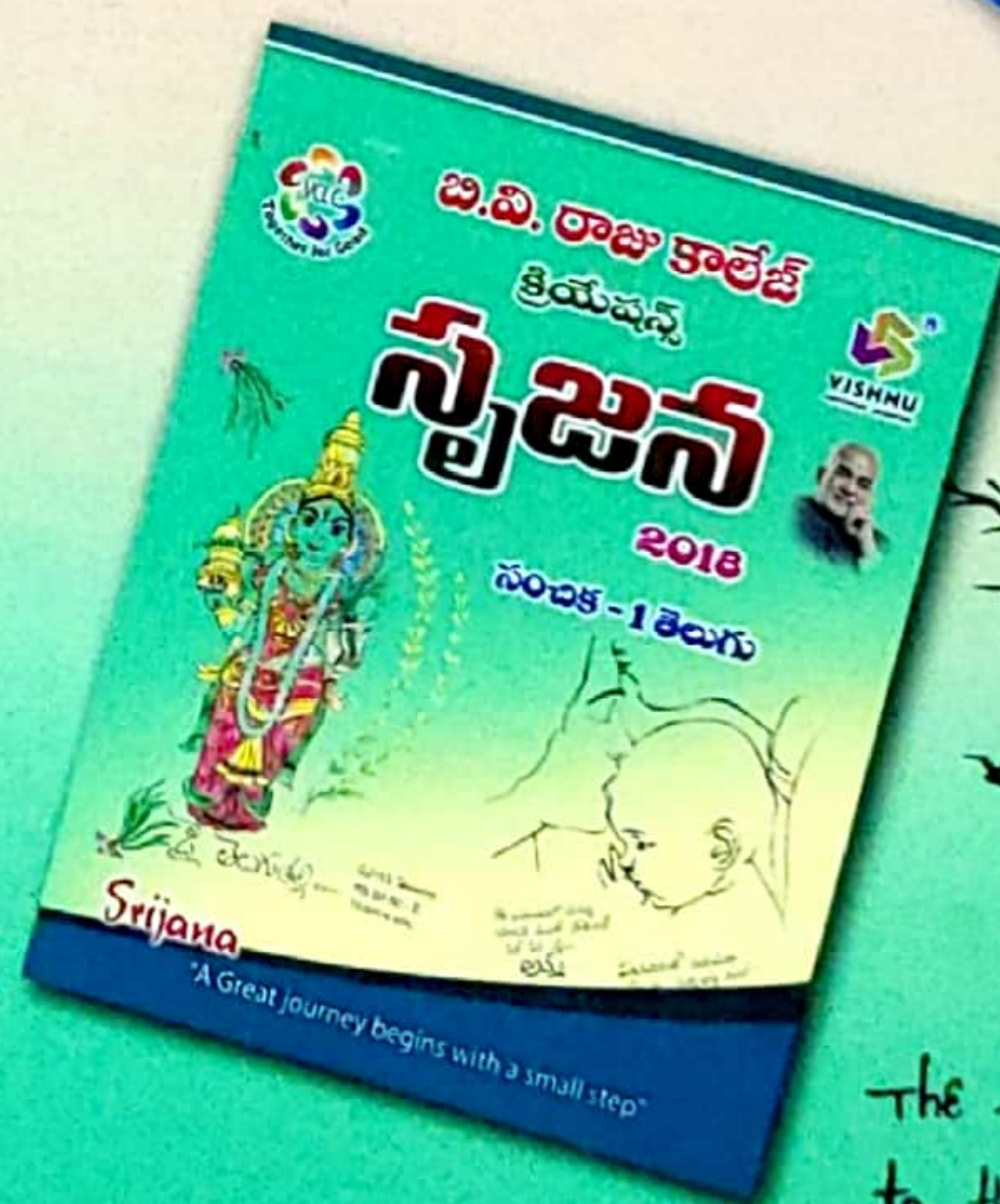
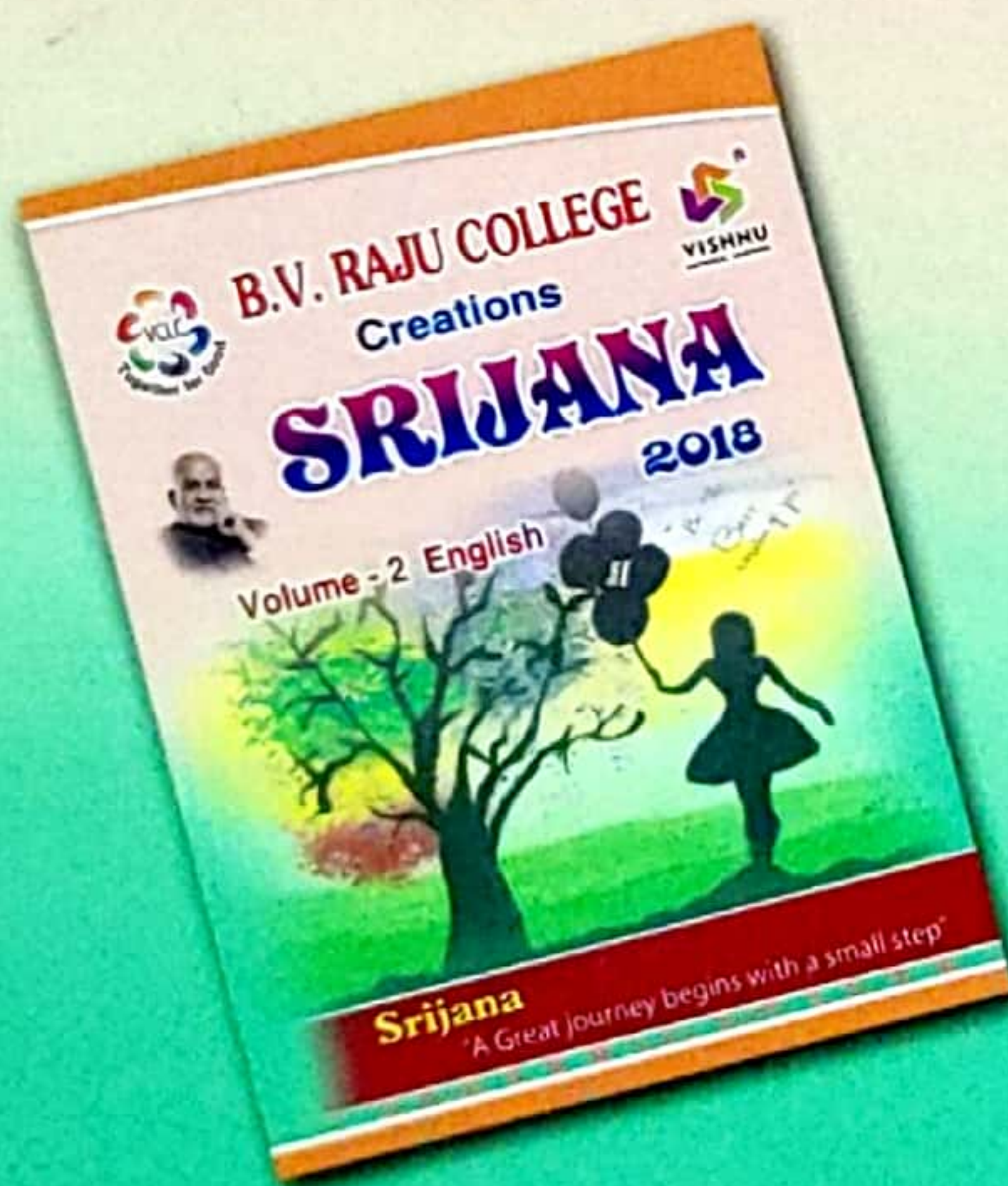
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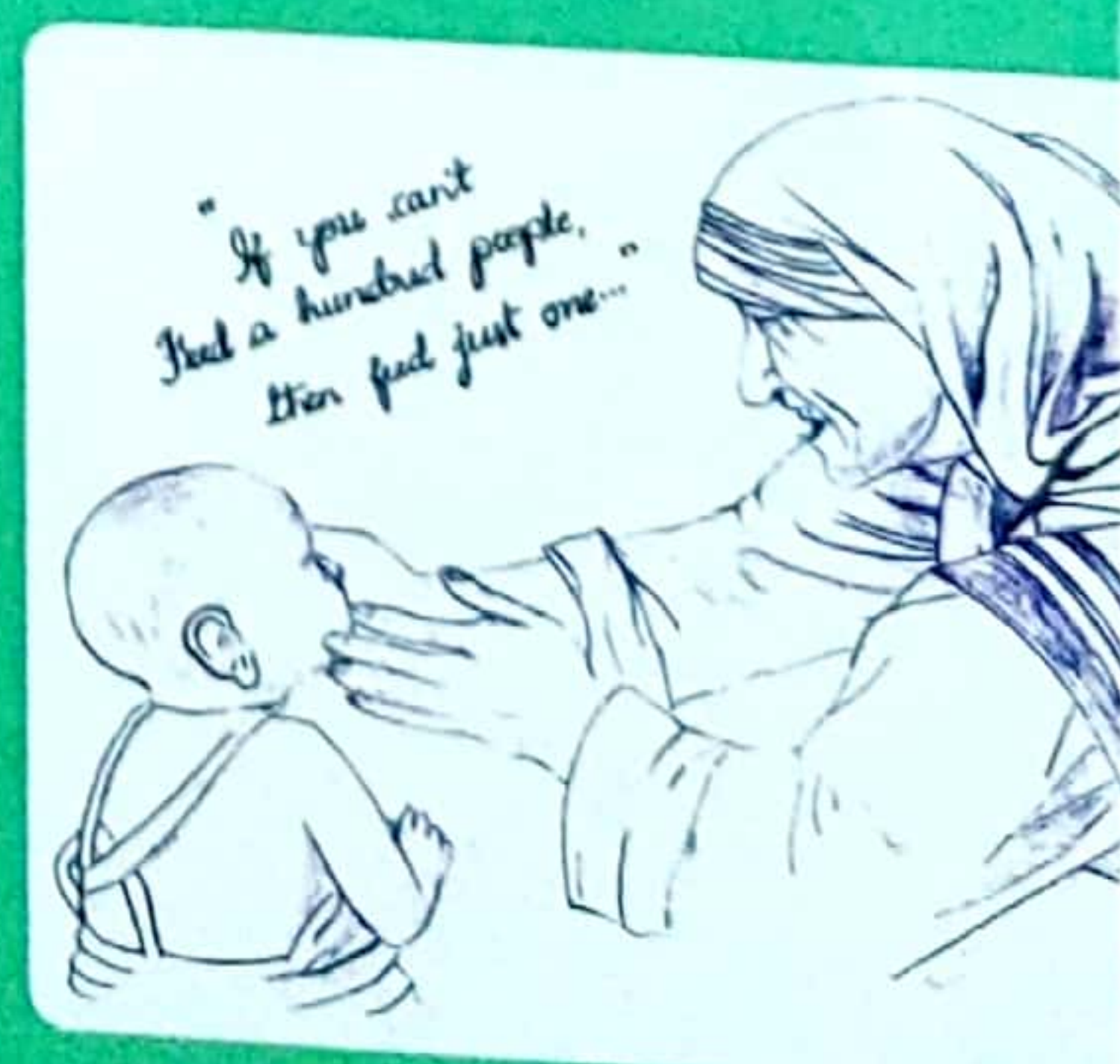
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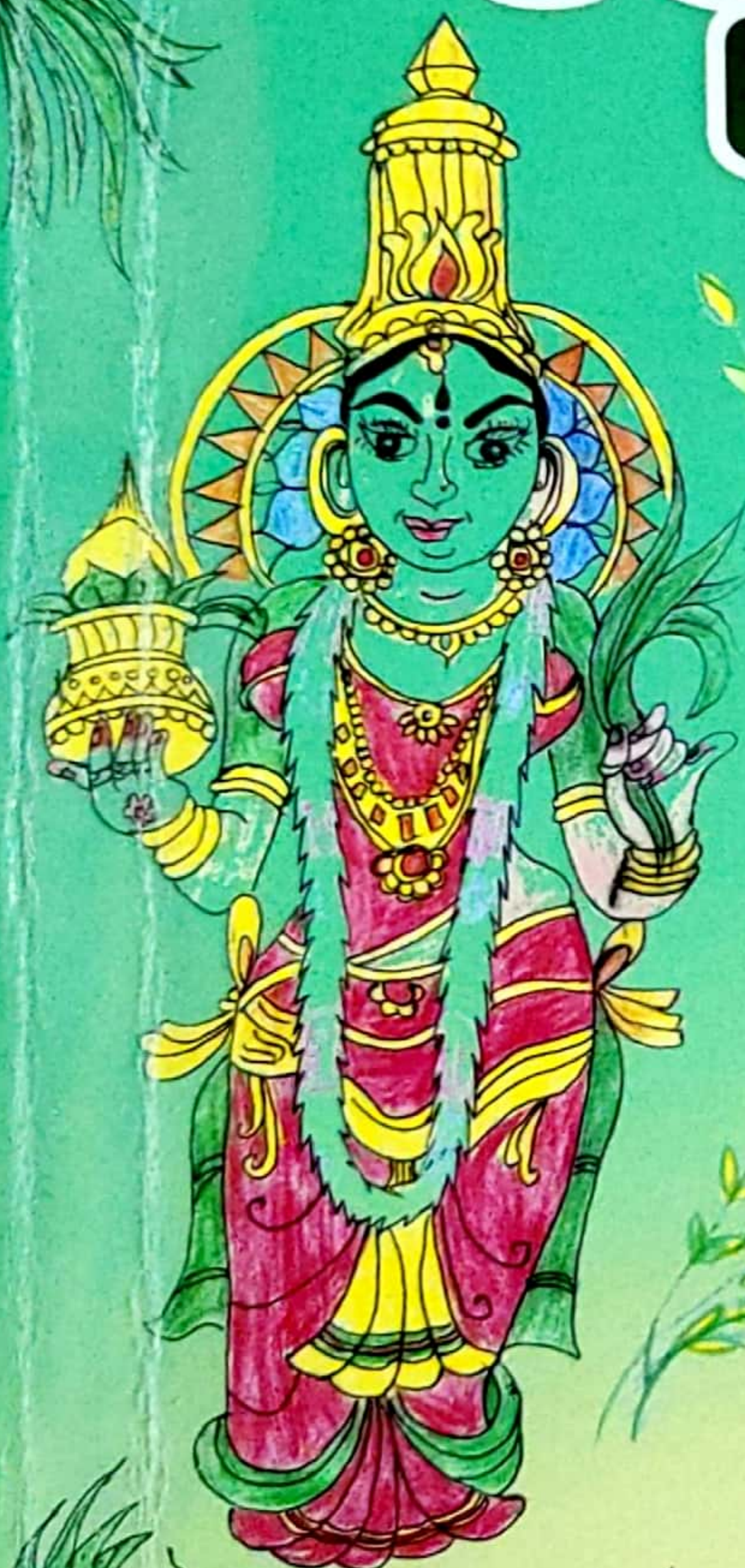
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సృజన

2018

సంచిక - 1 తెలుగు



పై తెలుగుతల్లి

G.P.S.L. Prasanna
MB.B.T.BC-II
1631141372



ఈ ప్రపంచంలో మనల్ని
చూడక ముందే ప్రేమించి
పేరే పెక న్ని....
అమ్మ

ప్రేమికుడికంటే అమితంగా
నిండు అన్ని బాటె నిలిచి

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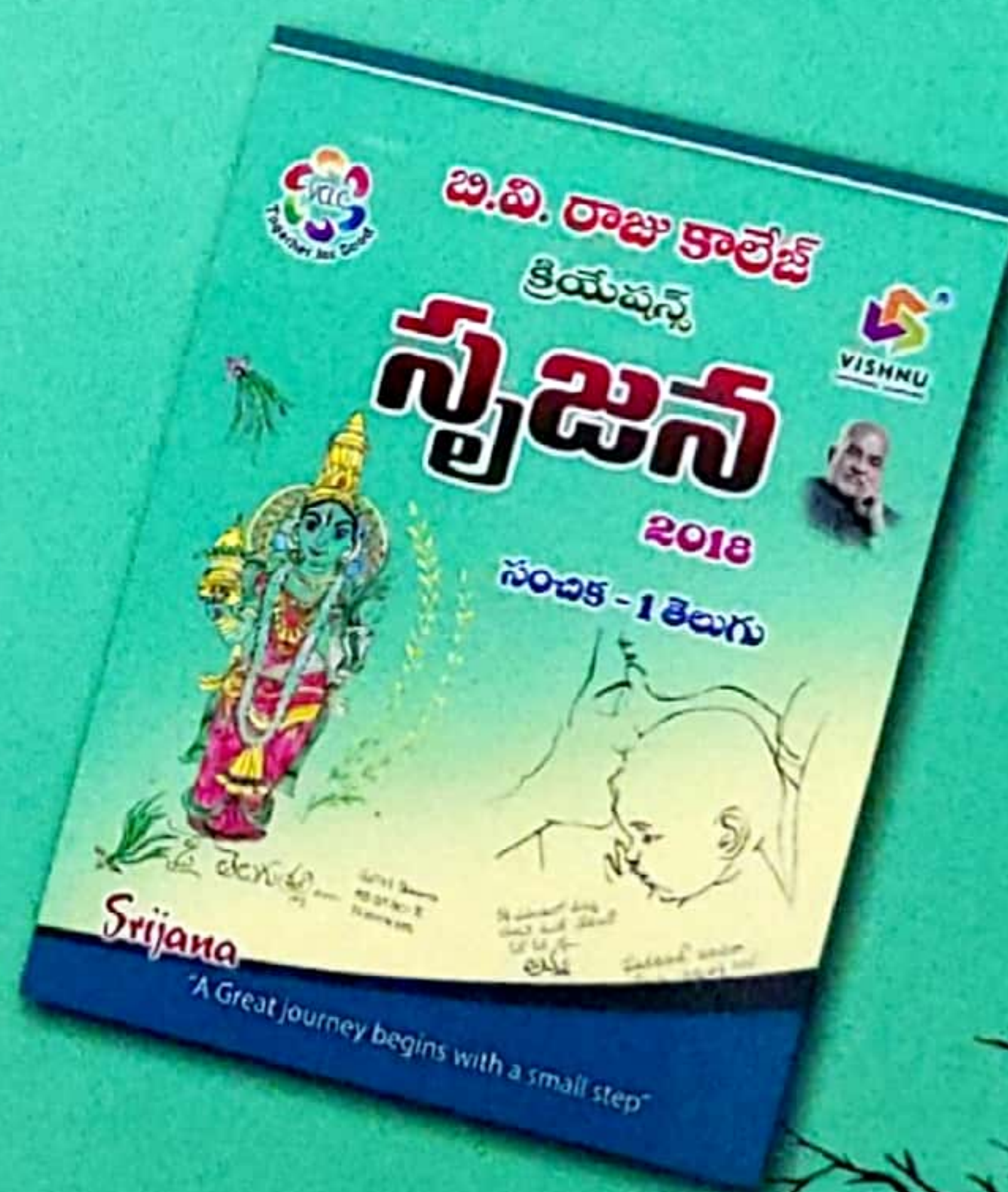
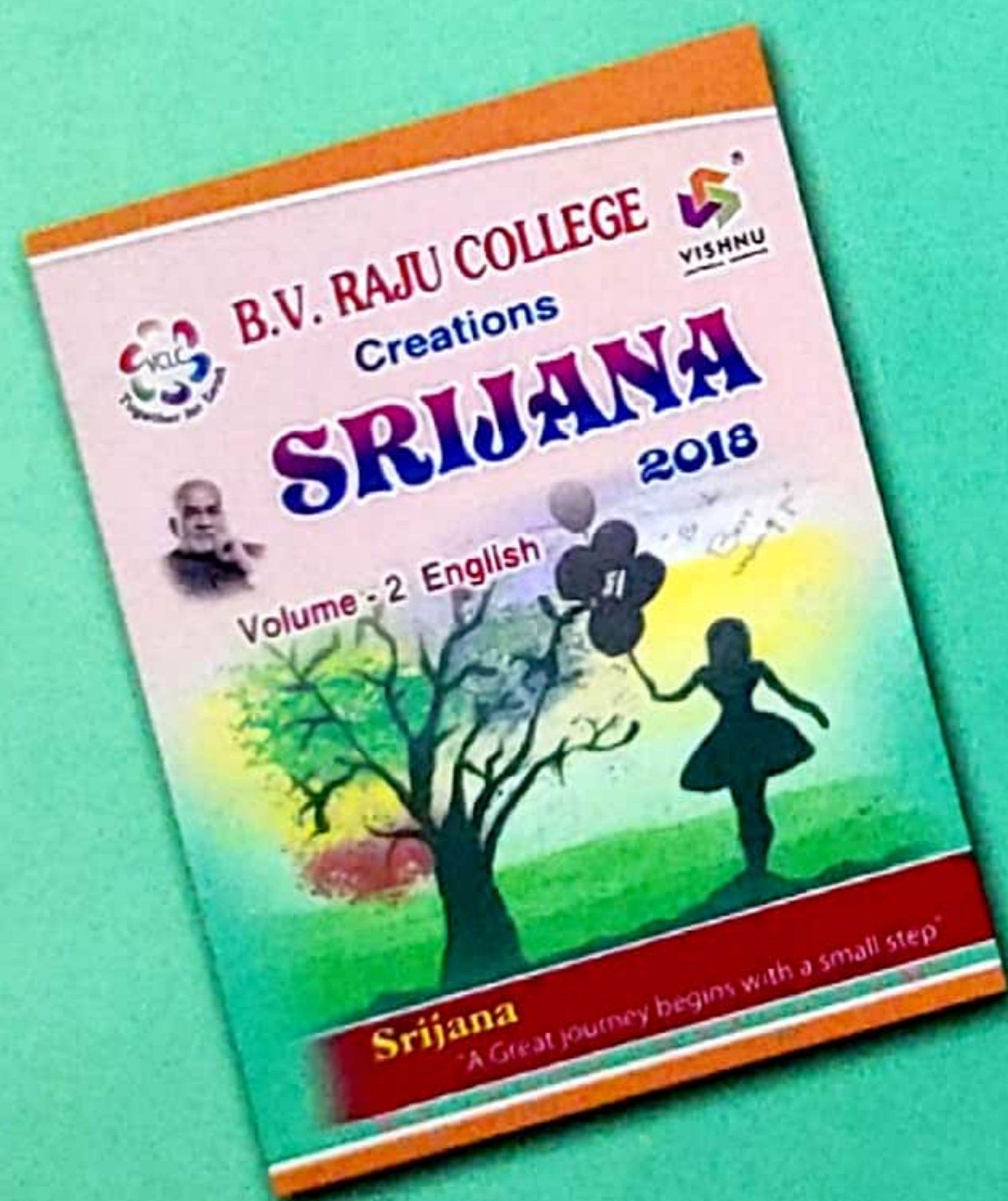
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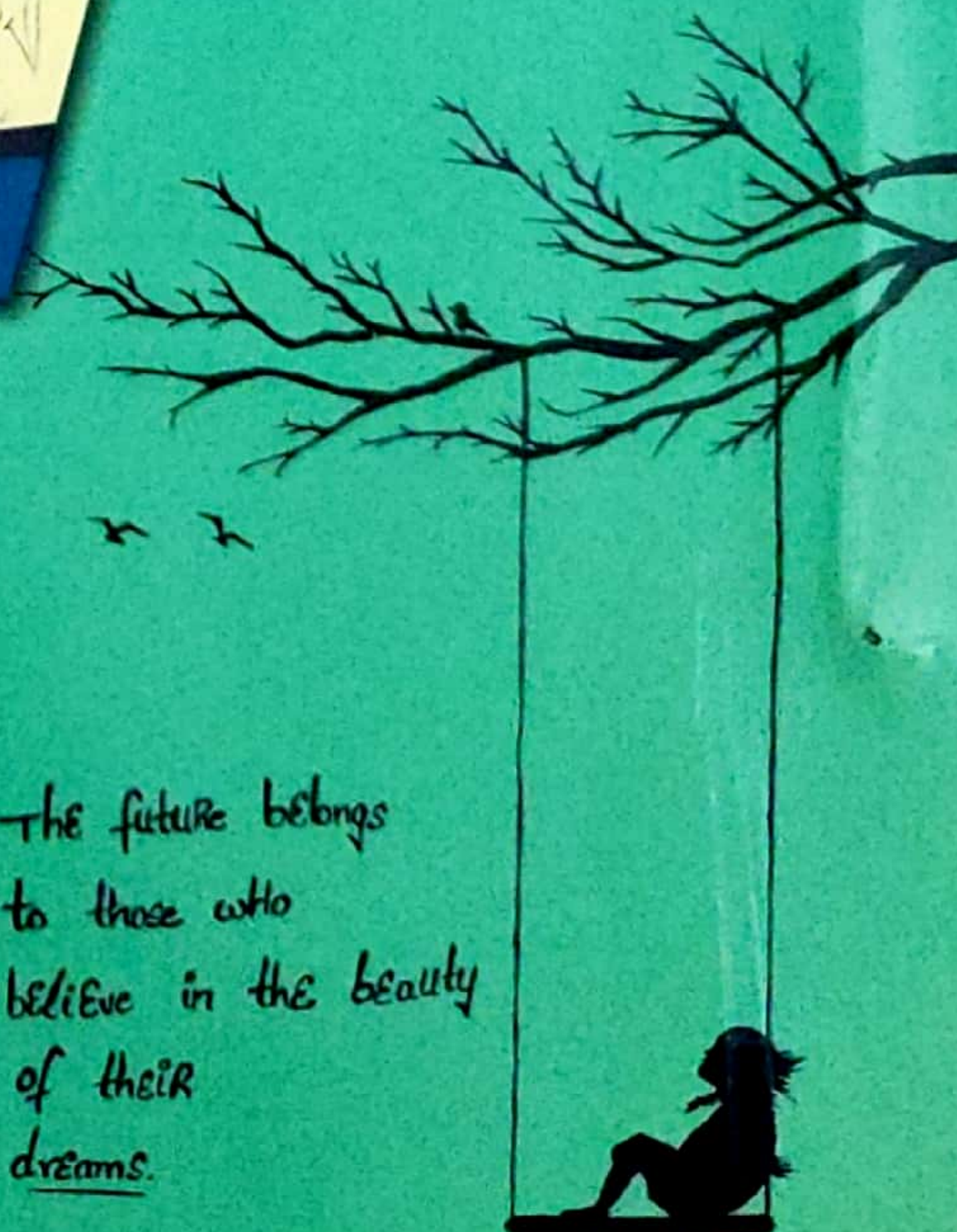
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VCLC 2017-18

NAME OF THE ACTIVITY : INAUGURATION OF THE COLLEGE MAGAZINE *SRUJANA-2018*

DATE OF THE ACTIVITY :01-01-2018

S.NO	Name of the student	The articles contributed by the students	
1.	M. Navyasurekha	New welcome	POETRY
2.	R. Veera babu	Validity of my love	
3.	Gayathri Devi	Happiness	
4.	Upendra	You are mine	
5.	G. Gayathri Devi	A dad's love	
6.	Ch. Dhanunjayvarma	Smile smile smile.....	
7.	G. Gayathri Devi	Life	
8.	R. Vijay Lakshmi	First love	SHORT STORY
9.	D. Anuradha	Selfish friendship	
10.	J. Renuka	The right person	
11.	Md. Farjana	A wise counting	
12.	N. Gayathri	Georgie porgie	
13.	N. Gayathri	Grey goose and gander	
14.	M. Bhavani	Cunning fox and clever stork	
15.	Ch. Padmini	Father	MESSAGE
16.	K.alfasunitha	Nature is every where	
17.	Ch. Padmini	Mother	
18.	V. Sridhari	Feeling indianly Indian	
19.	Usha sree	Old age home	
20.	Gayathri Devi	Seven lovely logics	
21.	G. Gayathri Devi	Mom	
22.	Ch. Ramya bharathi	Statistics in daily life	
23.	N. Devi	Information	
24.	Sudhakar	School life	DO YOU KNOW
25.	Sk. Asfar	Simply of having of money will make rich	
26.	Venkata ratnam. G	Y English is hard 2 learn	
27.	A. Vamsi	Solve if you can	
28.	Madhu mounika	Natural wonder of igazu falls	
29.	G. Deepika	Ten facts about you	
30.	G. Gopala Krishna	Dooms day vault	PERSONALITIES
31.	D. Anuradha	Vikram Seth	
32.	P.bharadvaj	Walt Disney	
33.	Bhargav sudeer	Steven paul	
34.	R. Dhanaraju	Hello	
35.	Madhu mounika	Abdul kalam	
36.	Bhardvaj	Che guevera	QUOTATIONS
37.	S.ramya	Quotation	

38.	D. Avinash	Gautham Buddha	JOKES
39.	A. Sri durga	Words of swamy Vivekananda	
40.	Pavani sai	Abdul kalam	
41.	V. Sridhari	Invention to no mentlon	
42.	T. Ramya	Murder of English	
43.	Y. Sravani	Mistake mistake	
44.	K. Swamy	Single status of my whatsapp	
45.	Ch. Nageswararao	Master mind	
46.	N. Vennela	Hahaha	
47.	A. Kiran	Just for fun	
48.	I. Namrata	Good batch	GALLERY
49.	A. Pavani	Importance of former	
50.	B. Pujitha	Parrots are green in colour	
51.	P. Bhavani	Love, honour ,respect ,nature like your mother	
52.	K. Pravallika	Peaceful India	
53.	Y. Padma swaroopa	No limits for imagination	
54.	Asfar	Respect female	
55.	R. Vijaya Lakshmi	Buddha	
56.	N. Preethi	Tamilnadu Tagore	
57.	B. Madhumounika	Peacock	
58.	S. Yamini	Don't hide your inner talents	
59.	Samyuktha	Pencil personifications	
60.	Y. Ramya	Save the girl child	
61.	A. Pavani	Great leader of Indian	

“A great journey begins with a small step”. Sensing that a magazine is the imminent need for the students to explore their creativity, this humble had written magazine is launched. It comprises of short stories, Poetry pieces, Jokes, Paintings, Gallery, Personalities, and Puzzles.


Coordinator


Academic Incharge


Principal



ANNUAL DAY
(CHEERIO)
2017-2018

B.V.RAJU COLLEGE
VISHNUPUR, BHIMAVARAM
VCLC ACTIVITIES 2017-18

NAME OF THE ACTIVITY :CHEERIO

DATE OF THE ACTIVITY : 27-02-2018

ANNUAL DAY AND FAREWELL CELEBRATIONS

Fare well cum Annual Day was celebrated with the title "CHEERIO 2K18" on 27-02-2018. Students made the program as a memorable event in the hearts of final year students. Students of first and second year degree performed cultural events with wide variety. They conducted different surprising events which perplexed their seniors with joyous. The Director and the chief guest of the event Dr.D.Suryanarayana addressed the students and distributed academic prizes to the second and final year toppers. Sports and English Club prizes were also distributed to the students. In this connection, to make the program a big success vclc student coordinators showed their utmost dedication.


Coordinator


Academic Incharge


Principal



Glimpse ... of CHEERIO 2K18



28 ఫిబ్రవరి 2018

వార్త

మధ్యాహ్నం 28 ఫిబ్రవరి 2018

ఉత్సాహంగా జివి రాజు కళాశాల వార్షికోత్సవం



జివి రాజు కళాశాల వార్షికోత్సవం (27/02/18) - 04.00pm) జరిగింది. ఈ సందర్భంగా కళాశాల ప్రధానాధికారి డాక్టర్ బి.వి.రాజు, ఉపాధ్యక్షులు, విద్యార్థులు, ఉపాధ్యాయులు, అధికారులు, ప్రజాపితా వంటివారు పాల్గొన్నారు. ఈ సందర్భంగా కళాశాల ప్రధానాధికారి డాక్టర్ బి.వి.రాజు, ఉపాధ్యక్షులు, విద్యార్థులు, ఉపాధ్యాయులు, అధికారులు, ప్రజాపితా వంటివారు పాల్గొన్నారు.

వార్త



చదువుతోపాటు కళలు

విద్యార్థులు విద్యతో పాటు కళలు అభ్యసించడం ప్రతివ కులంబిగమైనది. వీరికి సృజనాత్మకతే అవసరం. అందుకే వీరికి విద్యతో పాటు కళలు అభ్యసించే అవకాశం ఉండాలి. వీరికి విద్యతో పాటు కళలు అభ్యసించే అవకాశం ఉండాలి. వీరికి విద్యతో పాటు కళలు అభ్యసించే అవకాశం ఉండాలి.

విద్యార్థులందరూ విద్యను మాత్రమే అభ్యసించి విద్యతో పాటు కళలు అభ్యసించడం ప్రతివ కులంబిగమైనది. వీరికి సృజనాత్మకతే అవసరం. అందుకే వీరికి విద్యతో పాటు కళలు అభ్యసించే అవకాశం ఉండాలి. వీరికి విద్యతో పాటు కళలు అభ్యసించే అవకాశం ఉండాలి.

చదువుతోపాటు కళలు

విద్యార్థులు విద్యతో పాటు కళలు అభ్యసించడం ప్రతివ కులంబిగమైనది. వీరికి సృజనాత్మకతే అవసరం. అందుకే వీరికి విద్యతో పాటు కళలు అభ్యసించే అవకాశం ఉండాలి. వీరికి విద్యతో పాటు కళలు అభ్యసించే అవకాశం ఉండాలి.

విద్యార్థులందరూ విద్యను మాత్రమే అభ్యసించి విద్యతో పాటు కళలు అభ్యసించడం ప్రతివ కులంబిగమైనది. వీరికి సృజనాత్మకతే అవసరం. అందుకే వీరికి విద్యతో పాటు కళలు అభ్యసించే అవకాశం ఉండాలి. వీరికి విద్యతో పాటు కళలు అభ్యసించే అవకాశం ఉండాలి.



Amirach

B.V.RAJU COLLEGE-PROGRAM SHEET-CHEERIO-2K18

1	PRAYER SONG	SREEDHARI(2-MB BT BC)	5MINUTES				
2	COUNTDOWN(10 SECONDS)	VCLC	1MINUTE				
S.NO	NAME OF THE PARTICIPANT	SECTION	TYPE OF ACT	NAME OF THE SONGS	DURATION	PHONE NO.	ANCHOR
1	G.Ravindra	1/3 -M.P.Cs	SOLO	Hello	4:10	7997276373	
2	B.Gowthami	1/3 -M.P.C	GROUP	Left leg	4:00	8125540810	
3	Pavithra P.Yagna	2/3 -M.E.Cs-B	SOLO	padina padinattu	4:20		
4	R.Lakshmi	1/3 -M.P.C	GROUP	hamma hamma	3:40	9182605840	
5	EVENT	CH/FQ					
6	B.Sindhu	2/3 -BT.BC.C	SOLO	goomar	4:00	9347847444	
7	S.Siva ganesh	1/3 -M.S.Cs	GROUP	chupulto guchi(idiot)	4:00	9951959508	
8	S.S.V.Anusha	2/3 -M.E.Cs-B	SONG		3:20	7989196357	
9	Krishna	2/3 -M.S.Cs	SOLO	messay murukku	4:00	9160310539	
10	S.Priyanka	2/3 -MB.BT.BC	GROUP	bagamathi	4:00	7659975037	
11	Azzumatulla	2/3 -B.COM	SOLO	robotic	4:00	8374401089	
12	Madhu E.V. Upendra	3/3 -M.P.Cs	GROUP	shy shy	4:00	7995301554	
13	G.Ramya	2/3 -B.COM	SONG	parody	4:00	7013290969	
14	V.Pavitra	2/3 -M.S.Cs	GROUP	ranu ranu anttundo	4:00	9133593612	
15	EVENT	PAF/FQ					
16	Baradwaj	3/3 -B.COM	GROUP		4:00	7661011550	
17	P.Yagna Ravi Kumar	2/3 -M.E.Cs-B	SOLO	chikkini chameli	4:12	8328676794	
18	AWARDS	1HR					
19	Vasanth	3/3 -M.P.C	SOLO	natu muka	4:00	9505873699	
20	Farzana	3/3 -M.S.Cs	GROUP	avandoi nani garu	4:00		
21	T.Venkata raju	1/3 -MB.BT.BC	GROUP	gangam style	3:50	8688968483	
22	K.Durga	1/3 -M.P.Cs	SOLO	champeysavey nannu	2:04		
23	Lavanya	1/3 -B.COM	GROUP	hello hello	4:00	8297501025	
24	Ahmed	2/3 -M.E.Cs-B	SOLO	chiru chinuki	4:20		
25	M.Vijayalakshmi	2/3 -M.E.Cs-B	GROUP		3:35	9550653740	
26	Y.Samyuktha	2/3 -MB.BT.BC	SOLO	sun satiya	4:00	9494330855	
27	J.Rama krishna	3/3 -M.S.Cs	GROUP	messay murukku	4:30	9966743874	
28	N.Preethi	2/3 -M.P.C	SOLO	aja nacakle	1:40	9000264699	
29	EVENT	LB/LG&CB/CG					
30	Sarika	3/3 -MB.BT.BC	GROUP			9676884227	
31	CH.Gayathri	2/3 -M.P.Cs	SOLO	swag	3:55	9441017966	
32	N.Ramya	1/3 -BT.BC.C	GROUP	chusi chudanganey		8919950985	
33	Manikanta III Mscs spcl	3/3 -M.S.Cs	SONG	telugu lo kolavari di	3:00	9949687519	
34	CH.Mounika	2/3 -M.E.Cs-A	GROUP	cheeze badi	4:00	9573756015	
35	M.Suresh	3/3 -M.S.Cs	SOLO	a chinna ra chinna	4:30	7981871452	
36	Begum	1/3 -M.S.Cs	GROUP			9603908448	
37	SKIT				10:00		
38	koushik	3/3 -M.S.Cs	SOLO	akhil	4:30	9966743874	
39	EVENT	MSB&MRB/YSF					
40	S.S.V.Anusha	2/3 -M.E.Cs-B	SOLO	shape of you	3:56	7989196357	
41	Manikanta&co	3/3 -M.S.Cs	GROUP	dari chudu	4:00	9949687519	
42	SK.Kuddush	2/3 -M.E.Cs-B	SOLO	pista	4:00	9492177660	
43	R.Priyanka	1/3 -M.P.Cs	GROUP		4:00	7036750728	
44	P.Sirisha	1/3 -M.P.Cs	GROUP	jimmiki rath hey	3:28	7288070546	
45	VCLC(Special performance)						
46	SPOT PPT						
47	G.Lakshmi	1/3 -M.E.Cs-A	GROUP	ala ala	4:00	9490716667	
48	G.Girija	1/3 -M.S.Cs	GROUP	barusorey	4:00	9160888559	
49	P.Mounisha	1/3 -M.E.Cs-B	GROUP	manohara	3:53	9515168305	

**WOMEN'S DAY
CELEBRATION
(2017-2018)**

B.V.RAJU COLLEGE
VISHNUPUR, BHIMAVARAM

VCLC 2017-18

NAME OF THE ACTIVITY: WOMEN'S DAY CELEBRATION

DATE OF THE ACTIVITY : 08-03-2018

On the occasion of Women's day BV Raju College has sprinkled special colours on 08-03-2018. Different competitions were conducted for girl students to improve the spirit in them. Skit, Traditional look, Mehendi, Drawing, Quiz, Flower Decoration and Rongoli are the competitions of the day which made the day more merrily. More than 200 students of B.Sc,B.Com and M.Sc(Organic chemistry) participated in the competitions and made the program success. Winners of the competitions were awarded with prizes. All the Women staff members were felicitated by NSS Units which added glory to the event.


Coordinator


Academic Incharge


Principal



దాడులను పరిగలించి ఇక్కడ మహిళలలో రావాలి .. పనిపాత శివిరాస (8/03/18)

Posted on 08 Mar. 2018 in General | 0 Comments



భీమవరం జూబ్లీ హిల్స్, ఆంధ్రప్రదేశ్
(08/03/18, 04.00pm)

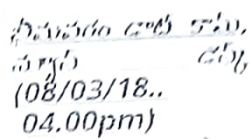
మహిళా సాంఘిక శాస్త్ర పరిశోధనా కేంద్రం, మహిళల పునరుద్ధరణ కార్యక్రమం, భీమవరం జూబ్లీ హిల్స్, ఆంధ్రప్రదేశ్. ఇక్కడ మహిళలలో రావాలి పనిపాత శివిరాస నిర్వహించబడింది.

మహిళలలో గురువారం ఆంధ్రప్రదేశ్ మహిళా దినోత్సవాన్ని నిర్వహించారు. ఈ సందర్భంగా శివిరాస మార్గదర్శిగా నటి సమాజంలో మహిళల పాత్ర ఎంతో ప్రాముఖ్యమైనదని, ప్రతి పనిలోనూ పురుషునితో సమానంగా వ్యవహరించుకోవాలని అన్నారు. అనంతరం విద్యార్థులకు టిఫిన్, పోస్టర్ ప్రటీటింగ్, టీగ్రాఫ్, మెమోర్ టెబిల్లను నిర్వహించి చిటికెలకు బహుమతులను అందించారు. కార్యక్రమంలో గౌరవాలు, అధ్యాపకులు విద్యార్థులు పాల్గొన్నారు.



hineerach

For the first time, an international jury composed



Handwritten notes in Tamil script, likely bleed-through from the reverse side of the page.

1. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$ (1/4)
 2. $\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$ (1/8)
 3. $\frac{1}{4} \times \frac{1}{4} = \frac{1}{16}$ (1/16)
 4. $\frac{1}{2} \times \frac{1}{8} = \frac{1}{16}$ (1/16)
 5. $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$ (1/32)
 6. $\frac{1}{2} \times \frac{1}{16} = \frac{1}{32}$ (1/32)
 7. $\frac{1}{4} \times \frac{1}{16} = \frac{1}{64}$ (1/64)
 8. $\frac{1}{2} \times \frac{1}{32} = \frac{1}{64}$ (1/64)
 9. $\frac{1}{4} \times \frac{1}{32} = \frac{1}{128}$ (1/128)
 10. $\frac{1}{2} \times \frac{1}{64} = \frac{1}{128}$ (1/128)
 11. $\frac{1}{4} \times \frac{1}{128} = \frac{1}{256}$ (1/256)
 12. $\frac{1}{2} \times \frac{1}{256} = \frac{1}{256}$ (1/256)
 13. $\frac{1}{4} \times \frac{1}{256} = \frac{1}{512}$ (1/512)
 14. $\frac{1}{2} \times \frac{1}{512} = \frac{1}{512}$ (1/512)
 15. $\frac{1}{4} \times \frac{1}{512} = \frac{1}{1024}$ (1/1024)
 16. $\frac{1}{2} \times \frac{1}{1024} = \frac{1}{1024}$ (1/1024)
 17. $\frac{1}{4} \times \frac{1}{1024} = \frac{1}{2048}$ (1/2048)
 18. $\frac{1}{2} \times \frac{1}{2048} = \frac{1}{2048}$ (1/2048)
 19. $\frac{1}{4} \times \frac{1}{2048} = \frac{1}{4096}$ (1/4096)
 20. $\frac{1}{2} \times \frac{1}{4096} = \frac{1}{4096}$ (1/4096)
 21. $\frac{1}{4} \times \frac{1}{4096} = \frac{1}{8192}$ (1/8192)
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 25. $\frac{1}{4} \times \frac{1}{16384} = \frac{1}{32768}$ (1/32768)
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 28. $\frac{1}{2} \times \frac{1}{65536} = \frac{1}{65536}$ (1/65536)
 29. $\frac{1}{4} \times \frac{1}{65536} = \frac{1}{131072}$ (1/131072)
 30. $\frac{1}{2} \times \frac{1}{131072} = \frac{1}{131072}$ (1/131072)
 31. $\frac{1}{4} \times \frac{1}{131072} = \frac{1}{262144}$ (1/262144)
 32. $\frac{1}{2} \times \frac{1}{262144} = \frac{1}{262144}$ (1/262144)
 33. $\frac{1}{4} \times \frac{1}{262144} = \frac{1}{524288}$ (1/524288)
 34. $\frac{1}{2} \times \frac{1}{524288} = \frac{1}{524288}$ (1/524288)
 35. $\frac{1}{4} \times \frac{1}{524288} = \frac{1}{1048576}$ (1/1048576)
 36. $\frac{1}{2} \times \frac{1}{1048576} = \frac{1}{1048576}$ (1/1048576)
 37. $\frac{1}{4} \times \frac{1}{1048576} = \frac{1}{2097152}$ (1/2097152)
 38. $\frac{1}{2} \times \frac{1}{2097152} = \frac{1}{2097152}$ (1/2097152)
 39. $\frac{1}{4} \times \frac{1}{2097152} = \frac{1}{4194304}$ (1/4194304)
 40. $\frac{1}{2} \times \frac{1}{4194304} = \frac{1}{4194304}$ (1/4194304)
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 42. $\frac{1}{2} \times \frac{1}{8388608} = \frac{1}{8388608}$ (1/8388608)
 43. $\frac{1}{4} \times \frac{1}{8388608} = \frac{1}{16777216}$ (1/16777216)
 44. $\frac{1}{2} \times \frac{1}{16777216} = \frac{1}{16777216}$ (1/16777216)
 45. $\frac{1}{4} \times \frac{1}{16777216} = \frac{1}{33554432}$ (1/33554432)
 46. $\frac{1}{2} \times \frac{1}{33554432} = \frac{1}{33554432}$ (1/33554432)
 47. $\frac{1}{4} \times \frac{1}{33554432} = \frac{1}{67108864}$ (1/67108864)
 48. $\frac{1}{2} \times \frac{1}{67108864} = \frac{1}{67108864}$ (1/67108864)
 49. $\frac{1}{4} \times \frac{1}{67108864} = \frac{1}{134217728}$ (1/134217728)
 50. $\frac{1}{2} \times \frac{1}{134217728} = \frac{1}{134217728}$ (1/134217728)
 51. $\frac{1}{4} \times \frac{1}{134217728} = \frac{1}{268435456}$ (1/268435456)
 52. $\frac{1}{2} \times \frac{1}{268435456} = \frac{1}{268435456}$ (1/268435456)
 53. $\frac{1}{4} \times \frac{1}{268435456} = \frac{1}{536870912}$ (1/536870912)
 54. $\frac{1}{2} \times \frac{1}{536870912} = \frac{1}{536870912}$ (1/536870912)
 55. $\frac{1}{4} \times \frac{1}{536870912} = \frac{1}{1073741824}$ (1/1073741824)
 56. $\frac{1}{2} \times \frac{1}{1073741824} = \frac{1}{1073741824}$ (1/1073741824)
 57. $\frac{1}{4} \times \frac{1}{1073741824} = \frac{1}{2147483648}$ (1/2147483648)
 58. $\frac{1}{2} \times \frac{1}{2147483648} = \frac{1}{2147483648}$ (1/2147483648)
 59. $\frac{1}{4} \times \frac{1}{2147483648} = \frac{1}{4294967296}$ (1/4294967296)
 60. $\frac{1}{2} \times \frac{1}{4294967296} = \frac{1}{4294967296}$ (1/4294967296)
 61. $\frac{1}{4} \times \frac{1}{4294967296} = \frac{1}{8589934592}$ (1/8589934592)
 62. $\frac{1}{2} \times \frac{1}{8589934592} = \frac{1}{8589934592}$ (1/8589934592)
 63. $\frac{1}{4} \times \frac{1}{8589934592} = \frac{1}{17179869184}$ (1/17179869184)
 64. $\frac{1}{2} \times \frac{1}{17179869184} = \frac{1}{17179869184}$ (1/17179869184)
 65. $\frac{1}{4} \times \frac{1}{17179869184} = \frac{1}{34359738368}$ (1/34359738368)
 66. $\frac{1}{2} \times \frac{1}{34359738368} = \frac{1}{34359738368}$ (1/34359738368)
 67. $\frac{1}{4} \times \frac{1}{34359738368} = \frac{1}{68719476736}$ (1/68719476736)
 68. $\frac{1}{2} \times \frac{1}{68719476736} = \frac{1}{68719476736}$ (1/68719476736)
 69. $\frac{1}{4} \times \frac{1}{68719476736} = \frac{1}{137438953472}$ (1/137438953472)
 70. $\frac{1}{2} \times \frac{1}{137438953472} = \frac{1}{137438953472}$ (1/137438953472)
 71. $\frac{1}{4} \times \frac{1}{137438953472} = \frac{1}{274877906944}$ (1/274877906944)
 72. $\$



B.V.RAJU COLLEGE
VISHNUPUR, BHIMAVARAM
DEPARTMENT OF M.Sc. CHEMISTRY

5.1.3- Capacity building and skills enhancement initiatives

ACADEMIC YEAR
2017-2018

B.V.RAJU COLLEGE
VISHNUPUR, BHIMAVARAM
DEPARTMENT OF UG CHEMISTRY

5.1.3- Capacity building and skills enhancement initiatives

S.No.	Name of the capacity development and skills enhancement program	Date of implementation (DD-MM-YYYY)	Number of students enrolled	Name of the agencies/consultants involved with contact details (if any)	Department offered
1.	Remidial classes	25-10-2017	15	Internal	UG Chemistry

Remedial classes for the Academic Year
2017 - 2018

33

Academic Year
2017 - 2018

III B.Sc (MPC) July, Aug;

(Semester-I)

S.NO	Name of the Student	4/7/2017	11/7/2017
1.	M.S.P. Rushi.	P	P
2.	P. Nageswara Rao.	P	Absent
3.	S.N. Pethaman	Absent	P
4.	T. Dhanusha Prasanna.	Absent	P
5.	A. Ranjith	P	P
6.	L. Leela Sai-Pam	P	P
7.	M.V. Sai Teja	P	Absent
8.	P. Prasad Babu.	P	P
9.			
10.			

Topics covered:-

- ① SN^1 , SN^2 reaction, mechanism.
- ② Phase rule
- ③ R-S configuration.
- ④ E-Z nomenclature with examples.
- ⑤ General properties of d-block elements.
- ⑥ Free electron theory.
- ⑦ VB theory.
- ⑧ Band theory.

20/7/2017	8/8/2017	17/8/2017	30/8/2017
Absent	P	P	
P	P	Absent	
P	P	P	
P	P	P	
P	Absent	P	
P	P	Absent	
P	P	P	
Absent	Absent	P	

Name of the Student	Signature of the Students				
	4/7/17	11/7/17	20/7/17	8/8/17	17/8/17
1. M.S.P. Rushi	Rushi	Rushi	A	Rushi	Rushi
2. P. Nageswara Rao	P. Rao	A	P. Rao	P. Rao	A
3. S.N. Rehman	A	Rehman	Rehman	Rehman	Rehman
4. T. Dhanusha Prasanna	A	Balana	Balana	Balana	Prasanna
5. A. Ranjith	Ranjith	Ranjith	Ranjith	A	Ranjith
6. L. Leela Sai Ram	Ram	Ram	Ram	Ram	A
7. M.V. Sai Teja	Teja	A	Teja	Teja	Teja
8. P. Prasad Babu	Prasad	Prasad	A	A	Prasad
9.					
10.					

Signature of the faculty: Chenna

BRB
Signature of HOD

III B.Sc (MPC)

S.NO	Name of the student	22/8/2017	30/8/2017
1	M.S.P. Rushi	P	P
2	P. Nagewara Rao	P	Absent
3	S.N. Rehman	P	P
4	T. Dhanusha prasanna.	Absent	P
5	A. Raniith Kumar	P	P
6	L. Leela Sai Ram	P	P
7	M.V. Sai Teja	Absent	P
8	P. prasad Babu.	P	AA
9			
10			

Topics covered

- ① Splitting of d-orbitals.
- ② Basicity of amines.
- ③ Preparation and properties of amines.
- ④ Preparation of nitro benzene.
- ⑤ Properties of nitro benzene.
- ⑥ Separation of amines.

(mid-2)

33

4/9/2017	11/9/2017	18/9/2017
P	P	Absent
P	P	P
Absent	P	P
P	P	P
P	Absent	P
Absent	P	Absent
P	P	P
P	Absent	P

Name of the Students:

Signature of the Students.

	22/8/17	30/8/17	4/9/17	11/9/17	18/9/17
1. M.S.P. Rushi	Rushi	Rushi	Rushi	Rushi	A
2. P. Nageswara Rao	P. Rao	A	P. Rao	P. Rao	P. Rao
3. S.N. Rehman	Rehman	Rehman	A	Rehman	Rehman
4. T. Dhanusha Prasanna	A	Prasanna	Prasanna	Prasanna	Prasanna
5. A. Ranjith Kumar	Ranjith	Ranjith	Ranjith	A	Ranjith
6. L. Leela Sai Ram	Ram	Ram	A	Ram	A
7. M.V. Sai Teja	A	Teja	Teja	Teja	Teja
8. P. Prasad Babu	Prasad	A	Prasad	A	Prasad
9.					
10.					

Signature of the faculty: Chinnu

BRW

Signature of HOD

III B.Sc (MPC)

(Semester-8)

S. NO	Name of the student.	6/11/17	22/11/17
1	M.S.P. Rushi	Absent	P
2	P. Nageswara Rao	P	P
3	S.N. Rehman	P	Absent
4	T. Dhanusha prasanna.	P	P
5	A. Ranjith	Absent	P
6	L. Leela Sai Ram	P	P
7	M.V. Sai Teja	P	Absent
8	P. Prasad Babu.	P	P
9			
10			

TOPICS COVERED

- ① Differences between order and molecularity.
- ② Rate constant for zero order.
- ③ Rate constant for 1st order.
- ④ Rate constant for 2nd order.
- ⑤ factors affecting rate of reaction.
- ⑥ Carnot cycle.

(mid-3)

6/12/2017

20/12/2017

2/1/2018

P

P

P

P

Absent

P

P

P

P

P

P

Absent

Absent

P

P

Absent

P

P

P

P

P

P

Absent

Absent

Name of the student:

Signature of the students.

1. m.s.p. Rushi

6/11/17

A

Rushi

22/11/17

P. Rao

6/12/17

Rushi

20/12/17

Rushi

2/1/18

Rushi

2. P. Nageswara Rao

P. Rao

P. Rao

P. Rao

A

P. Rao

3. S.H. Rehman

Rehman

A

Rehman

Rehman

Rehman

4. T. Dhanusha Prasanna

Prasanna

Prasanna

Prasanna

Prasanna

A

5. A. Ranjith

A

Ranjith

A

Ranjith

Ranjith

6. L. Leela Sai Ram

Ram

Ram

A

Ram

Ram

7. M.V. Sai Teja

Teja

A

Teja

Teja

Teja

8. P. Prasad Babu

Prasad

Prasad

Prasad

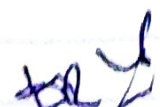
A

A

9.

10.

Signature of the faculty: 


signature of HOD

III B.Sc (MPC)

Csemester- 4)

S.NO	<u>Name of the student</u>	29/11/2018
1	m.s.p. Rushi	P
2	P. Nageswara Rao	P
3	S.N. Rehaman	Absent
4	T. Dhanusha prasanna.	P
5	A. Ranjith	P
6	L. Leela sai Ram	Absent
7	M.V. Sai Teja	P
8	P. Prasad Babu.	P
9		
10		

Topics covered

- ① Structure of glucose and properties.
- ② Preparation, properties of pyrrole.
- ③ Zwitter ion, iso electric point.
- ④ Determination of order of reactions.
- ⑤ factors effect Rate of Reaction.

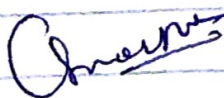
(MID-4)


5/2/2018	12/2/2018	19/2/2018	26/2/2018
Absent	P	P	P
P	P	Absent	P
P	P	P	P
P	Absent	P	Absent
Absent	P	P	P
P	P	P	P
P	Absent	P	P
P	P	Absent	Absent

Name of the student

Signature of the student

	29/1/18	5/2/18	12/2/18	19/2/18	26/2/18
1. m.s.p. Rushi	Rushi	A	Rushi	Rushi	Rushi
2. p. Nageswara Rao	P. Rao	P. Rao	P. Rao	A	P. Rao
3. S. N. Rehman	A	Rehman	Rehman	Rehman	Rehman
4. T. Dharmas ha Prashana	Prashana	Prashana	A	Prashana	A
5. A. Ranjith	Ranjith	A	Ranjith	Ranjith	Ranjith
6. L. Leela Sai Ram	A	Ram	Ram	Ram	Ram
7. m.v. sai Teja	Teja	Teja	A	Teja	Teja
8. P. Prasad Babu.	Prasad	Prasad	Prasad	A	Prasad
9.					
10.					

Signature of the faculty: 


signature of HOD

II B.Sc (MPC)

(Semester-1)

S.NO	Name of the students	5/7/2017	12/7/2017
1	CH. Nagamani	Absent	P
2	CH. madhavi	P	Absent
3	G. D. V. Kalyan	Absent	P
4	K. Akhil	P	P
5	K. m. m. K. Chandu	P	P
6	K. Achyuth Kumar	P	Absent
7	L. Balu Prasad	P	P
8	M. Lalith Satya Prakash	P	P
9	M. Ravi	P	Absent
10	S. Noori	P	P

TOPICS covered:-

- ① Properties of d-block elements
- ② Band theory
- ③ Free electron theory
- ④ Co-precipitation, post precipitation.
- ⑤ Aldol, benzene, perkin reactions.
- ⑥ Cannizzaro reaction.
- ⑦ SN^1 , SN^2 reaction & mechanism.
- ⑧ Lanthanide contraction.
- ⑨ Separation of Lanthanides.
- ⑩ Named reactions in phenols.

(mid-1)

5.

24/7/2017	9/8/2017	18/8/2017
P	P	Absent
P	Absent	P
P	P	P
Absent	P	P
P	Absent	P
P	P	P
Absent	P	P
P	P	Absent
P	P	P
P	Absent	P

Name of the student

Signature of the student

	5/7/17	12/7/17	24/7/17	9/8/17	18/8/17
1. CH. Nagamani	A	Nagamani	Nagamani	Nagamani	A
2. CH. madhuri	madhuri	A	madhuri	A	madhuri
3. G.D.V. Kalyan	A	Kalyan	Kalyan	Kalyan	Kalyan
4. K. Akhil	Akhil	Akhil	A	Akhil	Akhil
5. K. m. mk chandu	K. chandu	K. chandu	K. chandu	A	K. chandu
6. K. Achyuth	Achyuth	A	Achyuth	Achyuth	Achyuth
7. L. Balu prasad	prasad	prasad	A	prasad	prasad
8. m. Lalith	Lalith	Lalith	Lalith	Lalith	A
9. M. Raji	Raji	A	Raji	Raji	Raji
10. S. Noori	Noori	Noori	Noori	A	Noori

D. Saini

Signature of the faculty:

br

Signature of HOD.

D B.Sc(MPC)

(Semester-4)

S.NO	Name of the Students	23/8/2017	31/8/2017
1	CH. Nagamani	P	P
2	CH. madhuri	P	P
3	G.P.V. Kalyan	P	Absent
4	K. Akhil	Absent	P
5	K.m.m.K Chandu	P	P
6	K. Achyuth Kumar	P	P
7	L. Balu Prasad	Absent	P
8	M. Lalith	P	Absent
9	M. Raji	P	P
10	S. Noori	P	Absent

Topics covered:

- ① Haloforn reaction, Knoevenagel reaction.
- ② Clemenson reduction.
- ③ Analysis of aldehydes & ketones.
- ④ -Benzoin condensation.
- ⑤ Oxidation states of Lanthanides.
- ⑥ Characteristics of d-block elements.
- ⑦ Conductors, Semi-conductors, insulators.
- ⑧ SN^1 , SN^2 reactions.
- ⑨ Named reactions of Phenols.
- ⑩ Structure of $Ni(CO)_4$, $Fe(CO)_5$, $Cr(CO)_6$.
- ⑪ Valency bond theory of metals.
- ⑫ Cr, Cu triads.

(mid-2)

	5/9/2017	12/9/2017	19/9/2017	26/9/2017
	P	P	P	P
	P	P	P	P
	P	P	Absent	P
	Absent	P	P	P
	P	Absent	P	Absent
	P	P	Absent	P
	P	P	P	P
	P	P	P	P
	P	P	P	P
	Absent	Absent	P	P
	P	P	P	Absent

Name of the student

Signature of the student

	23/8/17	31/8/17	5/9/17	12/9/17	19/9/17	26/9/17
1 CH. Nagamani	Nagmani	Nagmani	Nagmani	Nagmani	Nagmani	Nagmani
2 CH. madhuri	madhu	madhu	madhu	madhu	madhu	madhu
3 G.P.V. Kalyan	Kalyan	A	Kalyan	Kalyan	A	Kalyan
4 K. Akhil	A	Akhil	A	Akhil	Akhil	Akhil
5 K. mmk Chandu	Richa	Richa	Richa	A	Richa	A
6 K. Achyuth	Achyuth	Achyuth	Achyuth	Achyuth	A	Achyuth
7 L. Balu prasad	A	Prasad	Prasad	Prasad	Prasad	Prasad
8 M. Lalith	Lalith	A	Lalith	Lalith	Lalith	Lalith
9 M. Raji	Raji	Raji	A	A	Raji	Raji
10 S. Noori	Noori	A	Noori	Noori	Noori	A

D. Dami

Signature of the faculty:

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signature of HOD

II B.Sc(MPC)

(Semester-2)

S.No	Name of the Student	7/11/2017
1	CH. Nagamani	ABSENT
2	CH. madhulal	P
3	Gi. D. V. Kalyan	P
4	K. Akhil	ABSENT
5	K. m. m. K Chandy	P
6	K. Achuth	P
7	L. Balu prasad	P
8	M. Lalith	P
9	M. Raji	P
10	S. NOORI	P

TOPICS covered

- ① Beer-Lambert's law.
- ② Types of molecular spectra.
- ③ Ostwald dilution law.
- ④ Hittorf's method.
- ⑤ Arrhenius theory.
- ⑥ Debye-Huckel-Onsager equation.
- ⑦ Kohlrausch law.
- ⑧ Write about colligative properties.
- ⑨ Conductometric titrations.
- ⑩ Nernst equation.

(mid-2)

21/11/2017	7/12/2017	21/12/2017	3/1/2018
P	P	Absent	P
Absent	P	P	P
P	Absent	P	Absent
P	P	P	P
Absent	P	P	P
P	Absent	P	P
P	P	Absent	P
P	P	P	Absent
Absent	P	P	P
P	Absent	P	P

Name of the student

Signature of the student.

	7/11/17	21/11/17	7/12/17	21/12/17	3/1/2018
1 CH. Nagamani	A	Nagamani	Nagamani	A	Nagamani
2 CH. madhuri	madhu	A	madhu	madhu	madhu
3 G. D. V. Kalyan	Kalya	Kalya	A	Kalyan	A
4 K. Akhil	A	Akhil	Akhil	Akhil	Akhil
5 K. M. M. K. Chandu	chandu	A	chandu	chandu	chandu
6 K. Achyuth	Achyuth	Achyuth	A	Achyuth	Achyuth
7 L. Balu Prasad	Prasad	Prasad	Prasad	A	Prasad
8 M. Lalith	Lalith	Lalith	Lalith	Lalith	Lalith
9 M. Raji	Raji	A	Raji	Raji	Raji
10 S. Noori	Noori	Noori	A	Noori	Noori

D. Sani

Signature of the faculty:-

BRW

signature of HOD

II B.Sc (MPC)

(Semester - 2)

S.NO	Name of the Student	25 / 1 / 2018
1	CH. Nagarmani	P
2	CH. Madhavi	Absent
3	G. P. V. Kalyan	P
4	K. Arhil	P
5	K. M. N. Chandra	P
6	K. Achuth	Absent
7	K. Bellu prasad	P
8	M. Lalith Kumar	P
9	M. Raji	P
10	S. Noori	P

Topics Covered

- ① Principles of NMR.
- ② Applications of NMR.
- ③ IR radiation.
- ④ Silver-lead system.
- ⑤ NaCl-water system.
- ⑥ Concept of phase rule.
- ⑦ Modes of vibrations in diatomic, polyatomic molecules.
- ⑧ Determination of EMF of cell.
- ⑨ Potentiometric titrations.
- ⑩ Reference electrode, Standard Hydrogen Electrode.

(mid-4)

6/2/2018	13/2/2018	20/2/2018	27/2/2018
P	Absent	P	P
P	P	P	P
P	P	Absent	P
Absent	P	P	P
P	P	P	Absent
P	P	P	P
Absent	P	Absent	P
P	Absent	P	P
P	P	P	Absent
P	P	P	P


name of the student

Signature of the student

	25/1/17	06/2/18	13/2/18	20/2/18	27/2/2018
1. Ch. Nigamani	Nigamani	Nigamani	A	Nigamani	Nigamani
2. Ch. madhuri	A	madhu	madhu	madhu	madhu
3. G. D. V. Kalyan	Kalyan	Kalyan	Kalyan	A	Kalyan
4. K. Akhil	Akhil	A	Akhil	Akhil	Akhil
5. K. m. r. k. chandu	c.Randhu	chandu	c.chandu	c.chandu	A
6. K. Achyuth	A	Achyuth	Achyuth	Achyuth	Achyuth
7. K. Balu prasad	Prasad	A	Prasad	A	Prasad
8. m. Lalith	Lalith	Lalith	A	Lalith	Lalith
9. M. Raji	Raji	Raji	Raji	Raji	A
10. S. Noori	Noori	Noori	Noori	Noori	P

D. Nam

Signature of the faculty:-


 Signature of HOD.

S.NO	Name of the student	7/7/2017	14/7/2017
1	K.V. parvathi	P	P
2	B. Supriya	Absent	P
3	J. Syam:	P	Absent
4	K. Renuka	Absent	P
5	N. Venkatesh	P	Absent
6	N. Venkata Rajesh	P	P
7	P. Peddaraicu	P	Absent
8	P. Udaya Sai ram	P	P
9			
10			

TOPICS covered

1. Structure of Diborane.
2. Synthesis and structure of higher Boranes.
3. Structure of $B_3N_3H_6$.
4. Preparation and applications of silicon.
5. Preparation and reactions of hydrazene.
6. Preparation and reactions of phosphazenes.
7. Preparation and reactions of hydroxylamine.
8. Types of bond fissions and organic reagents.
9. Applications of inductive effect.
10. Mesomeric effect and its applications.


(mid-1)

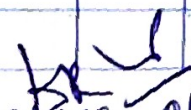
07/7/2017	11/8/2017	23/8/2017	28/8/2017
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P	P	P	Absent
Absent	P	P	P
P	Absent	P	P
P	P	Absent	Absent
P	Absent	P	P
Absent	P	Absent	P

Name of the student

Signature of the student

	7/7/2017	14/7/2017	27/7/2017	11/8/17	23/8/17	28/8/17
1 K.V. parvathi	Parvathi	Parvathi	A	Parvathi	A	Parvathi
2 B. Supriya	A	Subriya	Subriya	A	Subriya	Subriya
3 I. Syam	Syam	A	Syam	Syam	Syam	A
4 K. Renuka	A	Renuka	A	Renuka	Renuka	Renuka
5 M. Venkatesh	Vpnke	A	Vpnke	A	Vpnke	Vpnkates
6 M. Venkata Rajesh	Rajesh	Rajesh	Rajesh	Rajesh	A	A
7 P. Peddiboinu	P. Raju	A	P. Raju	A	P. Raju	P. Raju
8 P. Udaya Saikam	Saikam	Saikam	A	Saikam	A	Saikam
9						
10						

Signature of the faculty: 


signature of HOD

I B.Sc (MPC)

(Mid-2)

Csemester-1)

S.No	Name of the student	31/8/2017
1	K.V. Parvathi	Absent
2	B. Supriya	P
3	I. Syam	P
4	K. Renuka	P
5	m. Venkatesh	P
6	m. Venkata Rajesh	Absent
7	P. Peddi Raju	P
8	P. Uday Sai Ravi	P
9		
10		

Topics covered

1. classifications of oxides
2. Types of carbon metal bonds (CM bonds) and its applications of Rmgx.
3. properties and applications of alkyls of Li and Mg
4. Structure of diborane.
5. structure of $B_3N_3H_6$.
6. preparations and properties of alkanes.
7. classification of oxides.
8. preparation and properties of alkenes.
9. Bayer's strain theory and its limitations.
10. Electrophilic substitution reactions of Benzene.

8/9/2017

15/9/2017

22/9/2017

29/9/2017

P

Absent

P

P

P

P

Absent

P

P

P

Absent

P

P

P

P

Absent

P

P

P

Absent

P

P

P

Absent

Absent

P

P

P

Absent

P

P

Absent

Name of the student

Signature of the student

31/8/2017

8/9/2017

15/9/2017

22/9/2017

29/9/2017

1. K.V. Parvathi

A

Parvathi

Parvathi

Parvathi

A

2. B. Supriya

Supriya

A

Supriya

Supriya

Supriya

3. I. Syam

Syam

Syam

A

Syam

Syam

4. K. Renuka

Renuka

Renuka

Renuka

A

Renuka

5. m. Venkatesh.

Venkatesh

Venkatesh

Venkatesh

Venkatesh

A

6. n. Venkata Rajesh

A

Rajesh

Rajesh

Rajesh

Rajesh

7. p. Peddipati

P. Raju

A

P. Raju

P. Raju

P. Raju

8. p. Uday saipani

sai Ram

sai Ram

A

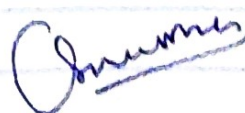
A

A

9

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Signature of the faculty:



Signature of HOD



I B.Sc (MPC)

(Mid-3)

(Semester-2)

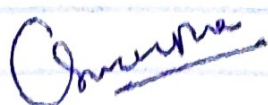
S.No	Name of the Student:	9/11/2017	14/11/2017
1	K-V-Parvathi	P	P
2	B. Supriya	Absent	P
3	I. Syam	P	P
4	K. Renuka	P	Absent
5	m. Venkatesh.	P	P
6	m. Venkata Rajesh	Absent	P
7	P. Peddi Raju	P	P
8	P. Uday Sai Kumar.	P	Absent
9			
10			

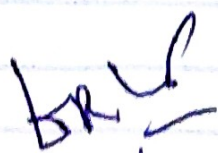
TOPICS COVERED

1. Write about Mesomorphic state.
2. Classification of liquid crystals.
3. Wanderwall's equation
4. Relation between wanderwall equation and critical constant.
5. Write about law of symmetry.
6. Bragg's equation.
7. Defects in crystals.
8. Differences between physical and chemical adsorption.
9. Valence bond (VB) theory and applications.
10. Molecular orbital theory
11. Definition of collider.

27/11/2017	8/12/2017	15/12/2017	5/1/2018
Absent	P	P	Absent
P	Absent	P	P
P	P	Absent	P
P	P	P	Absent
Absent	P	P	P
P	P	Absent	P
P	Absent	P	P
P	P	P	Absent

Name of the student	9/11/2017	14/11/17	27/11/17	8/12/17	15/12/17	5/1/18
1. K. V. Parvathi	Parvathi	Parvathi	A	Parvathi	Parvathi	A
2. B. Supriya	A	Supriya	Supriya	A	Supriya	Supriya
3. J. Syam	Syam	Syam	Syam	Syam	A	Syam
4. K. Renuka	Renuka	A	Renuka	Renuka	Renuka	A
5. M. Venkatesh	VPnkatesh	VPnkatesh	A	VPnkatesh	VPnkatesh	VPnkatesh
6. M. Venkata Rajesh	A	Rajesh	Rajesh	Rajesh	A	Rajesh
7. P. Peddi Raju	P. Raju	P. Raju	P. Raju	A	P. Raju	P. Raju
8. P. Lakshmi Sai Ram	Sai Ram	A	Sai Ram	Sai Ram	Sai Ram	A
9.						
10						

Signature of the faculty: 


Signature of HOD

I B.Sc (mpc)

(Mid-4)

(Semester-2)

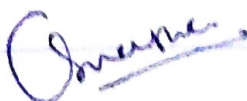
S.No	Name of the Student	15/1/2018
1	K.V. Parvathi	P
2	B. Supriya	P
3	I - syam	Absent
4	K. Remuka	P
5	m. Venkatesh.	P
6	m. Venkata Rajesh	P
7	P. Peddisaiju	Absent
8	P. Uday Sai ram.	P
9		
10		


TOPICS COVERED

1. Henry's law.
2. Azeotropes mixture of $HCl - H_2O$
3. Fractional distillation.
4. partially miscible liquids (phenol-water system)
5. Nernst distribution law.
6. Fischer, Newman and saw-horse formula.
7. optical isomerism.
8. Definition of Enantiomers and diastereomers.
9. D.L configuration
10. R.S configuration

30/1/2018	2/2/2018	16/2/2018	23/2/2018
Absent	P	Absent	P
P	Absent	P	Absent
P	P	P	P
P	P	P	P
Absent	P	Absent	P
P	P	P	P
P	P	P	P
P	A	P	Absent

Name of the student	15/1/2018	30/1/2018	2/2/2018	16/2/2018	23/2/2018
1. K. V. Parvathi	parvathi	A	Parvathi	A	Parvathi
2. B. Supriya	supriya	supriya	A	supriya	A
3. I. Syam	A	Syam	Syam	Syam	Syam
4. K. Renuka	Renuka	Renuka	Renuka	Renuka	Renuka
5. M. Venkatesh	Venkatesh	A	V Venkatesh	A	V Venkatesh
6. M. Venkata Rajesh	Rajesh	Rajesh	Rajesh	Rajesh	Rajesh
7. P. Radhika	A	P. Raju	P. Raju	P. Raju	P. Raju
8. P. Uday Sai Ram	Sai ram	sai Ram	A	sai Ram	A
9					
10					

Signature of the faculty: 


signature of HOD

2017-18

B V RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

I MECs
2017-18

Sl.No	Student Name	Signature
1	ADIMMULAM DURGA VIJAYA RAJU	A. Durga Vijaya Raju
2	AINAMPUDI LAVANYA SATYA	A. Lavanya Satya
3	AINAMPUDI RAMYA SUREKHA	A. Ramya Surekha
4	AJJUMPUDI VENKATA VAMSI KRISHNA	A. Venkata Vamsi Krishna
5	ALLURI LAKSHMI PRASANNA	A.L. Prasanna
6	A POOJA LAKSHMI KALYANI	A. Pooja
7	AMANAPU SIVA PARVATHI	A. Siva Parvathi
8	AMARA VEENAMADHURI	Madhuri
9	ANDRUPALLI PRASAD	Prasad.
10	ANISSETTI ROSHINI	A. Roshini
11	APPANA KAVERI DURGA	Kaveri Durga
12	BADDI RAVINDRABHARATHI	B. Bharathi
13	BAJINKI SATISH	B. Satish
14	B BHAVYA SATYA SRAVANI	B.B Satya Sravan
15	BANDARU NIRAJA	B. Niraja
16	BANDARU REVANTH	B. Revanth
17	BANDARU SAI KRISHNA	B. Sai Krishna
18	BANDI REKHA SATYA SREE	B. Satya Sree
19	BUDARANARSU SAI RISHITHA	B. Sai Rishitha
20	CHALAMALASETTI VIDYA	Ch. Vidya
21	CHEKURI MOUNIKA	Ch. Mounika
22	HELLABOINA NAGA DEVI	Ch. Naga Devi
23	CHENCHALA PAVANI	C. Pavani
24	CHILAKALAPALLI NAGENDRA KUMAR	Ch. Nagendra
25	CHITTAJALLU PRATHYUSHA	Ch. Prathyusha
26	CHUNDURI TEJA N.V.SAI RAM	Ch. T. N.V.S. Ram
27	DANGETI NAVEEN	D. NAVEEN
28	DASARI ANITHA	D. Anitha
29	GADIRAJU VIDYA SRI	G. Vidya Sri
30	GALIDEVARA JAGADEESH	G. JAGADEESH

B.V. Raju College, Vishnupur, Bhimavaram
Bridge Course (2017-18)



Generations of Computer

Dept. of Computer Science
B V Raju College
Bhimavaram

Generations of Computer

- ▶ Generation in computer terminology is a change in technology a computer is/was being used.
- ▶ Initially, the generation term was used to distinguish between varying hardware technologies.
- ▶ But nowadays, generation includes both hardware and software, which together make up an entire computer system.

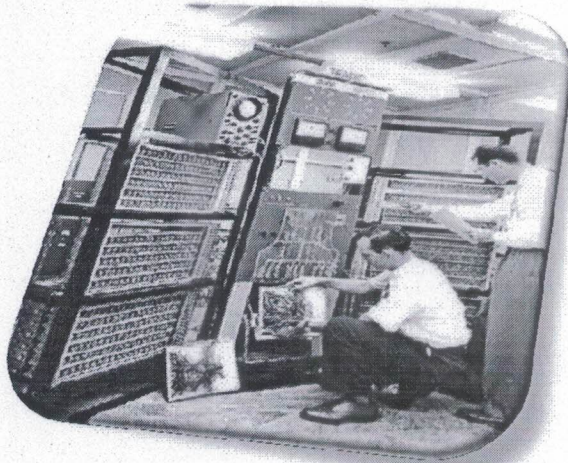
Following are the main five generations of computers

S.No.	Generation & Description
1	First Generation The period of first generation: 1946-1959. Vacuum tube based.
2	Second Generation The period of second generation: 1959-1965. Transistor based.
3	Third Generation The period of third generation: 1965-1971. Integrated Circuit based.
4	Fourth Generation The period of fourth generation: 1971-1980. VLSI microprocessor based.
5	Fifth Generation The period of fifth generation: 1980-onwards. ULSI microprocessor based

First Generation

- ▶ The period of first generation was 1946-1959.
- ▶ The computers of first generation used vacuum tubes as the basic components for memory and circuitry for CPU (Central Processing Unit).
- ▶ These tubes, like electric bulbs, produces a lot of heat.
- ▶ These are very expensive and could be afforded only by very large organizations.
- ▶ In this generation mainly batch processing operating system were used.
- ▶ Punched cards, paper tape, and magnetic tape were used as input and output devices.
- ▶ The computers in this generation used machine code as programming language.

First Generation



Advantages

- ▶ They were the fastest calculating devices of their time.

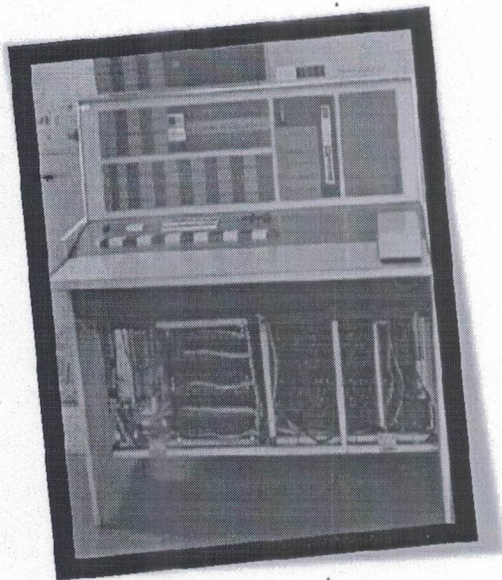
Disadvantages

- ▶ Unreliable
- ▶ Supported machine language only
- ▶ Very costly
- ▶ Generated lot of heat
- ▶ Slow input and output devices
- ▶ Huge size
- ▶ Need of A.C.
- ▶ Non-portable
- ▶ Consumed lot of electricity

Second Generation

- ▶ The period of second generation was 1959-1965.
- ▶ In this generation **transistors** were used that were **cheaper**, consumed **less power**, more compact in size, more reliable and faster than the first generation machines made of vacuum tubes.
- ▶ In this generation, **magnetic cores** were used as primary memory and **magnetic tape and magnetic disks** as secondary storage devices.
- ▶ In this generation assembly language and high-level programming languages like **FORTRAN**, **COBOL** was used.
- ▶ The computers used **batch processing** and **multiprogramming** operating system.

Second Generation



Advantages

- ▶ **Reliable** in comparison to first generation computers
- ▶ **Smaller size** as compared to first generation computers
- ▶ Generated **less heat** as compared to first generation computers
- ▶ Consumed **less electricity** as compared to first generation computers
- ▶ **Faster** than first generation computers

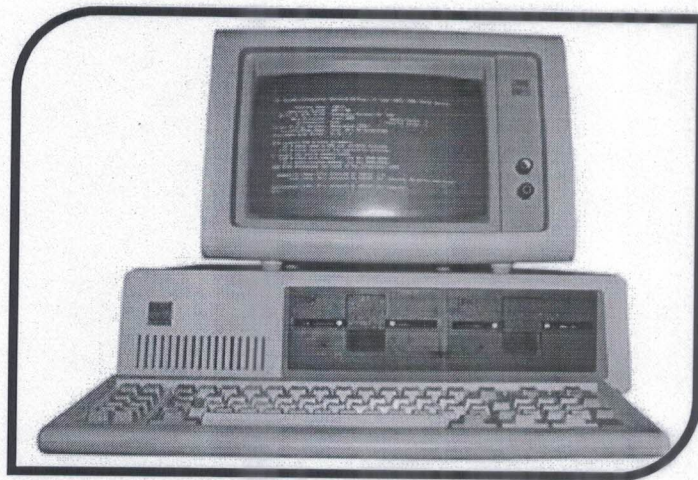
Disadvantages

- ▶ These are manufactured using **transistors**, which had to be **assembled manually**.
- ▶ Still very costly
- ▶ **A.C.** needed

Third Generation

- ▶ The period of third generation was 1965-1971.
- ▶ The computers of third generation used **integrated circuits (IC's)** in place of transistors.
- ▶ A single IC has many **transistors, resistors and capacitors** along with the associated circuitry.
- ▶ The IC was invented by **Jack Kilby**. This development made computers smaller in size, reliable and **efficient**.
- ▶ In this generation **remote processing, time-sharing, multi-programming operating system** were used.
- ▶ **High-level languages** (FORTRAN-II TO IV, COBOL, PASCAL PL/1, BASIC, ALGOL-68 etc.) were used during this generation.

Third Generation



Advantages

- ▶ They were **faster** than second generation computers and could perform one million transactions per second.
- ▶ They were **smaller, cheaper and more reliable** than their predecessors.
- ▶ These computers had **faster and larger** primary memory and secondary storage.
- ▶ Widely used for **scientific as well as business** applications.

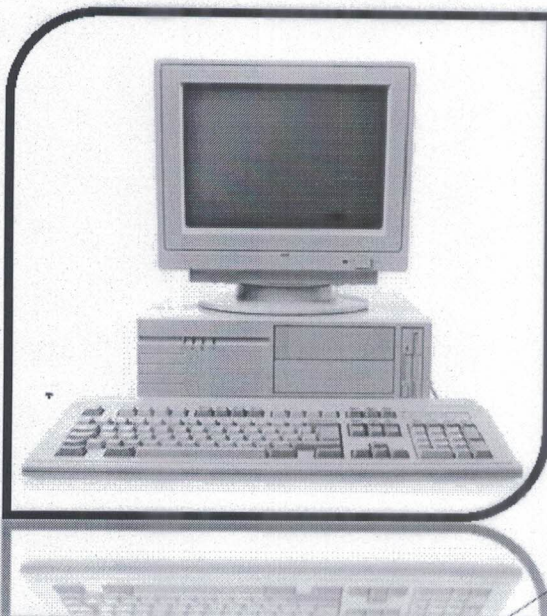
Disadvantages

- ▶ These Computers were **difficult** to maintain.
- ▶ They got **heated** very quickly.

Fourth Generation

- ▶ The period of fourth generation was 1971-1980.
- ▶ The computers of fourth generation used **Very Large Scale Integrated (VLSI)** circuits.
- ▶ VLSI circuits having about **5000 transistors and other circuit elements** and their associated circuits on a single chip made it possible to have microcomputers of fourth generation.
- ▶ Fourth generation computers became more **powerful, compact, reliable, and affordable**. As a result, it gave rise to **personal computer (PC)** revolution.
- ▶ In this generation **time sharing, real time, networks, distributed operating system** were used.
- ▶ All the high-level languages like **C, C++, DBASE** etc., were used in this generation.

Fourth Generation



Advantages

- ▶ These computers were smaller, cheaper, faster and more reliable than their predecessors.
- ▶ Consumed less electricity and generated less heat.
- ▶ They had faster and larger primary memory and secondary storage.
- ▶ No A.C. needed
- ▶ Concept of internet was introduced

Disadvantages

- ▶ They are not intelligent systems.

Fifth Generation

- ▶ The period of fifth generation is 1980-till date.
- ▶ In the fifth generation, the VLSI technology became **ULSI (Ultra Large Scale Integration)** technology, resulting in the production of microprocessor chips having ten million electronic components.
- ▶ This generation is based on parallel processing hardware and **AI (Artificial Intelligence)** software.
- ▶ AI is an emerging branch in computer science, which means method of making computers think like human beings.
- ▶ All the high-level languages like **C and C++, Java, .Net** etc., are used in this generation

Fifth Generation



The main features of fifth generation are:

- ▶ ULSI technology
- ▶ Development of true artificial intelligence
- ▶ Development of Natural language processing
- ▶ More user friendly interfaces with multimedia features
- ▶ Availability of very powerful and compact computers at cheaper rates



Thank You



Applications

- ▶ Banking
- ▶ Insurance
- ▶ Education
- ▶ Engineering Design
- ▶ Military
- ▶ Communication
- ▶ Government

B.V.RAJU COLLEGE
VISHNUPUR, BHIMAVARAM
DEPARTMENT OF LIFE SCIENCES

5.1.3 – Remedial Coaching

ACADEMIC YEAR
2017-2018

B.V.RAJU COLLEGE

VISHNUPUR, BHIMAVARAM

DEPARTMENT OF LIFE SCIENCES

S.No.	NAME OF THE FACULTY	No Of Students
1.	Dr. D. Ravi Shankar	11
2.	K.Sudha Madhavi	
3.	D.Sri Devi	

2018-2019

NOTICE

Remedial class are going to conduct for the students of Ist & IInd Semesters MB BTBC & BTBC because of their poor performance in Biotechnology, Biochemistry & Microbiology Practical Examinations

Venue: Microbiology Lab

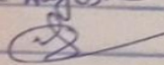
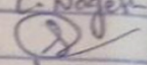
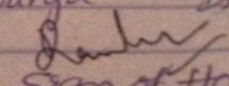
Date: 08/08/2018

Time: 4-5 pm

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Sign of the Head






Remedial classes are
conducting for the following students of I, II,
III & IV Sem Biotechnology, microbiology & Biochemistry

Candidates who attended the classes.

NAME OF THE STUDENT	GROUP	4/10/2019	5/10/2019
C. Nageswara Rao	C. BEST	C. Nagesh	C. Nagesh
C. Naga Venkata Sraya	"		
Y. Swayanarayana	"	Swaya	Narya
A. Kothlik	"	A. Kothlik	A. Kothlik
B. Nani	MB BC BT	B. Nani	B. Nani
P. Lalitha Kumar	MB BC BT	ARSEN	ARSEN
V. Venkatesh	"	Venkat	Venkat
T. Gauthami	"	T. G	T. G
B. Jayendra Kumar	"	Jayendra	Jayendra
Ch. Nageswarao	MB BC BT	Ch. Rao	Ch. Rao
D. Issac	Issac	Issac	Issac
D. Iswarya	Iswarya	Iswarya	Iswarya
Sign of faculty		 Sign of HOD	






The classes were conducted by
D. Sridevi, K. Sudharmadhari, D. Ravisankar. In the
following topics.

Biotechnology	Biochemistry	Microbiology
1) Microscopy SEM	1) Enzymes	1) Prokaryotic cell wall
2) TEM	2) proteins	2) Fungi
3) SDS-PAGE	3) lactic acid fermentation	3) Alcohol fermentation
4) PAGE	4) urea cycle	4) Fermenter
5) PCR	5) Replication	5) Carbon cycle
6) Applications of r-DNA Technology	6) Bioreactor	6) N ₂ cycle

06/08/2017	07/08/2017	08/08/2017	09/08/2017	12/08/2017
C. nagesh	C. nagesh	C. nagesh	C. nagesh	C. nagesh
				
Srujan	Srujan	Srujan	Srujan	Srujan
A. Karthik	A. Karthik	A. Karthik	A. Karthik	A. Karthik
B. Nani	B. Nani	B. Nani	B. Nani	B. Nani
Lalitha	ABSENT	ABSENT	Lalitha	Lalitha
Venkat	Venkat	Venkat	Venkat	Venkat
T. G	T. G	T. G	T. G	T. G
Jayendra	Jayendra	Jayendra	Jayendra	Jayendra
Ch. Rao	Ch. Rao	Ch. Rao	Ch. Rao	Ch. Rao
P. Sree	P. Sree	P. Sree	P. Sree	P. Sree
P. Srujan	P. Srujan	P. Srujan	P. Srujan	P. Srujan
Sign of AI				Sign of Principal

The classes were conducted by D. Sridevi, K. Sudharmadhav, D. Ravisankar. In the following topics.

Biotechnology	Biochemistry	Microbiology
1) Microscopy SEM	1) Enzymes	1) Prokaryotic cell wall
2) TEM	2) proteins	2) Fungi
3) SDS-PAGE	3) lactic acid fermentation	3) Alcohol fermentation
4) PAGE	4) urea cycle	4) Fermenter
5) PCR	5) Replication	5) Carbon cycle
6) Applications of r-DNA Technology	6) Bioreactor	6) N ₂ cycle

06/08/2017	07/08/2017	08/08/2017	09/08/2017	12/08/2017
C. nagesh	C. nagesh	C. nagesh	C. nagesh	C. nagesh
				
Srujan	Srujan	Srujan	Srujan	Srujan
A. Karthik	A. Karthik	A. Karthik	A. Karthik	A. Karthik
B. Nani	B. Nani	B. Nani	B. Nani	B. Nani
Lalitha	ABSENT	ABSENT	Lalitha	Lalitha
Venkat	Venkat	Venkat	Venkat	Venkat
T. G	T. G	T. G	T. G	T. G
Jayendra	Jayendra	Jayendra	Jayendra	Jayendra
Ch. Rao	Ch. Rao	Ch. Rao	Ch. Rao	Ch. Rao
Praveen	Praveen	Praveen	Praveen	Praveen
Prasanna	Prasanna	Prasanna	Prasanna	Prasanna
Sign of AI				Sign of Principal

Sl. No	Name of student	Group	15/10/17	16/10/17	17/10/17	18/10/17	19/10/17	20/10/17	21/10/17
13	G. V. Sai	BT BCC	Janyu	Janyu	Janyu	Janyu	Janyu	Janyu	Janyu
14	A. HARICA	"	HARI	HARI	HARI	HARI	HARI	HARI	HARI
15	E. HARSHITHA	"	I. D	J. D	J. D	I. D	J. D	J. D	J. D
16	J. D. KUMARI	"	Kumar	Kumar	Kumar	Kumar	Kumar	Kumar	Kumar
17	A. Saikam Goud	MBTBL	Saikam	Saikam	Saikam	Saikam	Saikam	Saikam	Saikam
18	N. Rajesh	"	R	R	R	R	R	R	R
19	K. Suresh	BTBCL	Su	Su	Su	Su	Su	Su	Su
20	N. Esowari	"	Esu	Esu	Esu	Esu	Esu	Esu	Esu

2017-2018

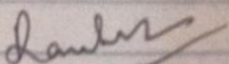
NOTICE

Remedial classes are going to be conducted for the student of I, III & V BTBC & MBBTBC. because of their poor performance in Biotechnology, Biochemistry & Microbiology in Examination.

Venue: microbiology lab

Date: 09/11/2018

Time: 4:00 - 5:00 pm.


Signature of the HOD

Remedial classes are
conducting for the following students of I, II & V
microbiology, Biotechnology, Biochemistry.

Candidates who attended the classes.

S-NO	NAME OF THE STUDENT	GROUP	05/08/2017	16/08/2017
1	C. Nageswara Rao	CBC BT	ABSENT	ABSENT
2	C. Naga Venkata Sraya	"	Sraya	Sraya
3	Y. Suryanarayana	"	ABSENT	ABSENT
4	A. Karthik	"	A. Karthik	A. Karthik
5	B. Nani	MBBC BT	B. Nani	B. Nani
6	P. Lalith Kumar	MBBC BT	Lalith	Lalith
7	N. Ajay	"	Ajay	Ajay
8	Y. Lakshmi Saarvani	"	Y. Saarvani	Y. Saarvani
9	B. Jayendra Kumar	BTBCC	Jayendra	Jayendra
10	Ch. Nageswarao	"	Ch. Rao	Ch. Rao
11	D. Essac	"	Essac	Essac
12		"		

Sign of Faculty

Sign of HOD

The classes were conducted by
D. Ravi Sankar, D. Snideri, K. Sudhamadhavi in the
following topics.

Biotechnology		Biochemistry		Microbiology	
1) Sterilization		1) classification of A.a.		1) Edward Jenner	
2) preservation		2) Lipids		2) viruses	
3) UV visible spectroscopy		3) Induced fit theory		3) Transformation, Translocation	
4) colorimetry		4) cell cycle		4) Bacterial strains	
5) Types of mutations		5) Replication		5) Food preservation	
6) Mutagens		6) Translation		6) Botulism	
02/08/2019	03/08/2019	04/08/2019	20/08/2019	21/08/2019	
C. Nagar	C. Nagar	C. Nagar	C. Nagar	C. Nagar	
ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	
A. Karthik	A. Karthik	A. Karthik	A. Karthik	A. Karthik	
B. Nani	B. Nani	B. Nani	B. Nani	B. Nani	
R. Lalith	R. Lalith	R. Lalith	R. Lalith	R. Lalith	
A. Jay	A. Jay	A. Jay	A. Jay	A. Jay	
Y. Saravani	Y. Saravani	Y. Saravani	Y. Saravani	Y. Saravani	
Jayendra	Jayendra	Jayendra	Jayendra	Jayendra	
Ch. Rao	Ch. Rao	Ch. Rao	Ch. Rao	Ch. Rao	
S. Sarac	S. Sarac	S. Sarac	S. Sarac	S. Sarac	
Sign of AI		Sign of Principal			

S.No	Name of the Student	Group	15/10/17	16/10/17	17/10/17	18/10/17	19/10/17	20/10/17	21/10/17
12	D. Iswariya	BTBC	D. Iswariya	D. Iswariya	D. Iswariya	D. Iswariya	D. Iswariya	D. Iswariya	D. Iswariya
13	G. V. Sai	"	Sai	Sai	Sai	Sai	Sai	Sai	Sai
14	A. HARILCA	"	HARILCA	HARILCA	HARILCA	HARILCA	HARILCA	HARILCA	HARILCA
15	I. HARSHITHA	"	I. HARSHITHA	I. HARSHITHA	I. HARSHITHA	I. HARSHITHA	I. HARSHITHA	I. HARSHITHA	I. HARSHITHA
16	J. D. KUMARI	"	J. D. KUMARI	J. D. KUMARI	J. D. KUMARI	J. D. KUMARI	J. D. KUMARI	J. D. KUMARI	J. D. KUMARI
17	A. SAIRAM GOUD	MBBTBC	A. SAIRAM GOUD	A. SAIRAM GOUD	A. SAIRAM GOUD	A. SAIRAM GOUD	A. SAIRAM GOUD	A. SAIRAM GOUD	A. SAIRAM GOUD
18	N. RAJESH	"	N. RAJESH	N. RAJESH	N. RAJESH	N. RAJESH	N. RAJESH	N. RAJESH	N. RAJESH
19	K. SURASH	BTBC	K. SURASH	K. SURASH	K. SURASH	K. SURASH	K. SURASH	K. SURASH	K. SURASH
20	M. ESQARI	"	M. ESQARI	M. ESQARI	M. ESQARI	M. ESQARI	M. ESQARI	M. ESQARI	M. ESQARI

B.V.RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

PHP PROGRAMMING SYLLABUS

UNIT-I:

Introduction to PHP Evaluation of Php, Basic Syntax, Defining variable and constant, Php Data type, Operator and Expression.

UNIT-II:

Decisions and loop Making Decisions, Doing Repetitive task with looping, Mixing Decisions and looping with Html.

UNIT-III:

Function What is a function, Define a function, Call by value and Call by reference, Recursive function, String Creating and accessing, String Searching & Replacing String, Formatting String, String Related Library function

UNIT-IV:

Array Anatomy of an Array, Creating index based and Associative array Accessing array, Element Looping with Index based array, Looping with associative array using each () and foreach(), Some useful Library function.

UNIT-V:

Handling Html Form with Php Capturing Form, Data Dealing with Multi-value filed, and Generating File uploaded form, redirecting a form after submission.

UNIT-VI:

Working with file and Directories Understanding file& directory, Opening and closing, a file, Coping, renaming and deleting a file, working with directories, Creating and deleting folder, File Uploading & Downloading.

UNIT-VII:

Session and Cookie Introduction to Session Control, Session Functionality What is a Cookie, Setting Cookies with PHP. Using Cookies with Sessions, Deleting Cookies, Registering Session variables, Destroying the variables and Session.

UNIT-VIII:

Database Connectivity with MySql Introduction to RDBMS, Connection with MySql Database, Performing basic database operation(DML) (Insert, Delete, Update, Select), Setting query parameter, Executing queryJoin (Cross joins, Inner joins, Outer Joins, Self joins.)

UNIT-IX:

Exception Handling Understanding Exception and error, Try, catch, throw. Error tracking and debugging.

B V RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

Skill Development Course

III BSC MECs (2017-18)

Name of the Faculty: B. Naresh

	1	2	3	4	5	6	7
MON			PHP				
TUE							
WED							
THUR							
FRI							
SAT						PHP	

B V RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

III MECs- A STUDENTS DATA
2017-18

Sl.No	Roll.No	Student Name
1.	153117137237	ABBIREDDI SAI TEJA
2.	153117137238	ACHANTA SUBBA RAO
3.	153117137239	ADABALA HARSHITHA VARDHINI
4.	153117137240	ADABALA RAMESH
5.	153117137241	ADDALA SIREESHA
6.	153117137242	BAISANI LAKSHMI SANTOSHI SUPRIYA
7.	153117137243	BAJINKI GANESH KUMAR
8.	153117137244	BANDARU LAKSHMIPAVANKALYAN
9.	153117137245	BANDARU YAMINI SRI VARA PURNIMA
10.	153117137246	BONDADA N V SYAMALA BINDHU BHARGAVI
11.	153117137247	CHATRATHI SAI SUBRAHMANYA SARMA
12.	153117137248	CHEEPURUPALLI VENKATESH
13.	153117137249	CHEKKA SATISH KUMAR
14.	153117137251	CHUVVADA SAI PRAVALLIKA
15.	153117137252	DANDU NAGA POORNIMA
16.	153117137253	DASARI VENKATA MAHESH
17.	153117137254	DOMMETI ASHOK KUMAR
18.	153117137255	DONGA YAMINI
19.	153117137256	DUDE DURGA RAO
20.	153117137257	DUSANAPUDI TANUSHA NAGA LAKSHMI
21.	153117137258	EROTHI SAI MANIKANTA
22.	153117137259	GADIRAJU DURGA PRASANNA
23.	153117137260	GAMIDI YASWANTH
24.	153117137261	GANGUMOLU MADHUSUDHAN
25.	153117137262	GEDALA BHARGAVI
26.	153117137263	GOKA NAGA SATYA SAI MAHESH
27.	153117137264	GOKADA SAI TEJA

28.	153117137265	GOLLAPALLI NAGA CHANDRA KALYAN
29.	153117137267	GOTTUMUKKALA PRUDHVI RAJU
30.	153117137268	GRANDHI MONIKA DEVI
31.	153117137269	GUBBALA RAVI DURGA RAO
32.	153117137270	GULLAPALLI JYOTHI KUMARI
33.	153117137271	GUNDU RAMA ANIL
34.	153117137272	GUNTURI REKHA SAI BHAVANI
35.	153117137273	GUTTULA DURGA BHAVANI
36.	153117137274	GUTTULA NAVYA KUMARI
37.	153117137275	GUTTULA SRI MOUNICA
38.	153117137276	INDALA NAGA VENKATA SAI KIRAN
39.	153117137277	IRRINKI TRIVENI
40.	153117137278	JANNU NAGA SYAM BABU
41.	153117137279	JATLA SAI SRINIVAS
42.	153117137280	JONNALAGADDA URMILA DEVI
43.	153117137281	JORIGE NAVYA
44.	153117137282	K SAI HARIKA
45.	153117137283	KADALI SAI KALYAN
46.	153117137284	KALIDINDI VENKATA CHANDESH RAJU
47.	153117137285	KALLA HARI HARA VENKATA MADHAVA RAO
48.	153117137286	KANAGARLA SAI LAKSHMI PRASUNA
49.	153117137287	KANTHETI SUBBA RAJU
50.	153117137288	KARUMURI LAKSHMI HARIKA
51.	153117137289	KARUMURI LAKSHMI SAHITHI
52.	153117137290	KASA SAI
53.	153117137291	KATTA SRI CHANDH
54.	153117137292	KATTA VINEESHA
55.	153117137293	KATTA YATENDRA KUMAR
56.	153117137294	KESANA ARUNA KUMARI
57.	153117137295	KESARI DHARMA RAJU
58.	153117137296	KHANDAVALLI SIVA KUMAR
59.	153117137297	KODALI ANJALI

B V RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

III MECs- B STUDENTS DATA
2017-18

Sl.No	Roll.No	Student Name
1	153117137298	KOTHAPALLI KUSHMA SANDHYA
2	153117137299	KOYA NAGA VENKATA KRISHNA SAI
3	153117137300	KUDULLA KESAVA
4	153117137301	KURELLA JANAKI
5	153117137302	LANKA SATYA SRI NAGA DURGA DEVI
6	153117137303	MADDALA DEVI VENKATA PRASANNA
7	153117137304	MADDALA SIRISHA
8	153117137305	MADDULA SAI VENKAT KRISHNA MURTHY
9	153117137306	MADIPALLI N V RATNA PRAVALLIKA
10	153117137307	MATHANGI SAI LAKSHMI
11	153117137308	MELLA AYYAPPA
12	153117137309	M.N.P. MANGA SIRISHA
13	153117137310	MOHAMMAD HAMEEDUNNISA
14	153117137311	MUDUNDI CHAITANYA VINAY VARMA
15	153117137312	MULLAGIRI TEJASWI
16	153117137313	MULUKUTLA KRISHNA HARINI
17	153117137314	MUNGARA VINAYAKA
18	153117137315	MUTYALA PRADEEP KUMAR RAJU
19	153117137316	NAGIREDDI SITARAMAYYA
20	153117137317	NAKKA PALLAVI
21	153117137318	NARAHARISSETTI VENKATA TRINADH
22	153117137319	NARINA PRUDHVI
23	153117137320	NATHIREDDY ANIL KUMAR
24	153117137321	PAIDIKONDALA HEMANTH
25	153117137322	PAKALAPATI ISSAC PAUL SON
26	153117137323	PALA JYOTHI

27	153117137324	PALURI V L B VINEELA
28	153117137325	PATHI TEJASWI
29	153117137326	PATNALA GEETHA PRIYANKA
30	153117137327	PENMETSA HARI VARMA
31	153117137328	PENMETSA TANUJA
32	153117137329	PERICHARLA MAHESHVARMA
33	153117137330	PERIKELA G K MAHESH
34	153117137331	PERUMALLA PUSHPA TANUJA
35	153117137332	PUDI RAMESH
36	153117137333	RALLABANDI VEERA BABU
37	153117137334	RATNALA PUSPA NAGA VEERA AYYAPPA
38	153117137335	ROMPICHARLA PRAVEEN
39	153117137336	SAGIRAJU PAVAN KUMAR VARMA
40	153117137337	SAIDU V S K DURGA VARA PRASAD
41	153117137338	SALA KUMARI NAGA MALLIKA
42	153117137339	SAMUDRAM SAMPATH
43	153117137340	SHAIK AFSAR
44	153117137341	SHAIK SABIHA TABASSUM
45	153117137342	SITA PURNA KUMAR
46	153117137343	SUDARSANAM SAI SRI NAVYA
47	153117137344	THORAM SRI SAI RAM
48	153117137345	TOOMU DANUJASAI
49	153117137346	UDAYAGIRI SAISRUTHI
50	153117137347	UNGARALA HARI VENKAT
51	153117137348	UPPALA PAVANI
52	153117137349	VANGA SRAVANTHI
53	153117137350	VANGA SUKANYA
54	153117137351	VASABHAKTHULA SYAMA
55	153117137352	VELAGANA SUDHA RANI
56	153117137353	VENDRA JEEVAN KUMAR
57	153117137354	VEPADA PRADEEP KUMAR
58	153117137355	VINJAMURI ANITHA
59	153117137356	YERRA KESAV KOUSAL

B.V.RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

R PROGRAMMING SYLLABUS

UNIT I

Introduction to R: What is R? – Why R? – Advantages of R over Other Programming Languages - R Studio: R command Prompt, R script file

UNIT II

R Data Types: Vectors, Lists, Matrices, Arrays, Factors, Data Frame

R - Variables: Variable assignment, Data types of Variable, Finding Variable ls(), Deleting Variables

R Operators: Arithmetic Operators, Relational Operators, Logical Operator, Assignment Operators, Miscellaneous Operators

R Decision Making: if statement, if – else statement, if– else if statement, switch statement

R Loops: repeat loop, while loop, for loop - Loop control statement: break statement, next statement.

UNIT III

R-Function : function definition, Built in functions: mean(), paste(), sum(), min(), max(), seq(), user-defined function, calling a function, calling a function without an argument, calling a function with argument values

R-Strings – Manipulating Text in Data: substr(), strsplit(), paste(), grep(), toupper(), tolower()

R Vectors – Sequence vector, rep function, vector access, vector names, vector math, vector recycling, vector element sorting

R List -Creating a List, List Tags and Values, Add/Delete Element to or from a List, Size of List, Merging Lists, Converting List to Vector

R Matrices – Accessing Elements of a Matrix, Matrix Computations: Addition, subtraction, Multiplication and Division.

R Arrays: Naming Columns and Rows, Accessing Array Elements, Manipulating Array Elements.

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Skill Development Course – R Programming

III BSC MSCs (2017-18)

Name of the Faculty: M N Ravindra Babu

	1	2	3	4	5	6	7
MON							
TUE							
WED							
THUR							
FRI			R-Programming				
SAT						R-Programming	

B V RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

III MSCS STUDENTS DATA
2017-18

Sl.No	Roll.No	Student Name
1	153117109121	ADDALA MALLESWARI
2	153117109122	AKKIREDDY SATYANAGA DURGABHAVANI
3	153117109124	BETHU BHARGAVI
4	153117109125	BHAVANI MANTHENA
5	153117109126	BHOGIREDDI KALYANI
6	153117109127	BOLLA SANTHI GANESH
7	153117109128	CHEBOLU RAMYA BHARATHI
8	153117109129	CHEGONDI GAYATHRI SUDHA
9	153117109130	CHILAKAMARTHI SRIDEVI
10	153117109131	DANDU PRASANTHIKUMARI
11	153117109132	DASARI NAGA RAJU
12	153117109134	GAJJELA JYOTHI VENKATA DURGA PRASAD
13	153117109135	GANAPATHIRAJU SIVAJI RAJU
14	153117109136	GANGIPAMULA SATYANARAYANA
15	153117109137	GANIREDDY VENKATA SAI KUMAR
16	153117109138	GONAGALA SUDHEER KUMAR
17	153117109139	GUNDABATTULA SAI RAVI TEJA
18	153117109140	GURRALA MANIKANTA
19	153117109141	IBBA POOJA KUMARI
20	153117109142	JANYAVULA RENUKA
21	153117109143	JAYAMANGALA SUBBA RAO
22	153117109144	JOGI PAVAN SAI
23	153117109145	JUTTIGA RAMA KRISHNA
24	153117109146	KALA GOWRI GANAPATHI
25	153117109147	KANDULA LAKSHMI PAVANI

26	153117109148	KANTHETI KOUSHIK
27	153117109149	KARRI JHANSI
28	153117109150	KOCHERLA HARI PRIYA SAI MADHAVI
29	153117109151	KUNDURTHI SRUJANA
30	153117109152	MANNE SRI KAVYA
31	153117109153	MEKALA SURESH
32	153117109154	MOHAMMAD FARJANA
33	153117109155	MOTUPALLI KOTA NAGA SATYA HEMANTH
34	153117109156	NAGALLA SAI PAVAN YADAV
35	153117109157	NAMBURI AMBIKA GAYATRI
36	153117109158	PACHIGOLLA SANTHI PRIYANKA
37	153117109159	PEETHANI HARI PRIYA
38	153117109160	PENTA NEERAJA
39	153117109161	PONNALA KEERTHI
40	153117109162	POTNURI ANUSHA DEVI
41	153117109163	PUDI NAGA SAI RAMA KRISHNA
42	153117109164	PUTTA SATYA SWARUPA
43	153117109165	RAJANA JUHEE DEEPTHIKA
44	153117109166	SAKAMURI NAGA LAKSHMI SUCHARITHA
45	153117109167	SAKHINETIPALLI MOUNIKA
46	153117109168	SALA SRINIVAS
47	153117109169	SUNKARA PAVAN KUMAR
48	153117109170	TALAGALLA SAI KUMARI
49	153117109171	TANKANI SAI SWARNA HARSHINI
50	153117109172	TATAVARTHI UMAMAHESWARI
51	153117109173	THOTA PUNEETH DURGA VINAY
52	153117109174	TUMU NAGA MAHA LAKSHMI
53	153117109175	UDI RAMALAKSHMI
54	153117109176	VANDANAPU UMASHANKAR
55	153117109177	VENDRA MOHAN CHANDRA BOSE
56	153117109178	VITHALA SHANMUKHA MANI KSHEMANKAR
57	153117109179	YELISETTI HARIKA
58	153117109180	YERRAMSETTY SAI

B.V.RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

PYTHON PROGRAMMING SYLLABUS

UNIT-I:

Introduction: -- Relationship between computers and programs -- Basic principles of computers -- File systems -- Using the Python interpreter -- Introduction to binary computation -- Input / Output

UNIT-II:

Data types and control structures -- Operators (unary, arithmetic, etc.) -- Data types, variables, expressions, and statements -- Assignment statements -- Strings and string operations -- Control Structures: loops and decision

UNIT-III:

Classes: Modularization and Classes -- Standard modules -- Packages -- Defining Classes -- Defining functions -- Functions and arguments

UNIT-IV:

Exceptions and data structures -- Data Structures (array, List, Dictionary) -- Error processing -- Exception Raising and Handling

B V RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

Skill Development Course

III BSC MPCs (2017-18)

Name of the Faculty: B Naresh

	1	2	3	4	5	6	7
MON							
TUE			Python				
WED						Python	
THUR							
FRI							
SAT							

B V RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

III MPCs STUDENTS DATA
2017-18

Sl.No	Roll.No	Student Name
1	153117102061	ACHYUTA LAKSHMI PRASANNA
2	153117102062	ADABALA PAVANI SAI
3	153117102063	ADDALA KIRAN BABU
4	153117102064	A.N.V.SIVASAI SUDHEER KUMAR
5	153117102065	AKULA SRI DURGA
6	153117102066	ANGARA VAMSI
7	153117102067	AREPALLI ADITYA SAI KRISHNA
8	153117102068	BALAGAM KIRAN
9	153117102069	BHAVARLAL BHARATH KUMAR SEIT
10	153117102070	BONDA NAGA SURYA LAKSHMI CHANDANA
11	153117102071	CHAMARTHI SWATHI
12	153117102072	CHIKKALA NAGESWARA RAO
13	153117102073	CHILAMAKURTHI YUVA SAI SRI
14	153117102074	CHNTHAGUNTA KUSUMA SAI
15	153117102075	DAARLANKA AVINASH
16	153117102076	DANDU MOUNEESHA
17	153117102077	DASARI NARENDRA SAI KUMAR
18	153117102078	DUGGIRALA MADHU MOUNIKA RANI
19	153117102079	GADIRAJU DEEPIKA
20	153117102080	GANDI VENKATA MUNIRATNAM
21	153117102082	GANTA SUBHASHINI
22	153117102083	GOLLA SIRISHA
23	153117102084	GONABOYINA KALYANI
24	153117102085	GOVADA GAYATHRI DEVI
25	153117102086	G.B.N.V. SATYA SAI RAJESH

26	153117102087	GRANDHI DURGA NAGA VENKATA SAI RAJASRI
27	153117102088	GUDIGANTLA SHANKAR JAYA KRISHNA
28	153117102089	GUDURI BHARGAV
29	153117102090	ILLA NAMRATHA
30	153117102091	JANAPAMULA UMESH
31	153117102092	KAMANA SAI TEJA
32	153117102093	KARACHI LAVANYA DEEPTHI
33	153117102094	KOLLI SRAVANI
34	153117102095	KOPPURAVURI LAVANYA
35	153117102096	MAINAM HARI PAVAN KUMAR
36	153117102097	MANCHIGANTI NAVYA SUREKHA
37	153117102098	MOHAMMED FARHEEN MEHNEEZ
38	153117102099	MOHAMMED ZUHEENA
39	153117102100	MUTHA KEDARESWARA SWAMY
40	153117102101	MUTHYALA VENKATA VIJAYA
41	153117102102	NANDAM SIVADURGESWARI
42	153117102103	NAYUDU G S NAGA VEERA SAI
43	153117102104	PACHIGOLLA N V PADMA SAI LAKSHMIDEVI
44	153117102105	PAILA UPENDRA
45	153117102106	PALAPARTHI HEMANTH KUMAR
46	153117102107	PATHIVADA SANYASI RAO
47	153117102108	PEDDIBOINA MANI KANTA
48	153117102109	POTHULA BHAVANI LAKSHMI SYAMALA
49	153117102110	RAPARTHI VIJAYA LAKSHMI
50	153117102111	RUDDARARAJU RAMA KRISHNA SAI VARMA
51	153117102112	SANAM SAI DIVYA
52	153117102113	SANNIDHI M N V S V GUPTA
53	153117102114	SHERUMOHMADPURAM KANAKA RAJU
54	153117102115	SODADASI MAHENDRA
55	153117102116	TAMIRI RAMYA
56	153117102117	VEDULLAPALLI RADHA PRASANTHI
57	153117102118	VISWANADHULA SRI VARA LAKSHMI
58	153117102119	YARAKARAJU SARVANI
59	153117102120	YEPUGANTI PADMA SWAROOPA

FEEDBACK ANALYSIS ON SKILL DEVELOPMENT COURSE

Name of the Department: Computer Science Academic Year: 2017-18

S.No	Group/Branch	Course Name/Skill Name	Total Participants
1.	<u>III BSc - MECs</u>	<u>PHP</u>	<u>116</u>
2.	<u>III BSc - MSCs</u>	<u>R-programming</u>	<u>60</u>
3.	<u>III BSc - MPCs</u>	<u>Python</u>	<u>60</u>

Feedback Analysis:: Please provide the percentage in concerned fields

S.No	Course Name	Excellent	Good	Average	satisfactory	Dissatisfaction
1	<u>PHP</u>	<u>50%</u>	<u>30%</u>	<u>20%</u>	<u>—</u>	<u>—</u>
2	<u>R-programming</u>	<u>60%</u>	<u>30%</u>	<u>10%</u>	<u>10%</u>	<u>—</u>
3	<u>Python</u>	<u>50%</u>	<u>40%</u>	<u>10%</u>	<u>—</u>	<u>—</u>

Coordinator Names:

1. B. Naresh
2. M. N. Ravindra baby
- 3.

R. Pawan
Signature of HOD

**Head of the Department,
Dept. of Computer Science
B.V. Raju College, BHIMAVARAM-2**

PHP (HYPERTEXT PREPROCESSOR)

&

MySQL

Syllabus

- Introduction
- PHP Features
- Web development and Prerequisite
- Running PHP code in XAMPP
- PHP File Upload
- PHP Sessions
- PHP MySQL Connection
- PHP MySQL Insertion

What is PHP

PHP is an open-source, interpreted, and object-oriented scripting language that can be executed at the server-side. PHP is well suited for web development. Therefore, it is used to develop web applications (an application that executes on the server and generates the dynamic page.).

PHP was created by **Rasmus Lerdorf in 1994** but appeared in the market in 1995. **PHP 7.4.0** is the latest version of PHP, which was released on **28 November**. Some important points need to be noticed about PHP are as followed:

- PHP stands for Hypertext Preprocessor.
- PHP is an interpreted language, i.e., there is no need for compilation.
- PHP is faster than other scripting languages, for example, ASP and JSP.
- PHP is a server-side scripting language, which is used to manage the dynamic content of the website.
- PHP can be embedded into HTML.
- PHP is an object-oriented language.
- PHP is an open-source scripting language.
- PHP is simple and easy to learn language.

Why use PHP

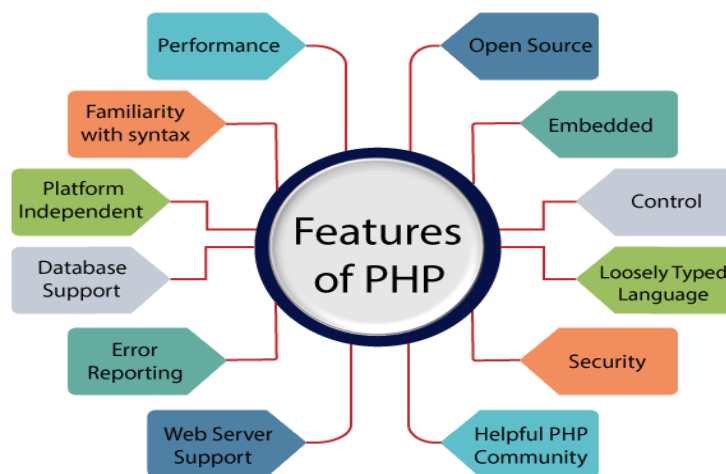
PHP is a server-side scripting language, which is used to design the dynamic web applications with MySQL database.

- It handles dynamic content, database as well as session tracking for the website.
- You can create sessions in PHP.
- It can access cookies variable and also set cookies.
- It helps to encrypt the data and apply validation.
- PHP supports several protocols such as HTTP, POP3, SNMP, LDAP, IMAP, and many more.
- Using PHP language, you can control the user to access some pages of your website.

- As PHP is easy to install and set up, this is the main reason why PHP is the best language to learn.
- PHP can handle the forms, such as - collect the data from users using forms, save it into the database, and return useful information to the user. **For example** - Registration form.

PHP Features

PHP is very popular language because of its simplicity and open source. There are some important features of PHP given below:



Web Development

PHP is widely used in web development nowadays. PHP can develop dynamic websites easily. But you must have the basic the knowledge of following technologies for web development as well.

- HTML
- CSS
- JavaScript
- Ajax
- XML and JSON
- jQuery

Prerequisite

Before learning PHP, you must have the basic knowledge of **HTML**, **CSS**, and **JavaScript**. So, learn these technologies for better implementation of PHP.

HTML - HTML is used to design static webpage.

CSS - CSS helps to make the webpage content more effective and attractive.

JavaScript - JavaScript is used to design an interactive website.

How to run PHP code in XAMPP

Generally, a PHP file contains HTML tags and some PHP scripting code. It is very easy to create a simple PHP example. To do so, create a file and write HTML tags + PHP code and save this file with .php extension.

Note: PHP statements ends with semicolon (;).

All PHP code goes between the php tag. It starts with <?php and ends with ?>. The syntax of PHP tag is given below:

```
<?php
```

```
//your code here
```

```
?>
```

Let's see a simple PHP example where we are writing some text using PHP echo command.

File: first.php

```
<!DOCTYPE>
```

```
<html>
```

```
<body>
```

```
<?php
```

```
echo "<h2>Hello First PHP</h2>";
```

```
?>
```

```
</body>
```

```
</html>
```

Output:

Hello First PHP

How to run PHP programs in XAMPP

How to run PHP programs in XAMPP PHP is a popular backend programming language. PHP programs can be written on any editor, such as - Notepad, Notepad++, Dreamweaver, etc. These programs save with **.php** extension, i.e., filename.php inside the htdocs folder.

For example - p1.php.

As I'm using window, and my XAMPP server is installed in D drive. So, the path for the htdocs directory will be "D:\xampp\htdocs".

PHP program runs on a web browser such as - Chrome, Internet Explorer, Firefox, etc. Below some steps are given to run the PHP programs.

Step 1: Create a simple PHP program like hello world.

```
<?php  
  
    echo "Hello World!";  
  
?>
```

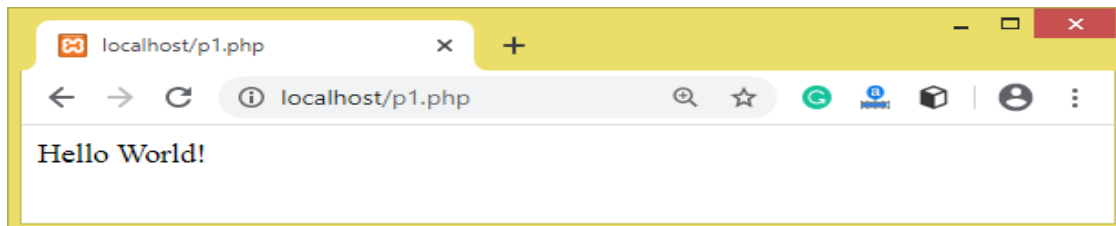
Step 2: Save the file with **hello.php** name in the htdocs folder, which resides inside the xampp folder.

Note: PHP program must be saved in the htdocs folder, which resides inside the xampp folder, where you installed the XAMPP. Otherwise it will generate an error - Object not found.

Step 3: Run the XAMPP server and start the Apache and MySQL.

Step 4: Now, open the web browser and type localhost *http://localhost/hello.php* on your browser window.

Step 5: The output for the above **hello.php** program will be shown as the screenshot below:



PHP File Upload

PHP allows you to upload single and multiple files through few lines of code only.

PHP file upload features allows you to upload binary and text files both. Moreover, you can have the full control over the file to be uploaded through PHP authentication and file operation functions.

PHP \$_FILES

The PHP global \$_FILES contains all the information of file. By the help of \$_FILES global, we can get file name, file type, file size, temp file name and errors associated with file.

Here, we are assuming that file name is *filename*.

```
$_FILES['filename']['name']
```

returns file name.

```
$_FILES['filename']['type']
```

returns MIME type of the file.

```
$_FILES['filename']['size']
```

returns size of the file (in bytes).

```
$_FILES['filename']['tmp_name']
```

returns temporary file name of the file which was stored on the server.

```
$_FILES['filename']['error']
```

returns error code associated with this file.

move_uploaded_file() function

The move_uploaded_file() function moves the uploaded file to a new location. The move_uploaded_file() function checks internally if the file is uploaded thorough the POST request. It moves the file if it is uploaded through the POST request.

Syntax

```
bool move_uploaded_file ( string $filename , string $destination )
```

PHP File Upload Example

File: uploadform.html

```
<form action="uploader.php" method="post" enctype="multipart/form-data">

    Select File:

    <input type="file" name="fileToUpload"/>

    <input type="submit" value="Upload Image" name="submit"/>

</form>
```

File: uploader.php

```
<?php

$target_path = "e:/";

$target_path = $target_path.basename( $_FILES['fileToUpload']['name']);

if(move_uploaded_file($_FILES['fileToUpload']['tmp_name'], $target_path)) {

    echo "File uploaded successfully!";

} else{

    echo "Sorry, file not uploaded, please try again!";

}

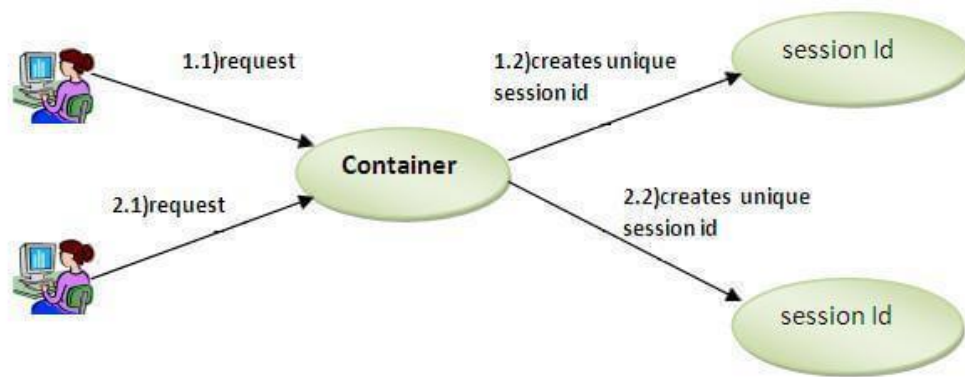
?>
```

PHP Session

PHP session is used to store and pass information from one page to another temporarily (until user close the website).

PHP session technique is widely used in shopping websites where we need to store and pass cart information e.g. username, product code, product name, product price etc from one page to another.

PHP session creates unique user id for each browser to recognize the user and avoid conflict between multiple browsers.



PHP session_start() function

PHP session_start() function is used to start the session. It starts a new or resumes existing session. It returns existing session if session is created already. If session is not available, it creates and returns new session.

Syntax

```
bool session_start ( void )
```

Example

```
session_start();
```

PHP \$_SESSION

PHP \$_SESSION is an associative array that contains all session variables. It is used to set and get session variable values.

Example: Store information

```
$_SESSION["user"] = "Sachin";
```

Example: Get information

```
echo $_SESSION["user"];
```

PHP Destroying Session

PHP session_destroy() function is used to destroy all session variables completely.

File: session3.php

```
<?php
```

```
session_start();  
session_destroy();  
?>
```

PHP MySQL Connect

Since PHP 5.5, **mysql_connect()** extension is *deprecated*. Now it is recommended to use one of the 2 alternatives.

- **mysqli_connect()**
- **PDO::__construct()**

PHP mysqli_connect()

PHP **mysqli_connect()** function is used to connect with MySQL database. It returns *resource* if connection is established or *null*.

Syntax

```
resource mysqli_connect (server, username, password)
```

PHP mysqli_close()

PHP **mysqli_close()** function is used to disconnect with MySQL database. It returns *true* if connection is closed or *false*.

Syntax

```
bool mysqli_close(resource $resource_link)
```

PHP MySQL Connect Example

Example

```
<?php  
  
$host = 'localhost';  
  
$user = "";  
  
$pass = "";  
  
$conn = mysqli_connect($host, $user, $pass);
```



```

if(! $conn )
{
    die('Could not connect: ' . mysqli_error());
}

echo 'Connected successfully';

mysqli_close($conn);

?>

```

Output:

Connected successfully

PHP MySQL Insert Record

PHP MySQLi Insert Record Example

Example

```

<?php

$host = 'localhost:3306';

$user = "";

$pass = "";

$dbname = 'test';

$conn = mysqli_connect($host, $user, $pass,$dbname);

if(!$conn){

    die('Could not connect: '.mysqli_connect_error());

}

echo 'Connected successfully<br/>';

$sql = 'INSERT INTO emp4(name,salary) VALUES ("sonoo", 9000)';

if(mysqli_query($conn, $sql)){

```

```
    echo "Record inserted successfully";  
  }else{  
    echo "Could not insert record: ". mysqli_error($conn);  
  }  
  mysqli_close($conn);  
?>
```

Output:

Connected successfully

Record inserted successfully

R is a programming language and software environment for statistical analysis, graphics representation and reporting. R was created by Ross Ihaka and Robert Gentleman at the University of Auckland, New Zealand, and is currently developed by the R Development Core Team.

- The core of R is an interpreted computer language which allows branching and looping as well as modular programming using functions. R allows integration with the procedures written in the C, C++, .Net, Python or FORTRAN languages for efficiency.
- R is freely available under the GNU General Public License, and pre-compiled binary versions are provided for various operating systems like Linux, Windows and Mac.

Features of R

As stated earlier, R is a programming language and software environment for statistical analysis, graphics representation and reporting. The following are the important features of R –

- R is a well-developed, simple and effective programming language which includes conditionals, loops, user defined recursive functions and input and output facilities.
- R has an effective data handling and storage facility,
- R provides a suite of operators for calculations on arrays, lists, vectors and matrices.
- R provides a large, coherent and integrated collection of tools for data analysis.
- R provides graphical facilities for data analysis and display either directly at the computer or printing at the papers.

R Command Prompt

```
> myString <- "Hello, World!"  
> print ( myString)  
[1] "Hello, World!"
```

Comments

```
# My first program in R Programming
```

R does not support multi-line comments but you can perform a trick which is something as follows –

```
if(FALSE) {  
  "This is a demo for multi-line comments and it should be put inside either a  
  single OR double quote"  
}
```

```
myString <- "Hello, World!"  
print ( myString)
```

R Datatypes

The variables are assigned with R-Objects and the data type of the R-object becomes the data type of the variable. There are many types of R-objects. The frequently used ones are –

- Vectors
- Lists
- Matrices
- Arrays
- Factors
- Data Frames

The simplest of these objects is the **vector object** and there are six data types of these atomic vectors, also termed as six classes of vectors. The other R-Objects are built upon the atomic vectors.

Data Type	Example	Verify
Logical	TRUE, FALSE	
		v <- TRUE print(class(v))
		it produces the following result –
		[1] "logical"
Numeric	12.3, 5, 999	
		v <- 23.5 print(class(v))
		it produces the following result –
		[1] "numeric"
Integer	2L, 34L, 0L	

		<pre>v <- 2L</pre> <pre>print(class(v))</pre> <p>it produces the following result –</p> <pre>[1] "integer"</pre>
Complex	3 + 2i	<pre>v <- 2+5i</pre> <pre>print(class(v))</pre> <p>it produces the following result –</p> <pre>[1] "complex"</pre>
Character	'a' , '"good", "TRUE", '23.4'	<pre>v <- "TRUE"</pre> <pre>print(class(v))</pre> <p>it produces the following result –</p> <pre>[1] "character"</pre>
Raw	"Hello" is stored as 48 65 6c 6c 6f	<pre>v <- charToRaw("Hello")</pre> <pre>print(class(v))</pre> <p>it produces the following result –</p> <pre>[1] "raw"</pre>

Vectors

c() function which means to combine the elements into a vector.

```
# Create a vector.
apple <- c('red','green',"yellow")
print(apple)
```

```
# Get the class of the vector.  
print(class(apple))
```

Lists

A list is an R-object which can contain many different types of elements inside it like vectors, functions and even another list inside it.

```
# Create a list.  
list1 <- list(c(2,5,3),21.3,sin)  
# Print the list.  
print(list1)
```

Matrices

A matrix is a two-dimensional rectangular data set. It can be created using a vector input to the matrix function.

```
# Create a matrix.  
M = matrix( c('a','a','b','c','b','a'), nrow = 2, ncol = 3, byrow = TRUE)  
print(M)
```

Arrays

```
# Create an array.  
a <- array(c('green','yellow'),dim = c(3,3,2))  
print(a)
```

When we execute the above code, it produces the following result –

```
, , 1  
      [,1] [,2] [,3]  
[1,] "green" "yellow" "green"  
[2,] "yellow" "green" "yellow"  
[3,] "green" "yellow" "green"  
  
, , 2  
      [,1] [,2] [,3]  
[1,] "yellow" "green" "yellow"
```



```
[2,] "green" "yellow" "green"  
[3,] "yellow" "green" "yellow"
```

Factors

Factors are the R-objects which are created using a vector. It stores the vector along with the distinct values of the elements in the vector as labels. The labels are always character irrespective of whether it is numeric or character or Boolean etc. in the input vector. They are useful in statistical modeling.

Factors are created using the **factor()** function. The **nlevels** function gives the count of levels.

```
# Create a vector.  
apple_colors <- c('green','green','yellow','red','red','red','green')  
  
# Create a factor object.  
factor_apple <- factor(apple_colors)  
  
# Print the factor.  
print(factor_apple)  
print(nlevels(factor_apple))
```

When we execute the above code, it produces the following result –

```
[1] green green yellow red red red green  
Levels: green red yellow  
[1] 3
```

Data Frames

Data frames are tabular data objects. Unlike a matrix in data frame each column can contain different modes of data. The first column can be numeric while the second column can be character and third column can be logical. It is a list of vectors of equal length.

Data Frames are created using the **data.frame()** function.

```
# Create the data frame.  
BMI <- data.frame(  
  gender = c("Male", "Male", "Female"),  
  height = c(152, 171.5, 165),
```

```
weight = c(81,93, 78),  
Age = c(42,38,26)  
)  
print(BMI)
```

When we execute the above code, it produces the following result –

```
gender height weight Age  
1 Male 152.0 81 42  
2 Male 171.5 93 38  
3 Female 165.0 78 26
```

A variable provides us with named storage that our programs can manipulate. A variable in R can store an atomic vector, group of atomic vectors or a combination of many R objects. A valid variable name consists of letters, numbers and the dot or underline characters. The variable name starts with a letter or the dot not followed by a number.

Variable Name	Validity	Reason
var_name2.	Valid	Has letters, numbers, dot and underscore
var_name%	Invalid	Has the character '%'. Only dot(.) and underscore allowed.
2var_name	invalid	Starts with a number
.var_name, var.name	Valid	Can start with a dot(.) but the dot(.) should not be followed by a number.
.2var_name	invalid	The starting dot is followed by a number making it invalid.
_var_name	invalid	Starts with _ which is not valid

Variable Assignment

```
# Assignment using equal operator.  
var.1 = c(0,1,2,3)
```



```
# Assignment using leftward operator.
var.2 <- c("learn", "R")

# Assignment using rightward operator.
c(TRUE,1) -> var.3

print(var.1)

cat ("var.1 is ", var.1 , "\n")

cat ("var.2 is ", var.2 , "\n")

cat ("var.3 is ", var.3 , "\n")
```

When we execute the above code, it produces the following result –

```
[1] 0 1 2 3
var.1 is 0 1 2 3
var.2 is learn R
var.3 is 1 1
```

Datatype of a variable

In R, a variable itself is not declared of any data type, rather it gets the data type of the R - object assigned to it. So R is called a dynamically typed language.

```
var_x <- "Hello"

cat("The class of var_x is ", class(var_x), "\n")

var_x <- 34.5

cat(" Now the class of var_x is ", class(var_x), "\n")

var_x <- 27L

cat(" Next the class of var_x becomes ", class(var_x), "\n")
```

Finding Variables

```
print(ls())

# List the variables starting with the pattern "var".

print(ls(pattern = "var"))

print(ls(all.name = TRUE))
```

Deleting Variables

Variables can be deleted by using the **rm()** function.

```
rm(var.3)
print(var.3)
rm(list = ls())
print(ls())
```

Types Of Operators

We have the following types of operators in R programming –

- Arithmetic Operators
- Relational Operators
- Logical Operators
- Assignment Operators
- Miscellaneous Operators

Arithmetic Operators

Following table shows the arithmetic operators supported by R language. The operators act on each element of the vector.

Operator	Description	Example
+	Adds two vectors	<pre>v <- c(2,5.5,6) t <- c(8, 3, 4) print(v+t)</pre>

		<p>it produces the following result –</p> <pre>[1] 10.0 8.5 10.0</pre>
–	Subtracts second vector from the first	<pre>v <- c(2,5.5,6) t <- c(8, 3, 4) print(v-t)</pre> <p>it produces the following result –</p> <pre>[1] -6.0 2.5 2.0</pre>
*	Multiplies both vectors	<pre>v <- c(2,5.5,6) t <- c(8, 3, 4) print(v*t)</pre> <p>it produces the following result –</p> <pre>[1] 16.0 16.5 24.0</pre>
/	Divide the first vector with the second	<pre>v <- c(2,5.5,6) t <- c(8, 3, 4) print(v/t)</pre> <p>When we execute the above code, it produces the following result –</p> <pre>[1] 0.250000 1.833333 1.500000</pre>
%%	Give the remainder of the first vector with the second	<pre>v <- c(2,5.5,6) t <- c(8, 3, 4) print(v%%t)</pre>

		<p>it produces the following result –</p> <pre>[1] 2.0 2.5 2.0</pre>
%%	The result of division of first vector with second quotientquotient	<pre>v <- c(2,5.5,6) t <- c(8, 3, 4) print(v%%t)</pre> <p>it produces the following result –</p> <pre>[1] 0 1 1</pre>
^	The first vector raised to the exponent of second vector	<pre>v <- c(2,5.5,6) t <- c(8, 3, 4) print(v^t)</pre> <p>it produces the following result –</p> <pre>[1] 256.000 166.375 1296.000</pre>

Relational Operators

Following table shows the relational operators supported by R language. Each element of the first vector is compared with the corresponding element of the second vector. The result of comparison is a Boolean value.

Operator	Description	Example
>	Checks if each element of the first vector is greater than the	<pre>v <- c(2,5.5,6,9) t <- c(8,2.5,14,9) print(v>t)</pre>

	corresponding element of the second vector.	<p>it produces the following result –</p> <pre>[1] FALSE TRUE FALSE FALSE</pre>
<	Checks if each element of the first vector is less than the corresponding element of the second vector.	<pre>v <- c(2,5.5,6,9) t <- c(8,2.5,14,9) print(v < t)</pre> <p>it produces the following result –</p> <pre>[1] TRUE FALSE TRUE FALSE</pre>
==	Checks if each element of the first vector is equal to the corresponding element of the second vector.	<pre>v <- c(2,5.5,6,9) t <- c(8,2.5,14,9) print(v == t)</pre> <p>it produces the following result –</p> <pre>[1] FALSE FALSE FALSE TRUE</pre>
<=	Checks if each element of the first vector is less than or equal to the corresponding element of the second vector.	<pre>v <- c(2,5.5,6,9) t <- c(8,2.5,14,9) print(v<=t)</pre> <p>it produces the following result –</p> <pre>[1] TRUE FALSE TRUE TRUE</pre>
>=	Checks if each element of the first vector is greater than or equal to the corresponding element of the second vector.	<pre>v <- c(2,5.5,6,9) t <- c(8,2.5,14,9) print(v>=t)</pre> <p>it produces the following result –</p> <pre>[1] FALSE TRUE FALSE TRUE</pre>
!=	Checks if each element of the first vector is unequal to the	<pre>v <- c(2,5.5,6,9) t <- c(8,2.5,14,9) print(v!=t)</pre>

	corresponding element of the second vector.	it produces the following result –
		<pre>[1] TRUE TRUE TRUE FALSE</pre>

Logical Operators

Following table shows the logical operators supported by R language. It is applicable only to vectors of type logical, numeric or complex. All numbers greater than 1 are considered as logical value TRUE.

Each element of the first vector is compared with the corresponding element of the second vector. The result of comparison is a Boolean value.

Operator	Description	Example
&	It is called Element-wise Logical AND operator. It combines each element of the first vector with the corresponding element of the second vector and gives a output TRUE if both the elements are TRUE.	<pre>v <- c(3,1,TRUE,2+3i) t <- c(4,1,FALSE,2+3i) print(v&t)</pre> <p>it produces the following result –</p> <pre>[1] TRUE TRUE FALSE TRUE</pre>
	It is called Element-wise Logical OR operator. It combines each element of the	<pre>v <- c(3,0,TRUE,2+2i) t <- c(4,0,FALSE,2+3i) print(v t)</pre>

	first vector with the corresponding element of the second vector and gives a output TRUE if one the elements is TRUE.	<p>it produces the following result –</p> <pre>[1] TRUE FALSE TRUE TRUE</pre>
!	It is called Logical NOT operator. Takes each element of the vector and gives the opposite logical value.	<pre>v <- c(3,0,TRUE,2+2i) print(!v)</pre> <p>it produces the following result –</p> <pre>[1] FALSE TRUE FALSE FALSE</pre>

The logical operator && and || considers only the first element of the vectors and give a vector of single element as output.

Operator	Description	Example
&&	Called Logical AND operator. Takes first element of both the vectors and gives the TRUE only if both are TRUE.	<pre>v <- c(3,0,TRUE,2+2i) t <- c(1,3,TRUE,2+3i) print(v&& t)</pre> <p>it produces the following result –</p> <pre>[1] TRUE</pre>
	Called Logical OR operator. Takes first	<pre>v <- c(0,0,TRUE,2+2i) t <- c(0,3,TRUE,2+3i)</pre>

	element of both the vectors and gives the TRUE if one of them is TRUE.	<pre>print(v t)</pre> <p>it produces the following result –</p> <pre>[1] FALSE</pre>
--	--	--

Assignment Operators

These operators are used to assign values to vectors.

Operator	Description	Example
<- or = or <<-	Called Left Assignment	<pre>v1 <- c(3,1,TRUE,2+3i) v2 <<- c(3,1,TRUE,2+3i) v3 = c(3,1,TRUE,2+3i) print(v1) print(v2) print(v3)</pre> <p>it produces the following result –</p> <pre>[1] 3+0i 1+0i 1+0i 2+3i [1] 3+0i 1+0i 1+0i 2+3i [1] 3+0i 1+0i 1+0i 2+3i</pre>
-> or ->>	Called Right Assignment	<pre>c(3,1,TRUE,2+3i) -> v1 c(3,1,TRUE,2+3i) ->> v2 print(v1) print(v2)</pre> <p>it produces the following result –</p> <pre>[1] 3+0i 1+0i 1+0i 2+3i [1] 3+0i 1+0i 1+0i 2+3i</pre>

Miscellaneous Operators

These operators are used to for specific purpose and not general mathematical or logical computation.

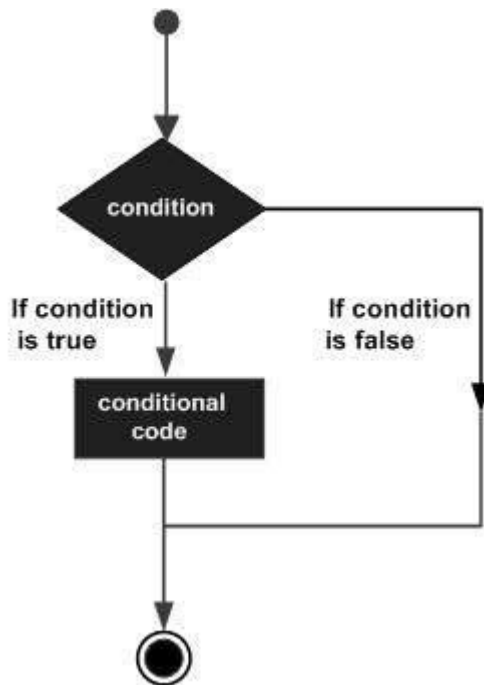
Operator	Description	Example
:	Colon operator. It creates the series of numbers in sequence for a vector.	<pre>v <- 2:8 print(v)</pre> <p>it produces the following result –</p> <pre>[1] 2 3 4 5 6 7 8</pre>
%in%	This operator is used to identify if an element belongs to a vector.	<pre>v1 <- 8 v2 <- 12 t <- 1:10 print(v1 %in% t) print(v2 %in% t)</pre> <p>it produces the following result –</p> <pre>[1] TRUE [1] FALSE</pre>
%*%	This operator is used to multiply a matrix with	<pre>M = matrix(c(2,6,5,1,10,4), nrow = 2,ncol = 3,byrow = TRUE) t = M %*% t(M) print(t)</pre> <p>it produces the following result –</p>

	its transpose.	<table><tr><td></td><td>[,1]</td><td>[,2]</td></tr><tr><td>[1,]</td><td>65</td><td>82</td></tr><tr><td>[2,]</td><td>82</td><td>117</td></tr></table>		[,1]	[,2]	[1,]	65	82	[2,]	82	117
	[,1]	[,2]									
[1,]	65	82									
[2,]	82	117									

Decision Making

Decision making structures require the programmer to specify one or more conditions to be evaluated or tested by the program, along with a statement or statements to be executed if the condition is determined to be **true**, and optionally, other statements to be executed if the condition is determined to be **false**.

Following is the general form of a typical decision making structure found in most of the programming languages –



R provides the following types of decision making statements. Click the following links to check their detail.

Sr.No.	Statement & Description
1	<p><u>if statement</u></p> <p>An if statement consists of a Boolean expression followed by one or more statements.</p>


```
Syntax : if(boolean_expression) {  
  
    // statement(s) will execute if the boolean  
    expression is true.  
}
```

Example

```
x <- 30L  
  
if(is.integer(x)) {  
    print("X is an Integer")  
}
```

Output

```
[1] "X is an Integer"
```

2

if...else statement

An **if** statement can be followed by an optional **else** statement, which executes when the Boolean expression is false.

```
Syntax : if(boolean_expression) {  
    // statement(s) will execute if the boolean  
    expression is true.  
} else {  
    // statement(s) will execute if the boolean  
    expression is false.  
}
```

Example

```
x <- c("what", "is", "truth")  
  
if("Truth" %in% x) {  
    print("Truth is found")  
} else {  
    print("Truth is not found")  
}
```

Output

	<pre>[1] "Truth is not found"</pre> <pre>if(boolean_expression 1) { // Executes when the boolean expression 1 is true. } else if(boolean_expression 2) { // Executes when the boolean expression 2 is true. } else if(boolean_expression 3) { // Executes when the boolean expression 3 is true. } else { // executes when none of the above condition is true. }</pre> <p>Example</p> <pre>x <- c("what","is","truth")</pre> <pre>if("Truth" %in% x) { print("Truth is found the first time") } else if ("truth" %in% x) { print("truth is found the second time") } else { print("No truth found") }</pre> <p>Output :</p> <pre>[1] "truth is found the second time"</pre>
3	<u>switch statement</u>

A **switch** statement allows a variable to be tested for equality against a list of values.

Syntax :
switch(expression, case1, case2, case3....)

Example

```
x <- switch(  
  3,  
  "first",  
  "second",  
  "third",  
  "fourth"  
)  
print(x)
```

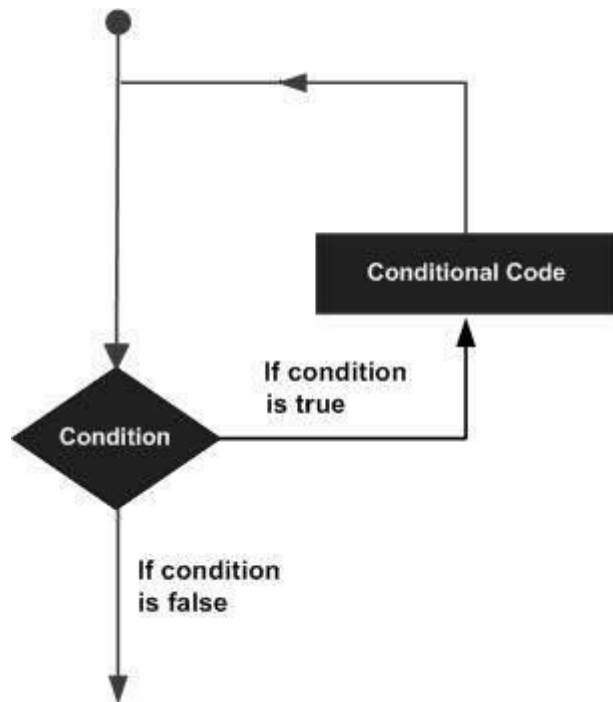
Output :

```
[1] "third"
```

There may be a situation when you need to execute a block of code several number of times. In general, statements are executed sequentially. The first statement in a function is executed first, followed by the second, and so on.

Programming languages provide various control structures that allow for more complicated execution paths.

A loop statement allows us to execute a statement or group of statements multiple times and the following is the general form of a loop statement in most of the programming languages –



R programming language provides the following kinds of loop to handle looping requirements. Click the following links to check their detail.

Sr.No.	Loop Type & Description
1	<p><u>repeat loop</u></p> <p>Executes a sequence of statements multiple times and abbreviates the code that manages the loop variable.</p> <p>Syntax :</p> <pre>repeat { commands if(condition) { break } }</pre> <p>Example :</p> <pre>v <- c("Hello","loop") cnt <- 2 repeat {</pre>

	<pre> print(v) cnt <- cnt+1 if(cnt > 5) { break } } Output : [1] "Hello" "loop" [1] "Hello" "loop" [1] "Hello" "loop" [1] "Hello" "loop" </pre>
2	<p><u>while loop</u></p> <p>Repeats a statement or group of statements while a given condition is true. It tests the condition before executing the loop body.</p> <p>Syntax :</p> <pre> while (test_expression) { statement } </pre> <p>Example</p> <pre> v <- c("Hello","while loop") cnt <- 2 while (cnt < 7) { print(v) cnt = cnt + 1 } </pre> <p>Output</p> <pre> [1] "Hello" "while loop" [1] "Hello" "while loop" [1] "Hello" "while loop" </pre>

	<pre>[1] "Hello" "while loop" [1] "Hello" "while loop"</pre>
3	<p><u>for loop</u></p> <p>Like a while statement, except that it tests the condition at the end of the loop body.</p>

Loop Control Statements

Loop control statements change execution from its normal sequence. When execution leaves a scope, all automatic objects that were created in that scope are destroyed.

R supports the following control statements. Click the following links to check their detail.

Sr.No.	Control Statement & Description
1	<p><u>break statement</u></p> <p>Terminates the loop statement and transfers execution to the statement immediately following the loop.</p> <p>Example :</p> <pre>v <- c("Hello","loop") cnt <- 2 repeat { print(v) cnt <- cnt + 1 if(cnt > 5) { break } }</pre> <p>Output</p> <pre>[1] "Hello" "loop" [1] "Hello" "loop" [1] "Hello" "loop" [1] "Hello" "loop"</pre>

2

Next statement

The **next** statement simulates the behavior of R switch.

```
v <- LETTERS[1:6]
for ( i in v) {
  if (i == "D") {
    next
  }
  print(i)
}
```

When the above code is compiled and executed, it produces the following result –

```
[1] "A"
[1] "B"
[1] "C"
[1] "E"
[1] "F"
```

An R function is created by using the keyword **function**. The basic syntax of an R function definition is as follows –

```
function_name <- function(arg_1, arg_2, ...) {
  Function body
}
```

Function Components

The different parts of a function are –

- **Function Name** – This is the actual name of the function. It is stored in R environment as an object with this name.
- **Arguments** – An argument is a placeholder. When a function is invoked, you pass a value to the argument. Arguments are optional; that is, a function may contain no arguments. Also arguments can have default values.
- **Function Body** – The function body contains a collection of statements that defines what the function does.
- **Return Value** – The return value of a function is the last expression in the function body to be evaluated.

R has many **in-built** functions which can be directly called in the program without defining them first. We can also create and use our own functions referred as **user defined** functions.

Built-in Function

Simple examples of in-built functions are **seq()**, **mean()**, **max()**, **sum(x)** and **paste(...)** etc. They are directly called by user written programs. You can refer [most widely used R functions](#).

```
# Create a sequence of numbers from 32 to 44.
```

```
print(seq(32,44))
```

```
# Find mean of numbers from 25 to 82.
```

```
print(mean(25:82))
```

```
# Find sum of numbers from 41 to 68.
```

```
print(sum(41:68))
```

When we execute the above code, it produces the following result –

```
[1] 32 33 34 35 36 37 38 39 40 41 42 43 44
```

```
[1] 53.5
```

```
[1] 1526
```

User-defined Function

We can create user-defined functions in R. They are specific to what a user wants and once created they can be used like the built-in functions. Below is an example of how a function is created and used.

```
# Create a function to print squares of numbers in sequence.
```

```
new.function <- function(a) {
```

```
  for(i in 1:a) {
```

```
    b <- i^2
```

```
    print(b)
```

```
  }
```

```
}
```

Calling a Function

```
# Create a function to print squares of numbers in sequence.
```

```
new.function <- function(a) {
```



```
for(i in 1:a) {  
  b <- i^2  
  print(b)  
}  
}  
  
# Call the function new.function supplying 6 as an argument.  
new.function(6)
```

When we execute the above code, it produces the following result –

```
[1] 1  
[1] 4  
[1] 9  
[1] 16  
[1] 25  
[1] 36
```

Calling a Function without an Argument

```
# Create a function without an argument.  
new.function <- function() {  
  for(i in 1:5) {  
    print(i^2)  
  }  
}  
  
# Call the function without supplying an argument.  
new.function()
```

When we execute the above code, it produces the following result –

```
[1] 1  
[1] 4  
[1] 9  
[1] 16  
[1] 25
```

Calling a Function with Argument Values (by position and by name)

The arguments to a function call can be supplied in the same sequence as defined in the function or they can be supplied in a different sequence but assigned to the names of the arguments.

```
# Create a function with arguments.
new.function <- function(a,b,c) {
  result <- a * b + c
  print(result)
}
# Call the function by position of arguments.
new.function(5,3,11)
# Call the function by names of the arguments.
new.function(a = 11, b = 5, c = 3)
```

When we execute the above code, it produces the following result –

```
[1] 26
[1] 58
```

Calling a Function with Default Argument

We can define the value of the arguments in the function definition and call the function without supplying any argument to get the default result. But we can also call such functions by supplying new values of the argument and get non default result.

```
# Create a function with arguments.
new.function <- function(a = 3, b = 6) {
  result <- a * b
  print(result)
}
# Call the function without giving any argument.
new.function()
# Call the function with giving new values of the argument.
new.function(9,5)
```

When we execute the above code, it produces the following result –


```
[1] 18  
[1] 45
```

Lazy Evaluation of Function

Arguments to functions are evaluated lazily, which means so they are evaluated only when needed by the function body.

```
# Create a function with arguments.  
new.function <- function(a, b) {  
  print(a^2)  
  print(a)  
  print(b)  
}  
  
# Evaluate the function without supplying one of the arguments.  
new.function(6)
```

When we execute the above code, it produces the following result –

```
[1] 36  
[1] 6  
Error in print(b) : argument "b" is missing, with no default
```

R-Strings

Any value written within a pair of single quote or double quotes in R is treated as a string. Internally R stores every string within double quotes, even when you create them with single quote.

Rules Applied in String Construction

- The quotes at the beginning and end of a string should be both double quotes or both single quote. They can not be mixed.
- Double quotes can be inserted into a string starting and ending with single quote.
- Single quote can be inserted into a string starting and ending with double quotes.
- Double quotes can not be inserted into a string starting and ending with double quotes.
- Single quote can not be inserted into a string starting and ending with single quote.

Examples of Valid Strings

Following examples clarify the rules about creating a string in R.

```
a <- 'Start and end with single quote'
print(a)

b <- "Start and end with double quotes"
print(b)

c <- "single quote ' in between double quotes"
print(c)

d <- 'Double quotes " in between single quote'
print(d)
```

When the above code is run we get the following output –

```
[1] "Start and end with single quote"
[1] "Start and end with double quotes"
[1] "single quote ' in between double quote"
[1] "Double quote \" in between single quote"
```

Examples of Invalid Strings

```
e <- 'Mixed quotes"
print(e)

f <- 'Single quote ' inside single quote'
print(f)

g <- "Double quotes " inside double quotes"
print(g)
```

When we run the script it fails giving below results.

```
Error: unexpected symbol in:
"print(e)
f <- 'Single"
Execution halted
```

String Manipulation

Concatenating Strings - paste() function

Many strings in R are combined using the **paste()** function. It can take any number of arguments to be combined together.

Syntax

The basic syntax for paste function is –

```
paste(..., sep = " ", collapse = NULL)
```

Following is the description of the parameters used –

- ... represents any number of arguments to be combined.
- **sep** represents any separator between the arguments. It is optional.
- **collapse** is used to eliminate the space in between two strings. But not the space within two words of one string.

Example

```
a <- "Hello"
b <- 'How'
c <- "are you? "
print(paste(a,b,c))
print(paste(a,b,c, sep = "-"))
print(paste(a,b,c, sep = "", collapse = ""))
```

When we execute the above code, it produces the following result –

```
[1] "Hello How are you? "
[1] "Hello-How-are you? "
[1] "HelloHoware you? "
```

Formatting numbers & strings - format() function

Numbers and strings can be formatted to a specific style using **format()** function.

Syntax

The basic syntax for format function is –

```
format(x, digits, nsmall, scientific, width, justify = c("left", "right", "centre", "none"))
```

Following is the description of the parameters used –

- **x** is the vector input.
- **digits** is the total number of digits displayed.

- **nsmall** is the minimum number of digits to the right of the decimal point.
- **scientific** is set to TRUE to display scientific notation.
- **width** indicates the minimum width to be displayed by padding blanks in the beginning.
- **justify** is the display of the string to left, right or center.

Example

```
# Total number of digits displayed. Last digit rounded off.
result <- format(23.123456789, digits = 9)
print(result)

# Display numbers in scientific notation.
result <- format(c(6, 13.14521), scientific = TRUE)
print(result)

# The minimum number of digits to the right of the decimal point.
result <- format(23.47, nsmall = 5)
print(result)

# Format treats everything as a string.
result <- format(6)
print(result)

# Numbers are padded with blank in the beginning for width.
result <- format(13.7, width = 6)
print(result)

# Left justify strings.
result <- format("Hello", width = 8, justify = "l")
print(result)

# Justfy string with center.
result <- format("Hello", width = 8, justify = "c")
print(result)
```

When we execute the above code, it produces the following result –


```
[1] "23.1234568"
[1] "6.000000e+00" "1.314521e+01"
[1] "23.47000"
[1] "6"
[1] " 13.7"
[1] "Hello "
[1] " Hello "
```

Counting number of characters in a string - `nchar()` function

This function counts the number of characters including spaces in a string.

Syntax

The basic syntax for `nchar()` function is –

```
nchar(x)
```

Following is the description of the parameters used –

- **x** is the vector input.

Example

```
result <- nchar("Count the number of characters")
print(result)
```

When we execute the above code, it produces the following result –

```
[1] 30
```

Changing the case - `toupper()` & `tolower()` functions

These functions change the case of characters of a string.

Syntax

The basic syntax for `toupper()` & `tolower()` function is –

```
toupper(x)
tolower(x)
```

Following is the description of the parameters used –

- **x** is the vector input.

Example

```
# Changing to Upper case.
result <- toupper("Changing To Upper")
print(result)
```

```
# Changing to lower case.  
result <- tolower("Changing To Lower")  
print(result)
```

When we execute the above code, it produces the following result –

```
[1] "CHANGING TO UPPER"  
[1] "changing to lower"
```

Extracting parts of a string - substring() function

This function extracts parts of a String.

Syntax

The basic syntax for substring() function is –

```
substring(x,first,last)
```

Following is the description of the parameters used –

- **x** is the character vector input.
- **first** is the position of the first character to be extracted.
- **last** is the position of the last character to be extracted.

Example

```
# Extract characters from 5th to 7th position.  
result <- substring("Extract", 5, 7)  
print(result)
```

When we execute the above code, it produces the following result –

```
[1] "act"
```

R Vectors

Single Element Vector

```
# Atomic vector of type character.  
print("abc");
```



```
# Atomic vector of type double.  
print(12.5)  
  
# Atomic vector of type integer.  
print(63L)  
  
# Atomic vector of type logical.  
print(TRUE)  
  
# Atomic vector of type complex.  
print(2+3i)  
  
# Atomic vector of type raw.
```

Multiple Elements Vector

Using colon operator with numeric data

```
# Creating a sequence from 5 to 13.  
v <- 5:13  
print(v)  
  
# Creating a sequence from 6.6 to 12.6.  
v <- 6.6:12.6  
print(v)  
  
# If the final element specified does not belong to the sequence then it is discarded.  
v <- 3.8:11.4  
print(v)
```

When we execute the above code, it produces the following result –

```
[1] 5 6 7 8 9 10 11 12 13  
[1] 6.6 7.6 8.6 9.6 10.6 11.6 12.6  
[1] 3.8 4.8 5.8 6.8 7.8 8.8 9.8 10.8
```

Using sequence (Seq.) operator

```
# Create vector with elements from 5 to 9 incrementing by 0.4.  
print(seq(5, 9, by = 0.4))
```

When we execute the above code, it produces the following result –

```
[1] 5.0 5.4 5.8 6.2 6.6 7.0 7.4 7.8 8.2 8.6 9.0
```

Using the c() function

The non-character values are coerced to character type if one of the elements is a character.

```
# The logical and numeric values are converted to characters.
```

```
s <- c('apple','red',5,TRUE)
```

```
print(s)
```

When we execute the above code, it produces the following result –

```
[1] "apple" "red"   "5"     "TRUE"
```

Accessing Vector Elements

Elements of a Vector are accessed using indexing. The [] **brackets** are used for indexing. Indexing starts with position 1. Giving a negative value in the index drops that element from result. **TRUE**, **FALSE** or **0** and **1** can also be used for indexing.

```
# Accessing vector elements using position.
```

```
t <- c("Sun","Mon","Tue","Wed","Thurs","Fri","Sat")
```

```
u <- t[c(2,3,6)]
```

```
print(u)
```

```
# Accessing vector elements using logical indexing.
```

```
v <- t[c(TRUE,FALSE,FALSE,FALSE,FALSE,TRUE,FALSE)]
```

```
print(v)
```

```
# Accessing vector elements using negative indexing.
```

```
x <- t[c(-2,-5)]
```

```
print(x)
```

```
# Accessing vector elements using 0/1 indexing.
```

```
y <- t[c(0,0,0,0,0,0,1)]
```

```
print(y)
```


When we execute the above code, it produces the following result –

```
[1] "Mon" "Tue" "Fri"  
[1] "Sun" "Fri"  
[1] "Sun" "Tue" "Wed" "Fri" "Sat"  
[1] "Sun"
```

Vector Manipulation

Vector arithmetic

Two vectors of same length can be added, subtracted, multiplied or divided giving the result as a vector output.

```
# Create two vectors.  
v1 <- c(3,8,4,5,0,11)  
v2 <- c(4,11,0,8,1,2)  
  
# Vector addition.  
add.result <- v1+v2  
print(add.result)  
  
# Vector subtraction.  
sub.result <- v1-v2  
print(sub.result)  
  
# Vector multiplication.  
multi.result <- v1*v2  
print(multi.result)  
  
# Vector division.  
divi.result <- v1/v2  
print(divi.result)
```

When we execute the above code, it produces the following result –

```
[1] 7 19 4 13 1 13  
[1] -1 -3 4 -3 -1 9  
[1] 12 88 0 40 0 22  
[1] 0.7500000 0.7272727      Inf 0.6250000 0.0000000 5.5000000
```

Vector Element Recycling

If we apply arithmetic operations to two vectors of unequal length, then the elements of the shorter vector are recycled to complete the operations.

```
v1 <- c(3,8,4,5,0,11)
v2 <- c(4,11)
# V2 becomes c(4,11,4,11,4,11)
add.result <- v1+v2
print(add.result)
sub.result <- v1-v2
print(sub.result)
```

When we execute the above code, it produces the following result –

```
[1] 7 19 8 16 4 22
[1] -1 -3 0 -6 -4 0
```

Vector Element Sorting

Elements in a vector can be sorted using the **sort()** function.

```
v <- c(3,8,4,5,0,11, -9, 304)
# Sort the elements of the vector.
sort.result <- sort(v)
print(sort.result)
# Sort the elements in the reverse order.
revsort.result <- sort(v, decreasing = TRUE)
print(revsort.result)
# Sorting character vectors.
v <- c("Red", "Blue", "yellow", "violet")
sort.result <- sort(v)
print(sort.result)
# Sorting character vectors in reverse order.
revsort.result <- sort(v, decreasing = TRUE)
```



```
print(revsort.result)
```

When we execute the above code, it produces the following result –

```
[1] -9 0 3 4 5 8 11 304
[1] 304 11 8 5 4 3 0 -9
[1] "Blue" "Red" "violet" "yellow"
[1] "yellow" "violet" "Red" "Blue"
```

Output

```
[1] "abc"
[1] 12.5
[1] 63
[1] TRUE
[1] 2+3i
[1] 68 65 6c 6c 6f
```

R-Lists

```
# Create a list containing strings, numbers, vectors and a logical
# values.

list_data <- list("Red", "Green", c(21,32,11), TRUE, 51.23, 119.1)

print(list_data)

[[1]]
[1] "Red"

[[2]]
[1] "Green"

[[3]]
[1] 21 32 11

[[4]]
[1] TRUE

[[5]]
[1] 51.23

[[6]]
[1] 119.1
```

Naming List Elements

The list elements can be given names and they can be accessed using these names.

```
# Create a list containing a vector, a matrix and a list.

list_data <- list(c("Jan","Feb","Mar"), matrix(c(3,9,5,1,-2,8), nrow = 2),
  list("green",12.3))

# Give names to the elements in the list.

names(list_data) <- c("1st Quarter", "A_Matrix", "A Inner list")

# Show the list.

print(list_data)
```

When we execute the above code, it produces the following result –

```
$`1st_Quarter`
[1] "Jan" "Feb" "Mar"

$A_Matrix
  [,1] [,2] [,3]
[1,]  3   5  -2
[2,]  9   1   8

$A_Inner_list
$A_Inner_list[[1]]
[1] "green"

$A_Inner_list[[2]]
[1] 12.3
```

Accessing List Elements

Elements of the list can be accessed by the index of the element in the list. In case of named lists it can also be accessed using the names.

We continue to use the list in the above example –

```
# Create a list containing a vector, a matrix and a list.

list_data <- list(c("Jan","Feb","Mar"), matrix(c(3,9,5,1,-2,8), nrow = 2),
  list("green",12.3))

# Give names to the elements in the list.
```



```
names(list_data) <- c("1st Quarter", "A_Matrix", "A Inner list")

# Access the first element of the list.

print(list_data[1])

# Access the thrid element. As it is also a list, all its elements will be printed.

print(list_data[3])

# Access the list element using the name of the element.

print(list_data$A_Matrix)
```

When we execute the above code, it produces the following result –

```
$`1st_Quarter`
[1] "Jan" "Feb" "Mar"

$A_Inner_list
$A_Inner_list[[1]]
[1] "green"

$A_Inner_list[[2]]
[1] 12.3

      [,1] [,2] [,3]
[1,]   3   5  -2
[2,]   9   1   8
```

Manipulating List Elements

We can add, delete and update list elements as shown below. We can add and delete elements only at the end of a list. But we can update any element.

```
# Create a list containing a vector, a matrix and a list.

list_data <- list(c("Jan","Feb","Mar"), matrix(c(3,9,5,1,-2,8), nrow = 2),
  list("green",12.3))

# Give names to the elements in the list.

names(list_data) <- c("1st Quarter", "A_Matrix", "A Inner list")

# Add element at the end of the list.

list_data[4] <- "New element"

print(list_data[4])
```

```
# Remove the last element.

list_data[4] <- NULL

# Print the 4th Element.

print(list_data[4])

# Update the 3rd Element.

list_data[3] <- "updated element"

print(list_data[3])
```

When we execute the above code, it produces the following result –

```
[[1]]
[1] "New element"

$<NA>
NULL

$`A Inner list`
[1] "updated element"
```

Merging Lists

You can merge many lists into one list by placing all the lists inside one list() function.

```
# Create two lists.

list1 <- list(1,2,3)

list2 <- list("Sun","Mon","Tue")

# Merge the two lists.

merged.list <- c(list1,list2)

# Print the merged list.

print(merged.list)
```

When we execute the above code, it produces the following result –

```
[[1]]
[1] 1

[[2]]
[1] 2
```



```
[[3]]  
[1] 3
```

```
[[4]]  
[1] "Sun"
```

```
[[5]]  
[1] "Mon"
```

```
[[6]]  
[1] "Tue"
```

Converting List to Vector

A list can be converted to a vector so that the elements of the vector can be used for further manipulation. All the arithmetic operations on vectors can be applied after the list is converted into vectors. To do this conversion, we use the **unlist()** function. It takes the list as input and produces a vector.

```
# Create lists.
```

```
list1 <- list(1:5)
```

```
print(list1)
```

```
list2 <-list(10:14)
```

```
print(list2)
```

```
# Convert the lists to vectors.
```

```
v1 <- unlist(list1)
```

```
v2 <- unlist(list2)
```

```
print(v1)
```

```
print(v2)
```

```
# Now add the vectors
```

```
result <- v1+v2
```

```
print(result)
```

When we execute the above code, it produces the following result –

```
[[1]]  
[1] 1 2 3 4 5
```

```
[[1]]  
[1] 10 11 12 13 14  
  
[1] 1 2 3 4 5  
[1] 10 11 12 13 14  
[1] 11 13 15 17 19
```

R-Matrices

Matrices are the R objects in which the elements are arranged in a two-dimensional rectangular layout. They contain elements of the same atomic types. Though we can create a matrix containing only characters or only logical values, they are not of much use. We use matrices containing numeric elements to be used in mathematical calculations.

A Matrix is created using the **matrix()** function.

Syntax

The basic syntax for creating a matrix in R is –

```
matrix(data, nrow, ncol, byrow, dimnames)
```

Following is the description of the parameters used –

- **data** is the input vector which becomes the data elements of the matrix.
- **nrow** is the number of rows to be created.
- **ncol** is the number of columns to be created.
- **byrow** is a logical clue. If TRUE then the input vector elements are arranged by row.
- **dimname** is the names assigned to the rows and columns.

Example

Create a matrix taking a vector of numbers as input.

```
# Elements are arranged sequentially by row.  
M <- matrix(c(3:14), nrow = 4, byrow = TRUE)  
print(M)  
  
# Elements are arranged sequentially by column.  
N <- matrix(c(3:14), nrow = 4, byrow = FALSE)  
print(N)  
  
# Define the column and row names.
```



```
rownames = c("row1", "row2", "row3", "row4")
colnames = c("col1", "col2", "col3")
P <- matrix(c(3:14), nrow = 4, byrow = TRUE, dimnames = list(rownames, colnames))
print(P)
```

When we execute the above code, it produces the following result –

```
      [,1] [,2] [,3]
[1,]   3   4   5
[2,]   6   7   8
[3,]   9  10  11
[4,]  12  13  14
      [,1] [,2] [,3]
[1,]   3   7  11
[2,]   4   8  12
[3,]   5   9  13
[4,]   6  10  14
      col1 col2 col3
row1     3     4     5
row2     6     7     8
row3     9    10    11
row4    12    13    14
```

Accessing Elements of a Matrix

Elements of a matrix can be accessed by using the column and row index of the element. We consider the matrix P above to find the specific elements below.

```
# Define the column and row names.
rownames = c("row1", "row2", "row3", "row4")
colnames = c("col1", "col2", "col3")

# Create the matrix.
P <- matrix(c(3:14), nrow = 4, byrow = TRUE, dimnames = list(rownames, colnames))

# Access the element at 3rd column and 1st row.
print(P[1,3])

# Access the element at 2nd column and 4th row.
print(P[4,2])

# Access only the 2nd row.
```

```
print(P[2,])  
  
# Access only the 3rd column.  
  
print(P[,3])
```

When we execute the above code, it produces the following result –

```
[1] 5  
[1] 13  
col1 col2 col3  
  6   7   8  
row1 row2 row3 row4  
  5   8  11  14
```

Matrix Computations

Various mathematical operations are performed on the matrices using the R operators. The result of the operation is also a matrix.

The dimensions (number of rows and columns) should be same for the matrices involved in the operation.

Matrix Addition & Subtraction

```
# Create two 2x3 matrices.  
  
matrix1 <- matrix(c(3, 9, -1, 4, 2, 6), nrow = 2)  
  
print(matrix1)  
  
matrix2 <- matrix(c(5, 2, 0, 9, 3, 4), nrow = 2)  
  
print(matrix2)  
  
# Add the matrices.  
  
result <- matrix1 + matrix2  
  
cat("Result of addition","\n")  
  
print(result)  
  
# Subtract the matrices  
  
result <- matrix1 - matrix2  
  
cat("Result of subtraction","\n")  
  
print(result)
```

When we execute the above code, it produces the following result –

```

      [,1] [,2] [,3]
[1,]   3  -1   2
[2,]   9   4   6
      [,1] [,2] [,3]
[1,]   5   0   3
[2,]   2   9   4
Result of addition
      [,1] [,2] [,3]
[1,]   8  -1   5
[2,]  11  13  10
Result of subtraction
      [,1] [,2] [,3]
[1,]  -2  -1  -1
[2,]   7  -5   2

```

Matrix Multiplication & Division

```

# Create two 2x3 matrices.

matrix1 <- matrix(c(3, 9, -1, 4, 2, 6), nrow = 2)

print(matrix1)

matrix2 <- matrix(c(5, 2, 0, 9, 3, 4), nrow = 2)

print(matrix2)

# Multiply the matrices.

result <- matrix1 * matrix2

cat("Result of multiplication","\n")

print(result)


# Divide the matrices

result <- matrix1 / matrix2

cat("Result of division","\n")

print(result)

```

When we execute the above code, it produces the following result –

```

      [,1] [,2] [,3]
[1,]   3  -1   2
[2,]   9   4   6
      [,1] [,2] [,3]

```



```

[1,] 5 0 3
[2,] 2 9 4
Result of multiplication
      [,1] [,2] [,3]
[1,] 15  0  6
[2,] 18 36 24
Result of division
      [,1] [,2] [,3]
[1,] 0.6 -Inf 0.6666667
[2,] 4.5 0.4444444 1.5000000

```

R-Arrays

Arrays are the R data objects which can store data in more than two dimensions. For example – If we create an array of dimension (2, 3, 4) then it creates 4 rectangular matrices each with 2 rows and 3 columns. Arrays can store only data type.

An array is created using the **array()** function. It takes vectors as input and uses the values in the **dim** parameter to create an array.

Example

The following example creates an array of two 3x3 matrices each with 3 rows and 3 columns.

```

# Create two vectors of different lengths.
vector1 <- c(5,9,3)
vector2 <- c(10,11,12,13,14,15)
# Take these vectors as input to the array.
result <- array(c(vector1,vector2),dim = c(3,3,2))
print(result)

```

When we execute the above code, it produces the following result –

```

, , 1
      [,1] [,2] [,3]
[1,]  5  10  13
[2,]  9  11  14
[3,]  3  12  15

, , 2
      [,1] [,2] [,3]

```

```
[1,] 5 10 13
[2,] 9 11 14
[3,] 3 12 15
```

Naming Columns and Rows

We can give names to the rows, columns and matrices in the array by using the **dimnames** parameter.

```
# Create two vectors of different lengths.
```

```
vector1 <- c(5,9,3)
```

```
vector2 <- c(10,11,12,13,14,15)
```

```
column.names <- c("COL1","COL2","COL3")
```

```
row.names <- c("ROW1","ROW2","ROW3")
```

```
matrix.names <- c("Matrix1","Matrix2")
```

```
# Take these vectors as input to the array.
```

```
result <- array(c(vector1,vector2),dim = c(3,3,2),dimnames = list(row.names,column.names,
  matrix.names))
```

```
print(result)
```

When we execute the above code, it produces the following result –

```
, , Matrix1
```

```
      COL1 COL2 COL3
ROW1    5   10   13
ROW2    9   11   14
ROW3    3   12   15
```

```
, , Matrix2
```

```
      COL1 COL2 COL3
ROW1    5   10   13
ROW2    9   11   14
ROW3    3   12   15
```

Accessing Array Elements

```
# Create two vectors of different lengths.
```

```
vector1 <- c(5,9,3)
```

```
vector2 <- c(10,11,12,13,14,15)
```

```

column.names <- c("COL1","COL2","COL3")
row.names <- c("ROW1","ROW2","ROW3")
matrix.names <- c("Matrix1","Matrix2")

# Take these vectors as input to the array.
result <- array(c(vector1,vector2),dim = c(3,3,2),dimnames = list(row.names,
  column.names, matrix.names))

# Print the third row of the second matrix of the array.
print(result[3,,2])

# Print the element in the 1st row and 3rd column of the 1st matrix.
print(result[1,3,1])

# Print the 2nd Matrix.
print(result[,,2])

```

When we execute the above code, it produces the following result –

```

COL1 COL2 COL3
 3  12  15
[1] 13
  COL1 COL2 COL3
ROW1  5  10  13
ROW2  9  11  14
ROW3  3  12  15

```

Manipulating Array Elements

As array is made up matrices in multiple dimensions, the operations on elements of array are carried out by accessing elements of the matrices.

```

# Create two vectors of different lengths.
vector1 <- c(5,9,3)
vector2 <- c(10,11,12,13,14,15)

# Take these vectors as input to the array.
array1 <- array(c(vector1,vector2),dim = c(3,3,2))

# Create two vectors of different lengths.
vector3 <- c(9,1,0)

```



```
vector4 <- c(6,0,11,3,14,1,2,6,9)
array2 <- array(c(vector1,vector2),dim = c(3,3,2))
# create matrices from these arrays.
matrix1 <- array1[,2]
matrix2 <- array2[,2]
# Add the matrices.
result <- matrix1+matrix2
print(result)
```

When we execute the above code, it produces the following result –

```
  [,1] [,2] [,3]
[1,]  10  20  26
[2,]  18  22  28
[3,]   6  24  30
```

Calculations Across Array Elements

We can do calculations across the elements in an array using the **apply()** function.

Syntax

```
apply(x, margin, fun)
```

Following is the description of the parameters used –

- **x** is an array.
- **margin** is the name of the data set used.
- **fun** is the function to be applied across the elements of the array.

Example

We use the `apply()` function below to calculate the sum of the elements in the rows of an array across all the matrices.

```
# Create two vectors of different lengths.
vector1 <- c(5,9,3)
vector2 <- c(10,11,12,13,14,15)
# Take these vectors as input to the array.
new.array <- array(c(vector1,vector2),dim = c(3,3,2))
print(new.array)
```

```
# Use apply to calculate the sum of the rows across all the matrices.
```

```
result <- apply(new.array, c(1), sum)
```

```
print(result)
```

When we execute the above code, it produces the following result –

```
, , 1
```

```
      [,1] [,2] [,3]  
[1,]   5  10  13  
[2,]   9  11  14  
[3,]   3  12  15
```

```
, , 2
```

```
      [,1] [,2] [,3]  
[1,]   5  10  13  
[2,]   9  11  14  
[3,]   3  12  15
```

```
[1] 56 68 60
```

R-Factors

Factors are the data objects which are used to categorize the data and store it as levels. They can store both strings and integers. They are useful in the columns which have a limited number of unique values. Like "Male", "Female" and True, False etc. They are useful in data analysis for statistical modeling.

Factors are created using the **factor ()** function by taking a vector as input.

Example

```
# Create a vector as input.
```

```
data <- c("East", "West", "East", "North", "North", "East", "West", "West", "West", "East", "North")
```

```
print(data)
```

```
print(is.factor(data))
```

```
# Apply the factor function.
```

```
factor_data <- factor(data)
```

```
print(factor_data)
```

```
print(is.factor(factor_data))
```

When we execute the above code, it produces the following result –

```
[1] "East" "West" "East" "North" "North" "East" "West" "West" "West" "East" "North"
[1] FALSE
[1] East West East North North East West West West East North
Levels: East North West
[1] TRUE
```

Factors in Data Frame

On creating any data frame with a column of text data, R treats the text column as categorical data and creates factors on it.

```
# Create the vectors for data frame.

height <- c(132,151,162,139,166,147,122)

weight <- c(48,49,66,53,67,52,40)

gender <- c("male","male","female","female","male","female","male")

# Create the data frame.

input_data <- data.frame(height,weight,gender)

print(input_data)

# Test if the gender column is a factor.

print(is.factor(input_data$gender))

# Print the gender column so see the levels.

print(input_data$gender)
```

When we execute the above code, it produces the following result –

```
height weight gender
1  132    48  male
2  151    49  male
3  162    66 female
4  139    53 female
5  166    67  male
6  147    52 female
7  122    40  male
[1] TRUE
[1] male  male  female female male  female male
```


Levels: female male

Changing the Order of Levels

The order of the levels in a factor can be changed by applying the factor function again with new order of the levels.

```
data <- c("East", "West", "East", "North", "North", "East", "West",  
         "West", "West", "East", "North")  
  
# Create the factors  
factor_data <- factor(data)  
  
print(factor_data)  
  
# Apply the factor function with required order of the level.  
new_order_data <- factor(factor_data, levels = c("East", "West", "North"))  
  
print(new_order_data)
```

When we execute the above code, it produces the following result –

```
[1] East West East North North East West West West East North  
Levels: East North West  
[1] East West East North North East West West West East North  
Levels: East West North
```

Generating Factor Levels

We can generate factor levels by using the **gl()** function. It takes two integers as input which indicates how many levels and how many times each level.

Syntax

```
gl(n, k, labels)
```

Following is the description of the parameters used –

- **n** is a integer giving the number of levels.
- **k** is a integer giving the number of replications.
- **labels** is a vector of labels for the resulting factor levels.

Example

```
v <- gl(3, 4, labels = c("Tampa", "Seattle", "Boston"))  
  
print(v)
```

When we execute the above code, it produces the following result –

```
Tampa Tampa Tampa Tampa Seattle Seattle Seattle Seattle Boston
[10] Boston Boston Boston
Levels: Tampa Seattle Boston
```

R-DataFrames

A data frame is a table or a two-dimensional array-like structure in which each column contains values of one variable and each row contains one set of values from each column.

Following are the characteristics of a data frame.

- The column names should be non-empty.
- The row names should be unique.
- The data stored in a data frame can be of numeric, factor or character type.
- Each column should contain same number of data items.

Create Data Frame

```
# Create the data frame.

emp.data <- data.frame(
  emp_id = c(1:5),
  emp_name = c("Rick", "Dan", "Michelle", "Ryan", "Gary"),
  salary = c(623.3, 515.2, 611.0, 729.0, 843.25),

  start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11",
    "2015-03-27")),
  stringsAsFactors = FALSE
)

# Print the data frame.

print(emp.data)
```

When we execute the above code, it produces the following result –

```
emp_id emp_name salary start_date
1  1  Rick      623.30 2012-01-01
2  2   Dan      515.20 2013-09-23
3  3 Michelle    611.00 2014-11-15
4  4   Ryan      729.00 2014-05-11
```

```
5    5    Gary    843.25    2015-03-27
```

Get the Structure of the Data Frame

The structure of the data frame can be seen by using **str()** function.

```
# Create the data frame.
```

```
emp.data <- data.frame(  
  emp_id = c(1:5),  
  emp_name = c("Rick", "Dan", "Michelle", "Ryan", "Gary"),  
  salary = c(623.3, 515.2, 611.0, 729.0, 843.25),  
  start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11",  
    "2015-03-27")),  
  stringsAsFactors = FALSE  
)
```

```
# Get the structure of the data frame.
```

```
str(emp.data)
```

When we execute the above code, it produces the following result –

```
'data.frame':  5 obs. of  4 variables:  
 $ emp_id   : int  1 2 3 4 5  
 $ emp_name  : chr  "Rick" "Dan" "Michelle" "Ryan" ...  
 $ salary    : num  623 515 611 729 843  
 $ start_date: Date, format: "2012-01-01" "2013-09-23" "2014-11-15" "2014-05-11" ...
```

Summary of Data in Data Frame

The statistical summary and nature of the data can be obtained by applying **summary()** function.

```
# Create the data frame.
```

```
emp.data <- data.frame(  
  emp_id = c(1:5),  
  emp_name = c("Rick", "Dan", "Michelle", "Ryan", "Gary"),  
  salary = c(623.3, 515.2, 611.0, 729.0, 843.25),  
  start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11",  
    "2015-03-27")),
```



```

stringsAsFactors = FALSE
)
# Print the summary.
print(summary(emp.data))

```

When we execute the above code, it produces the following result –

	emp_id	emp_name	salary	start_date
Min.	:1	Length:5	Min. :515.2	Min. :2012-01-01
1st Qu.	:2	Class :character	1st Qu.:611.0	1st Qu.:2013-09-23
Median	:3	Mode :character	Median :623.3	Median :2014-05-11
Mean	:3		Mean :664.4	Mean :2014-01-14
3rd Qu.	:4		3rd Qu.:729.03rd	Qu.:2014-11-15
Max.	:5		Max. :843.2	Max. :2015-03-27

Extract Data from Data Frame

Extract specific column from a data frame using column name.

```

# Create the data frame.
emp.data <- data.frame(
  emp_id = c(1:5),
  emp_name = c("Rick","Dan","Michelle","Ryan","Gary"),
  salary = c(623.3,515.2,611.0,729.0,843.25),

  start_date = as.Date(c("2012-01-01","2013-09-23","2014-11-15","2014-05-11",
    "2015-03-27")),
  stringsAsFactors = FALSE
)
# Extract Specific columns.
result <- data.frame(emp.data$emp_name,emp.data$salary)
print(result)

```

When we execute the above code, it produces the following result –

	emp.data.emp_name	emp.data.salary
1	Rick	623.30
2	Dan	515.20

3	Michelle	611.00
4	Ryan	729.00
5	Gary	843.25

Extract the first two rows and then all columns

Create the data frame.

```
emp.data <- data.frame(
  emp_id = c(1:5),
  emp_name = c("Rick","Dan","Michelle","Ryan","Gary"),
  salary = c(623.3,515.2,611.0,729.0,843.25),
  start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11",
    "2015-03-27")),
  stringsAsFactors = FALSE
)
```

Extract first two rows.

```
result <- emp.data[1:2,]
print(result)
```

When we execute the above code, it produces the following result –

	emp_id	emp_name	salary	start_date
1	1	Rick	623.3	2012-01-01
2	2	Dan	515.2	2013-09-23

Extract 3rd and 5th row with 2nd and 4th column

Create the data frame.

```
emp.data <- data.frame(
  emp_id = c(1:5),
  emp_name = c("Rick","Dan","Michelle","Ryan","Gary"),
  salary = c(623.3,515.2,611.0,729.0,843.25),
  start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11",
    "2015-03-27")),
  stringsAsFactors = FALSE
)
```

```
)
# Extract 3rd and 5th row with 2nd and 4th column.
result <- emp.data[c(3,5),c(2,4)]
print(result)
```

When we execute the above code, it produces the following result –

```
emp_name start_date
3 Michelle 2014-11-15
5 Gary 2015-03-27
```

Expand Data Frame

A data frame can be expanded by adding columns and rows.

Add Column

Just add the column vector using a new column name.

```
# Create the data frame.
emp.data <- data.frame(
  emp_id = c(1:5),
  emp_name = c("Rick","Dan","Michelle","Ryan","Gary"),
  salary = c(623.3,515.2,611.0,729.0,843.25),

  start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11",
    "2015-03-27")),
  stringsAsFactors = FALSE
)
# Add the "dept" column.
emp.data$dept <- c("IT","Operations","IT","HR","Finance")
v <- emp.data
print(v)
```

When we execute the above code, it produces the following result –

```
emp_id emp_name salary start_date dept
1 1 Rick 623.30 2012-01-01 IT
```


2	2	Dan	515.20	2013-09-23	Operations
3	3	Michelle	611.00	2014-11-15	IT
4	4	Ryan	729.00	2014-05-11	HR
5	5	Gary	843.25	2015-03-27	Finance

Add Row

To add more rows permanently to an existing data frame, we need to bring in the new rows in the same structure as the existing data frame and use the **rbind()** function.

In the example below we create a data frame with new rows and merge it with the existing data frame to create the final data frame.

Create the first data frame.

```
emp.data <- data.frame(
  emp_id = c(1:5),
  emp_name = c("Rick","Dan","Michelle","Ryan","Gary"),
  salary = c(623.3,515.2,611.0,729.0,843.25),
  start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11",
    "2015-03-27")),
  dept = c("IT","Operations","IT","HR","Finance"),
  stringsAsFactors = FALSE
)
```

Create the second data frame

```
emp.newdata <- data.frame(
  emp_id = c(6:8),
  emp_name = c("Rasmi","Pranab","Tusar"),
  salary = c(578.0,722.5,632.8),
  start_date = as.Date(c("2013-05-21","2013-07-30","2014-06-17")),
  dept = c("IT","Operations","Fianance"),
  stringsAsFactors = FALSE
)
```

Bind the two data frames.

```
emp.finaldata <- rbind(emp.data,emp.newdata)
```

```
print(emp.finaldata)
```

When we execute the above code, it produces the following result –

	emp_id	emp_name	salary	start_date	dept
1	1	Rick	623.30	2012-01-01	IT
2	2	Dan	515.20	2013-09-23	Operations
3	3	Michelle	611.00	2014-11-15	IT
4	4	Ryan	729.00	2014-05-11	HR
5	5	Gary	843.25	2015-03-27	Finance
6	6	Rasmi	578.00	2013-05-21	IT
7	7	Pranab	722.50	2013-07-30	Operations
8	8	Tusar	632.80	2014-06-17	Fianance

R-Packages

R packages are a collection of R functions, complied code and sample data. They are stored under a directory called "**library**" in the R environment. By default, R installs a set of packages during installation. More packages are added later, when they are needed for some specific purpose. When we start the R console, only the default packages are available by default. Other packages which are already installed have to be loaded explicitly to be used by the R program that is going to use them.

All the packages available in R language are listed at [R Packages](#).

Below is a list of commands to be used to check, verify and use the R packages.

Check Available R Packages

Get library locations containing R packages

```
.libPaths()
```

When we execute the above code, it produces the following result. It may vary depending on the local settings of your pc.

```
[2] "C:/Program Files/R/R-3.2.2/library"
```

Get the list of all the packages installed

```
library()
```

When we execute the above code, it produces the following result. It may vary depending on the local settings of your pc.

```
Packages in library 'C:/Program Files/R/R-3.2.2/library':
```

base	The R Base Package
boot	Bootstrap Functions (Originally by Angelo Canty for S)
class	Functions for Classification
cluster	"Finding Groups in Data": Cluster Analysis Extended Rousseeuw et al.
codetools	Code Analysis Tools for R
compiler	The R Compiler Package
datasets	The R Datasets Package
foreign	Read Data Stored by 'Minitab', 'S', 'SAS', 'SPSS', 'Stata', 'Systat', 'Weka', 'dBase', ...
graphics	The R Graphics Package
grDevices	The R Graphics Devices and Support for Colours and Fonts
grid	The Grid Graphics Package
KernSmooth	Functions for Kernel Smoothing Supporting Wand & Jones (1995)
lattice	Trellis Graphics for R
MASS	Support Functions and Datasets for Venables and Ripley's MASS
Matrix	Sparse and Dense Matrix Classes and Methods
methods	Formal Methods and Classes
mgecv	Mixed GAM Computation Vehicle with GCV/AIC/REML Smoothness Estimation
nlme	Linear and Nonlinear Mixed Effects Models
nnet	Feed-Forward Neural Networks and Multinomial Log-Linear Models
parallel	Support for Parallel computation in R
rpart	Recursive Partitioning and Regression Trees
spatial	Functions for Kriging and Point Pattern Analysis
splines	Regression Spline Functions and Classes
stats	The R Stats Package
stats4	Statistical Functions using S4 Classes
survival	Survival Analysis
tcltk	Tcl/Tk Interface
tools	Tools for Package Development
utils	The R Utils Package

Get all packages currently loaded in the R environment

search()

When we execute the above code, it produces the following result. It may vary depending on the local settings of your pc.


```
[1] ".GlobalEnv"      "package:stats"  "package:graphics"
[4] "package:grDevices" "package:utils"  "package:datasets"
[7] "package:methods" "Autoloads"      "package:base"
```

Install a New Package

There are two ways to add new R packages. One is installing directly from the CRAN directory and another is downloading the package to your local system and installing it manually.

Install directly from CRAN

The following command gets the packages directly from CRAN webpage and installs the package in the R environment. You may be prompted to choose a nearest mirror. Choose the one appropriate to your location.

```
install.packages("Package Name")

# Install the package named "XML".
install.packages("XML")
```

Install package manually

Go to the link [R Packages](#) to download the package needed. Save the package as a **.zip** file in a suitable location in the local system.

Now you can run the following command to install this package in the R environment.

```
install.packages(file_name_with_path, repos = NULL, type = "source")

# Install the package named "XML"

install.packages("E:/XML_3.98-1.3.zip", repos = NULL, type = "source")
```

Load Package to Library

Before a package can be used in the code, it must be loaded to the current R environment. You also need to load a package that is already installed previously but not available in the current environment.

A package is loaded using the following command –

```
library("package Name", lib.loc = "path to library")

# Load the package named "XML"
install.packages("E:/XML_3.98-1.3.zip", repos = NULL, type = "source")
```

R-Data Reshaping

Data Reshaping in R is about changing the way data is organized into rows and columns. Most of the time data processing in R is done by taking the input data as a data frame. It is easy to extract data from the rows and columns of a data frame but there are situations when we need the data frame in a format that is different from format in which we received it. R has many functions to split, merge and change the rows to columns and vice-versa in a data frame.

Joining Columns and Rows in a Data Frame

We can join multiple vectors to create a data frame using the **cbind()** function. Also we can merge two data frames using **rbind()** function.

```
# Create vector objects.
city <- c("Tampa","Seattle","Hartford","Denver")
state <- c("FL","WA","CT","CO")
zipcode <- c(33602,98104,06161,80294)

# Combine above three vectors into one data frame.
addresses <- cbind(city,state,zipcode)

# Print a header.
cat("# # # # The First data frame\n")

# Print the data frame.
print(addresses)

# Create another data frame with similar columns
new.address <- data.frame(
  city = c("Lowry","Charlotte"),
  state = c("CO","FL"),
  zipcode = c("80230","33949"),
  stringsAsFactors = FALSE
)

# Print a header.
cat("# # # The Second data frame\n")

# Print the data frame.
```

```

print(new.address)

# Combine rows form both the data frames.

all.addresses <- rbind(addresses,new.address)

# Print a header.

cat("# # # The combined data frame\n")

# Print the result.

print(all.addresses)

```

When we execute the above code, it produces the following result –

```

# # # # The First data frame
  city    state zipcode
[1,] "Tampa"  "FL"  "33602"
[2,] "Seattle" "WA"  "98104"
[3,] "Hartford" "CT"  "6161"
[4,] "Denver"  "CO"  "80294"

# # # The Second data frame
  city    state zipcode
1   Lowry    CO   80230
2   Charlotte FL   33949

# # # The combined data frame
  city    state zipcode
1   Tampa    FL   33602
2   Seattle  WA   98104
3   Hartford CT    6161
4   Denver   CO   80294
5   Lowry    CO   80230
6   Charlotte FL   33949

```

Merging Data Frames

We can merge two data frames by using the **merge()** function. The data frames must have same column names on which the merging happens.

In the example below, we consider the data sets about Diabetes in Pima Indian Women available in the library names "MASS". we merge the two data sets based on the values of blood pressure("bp") and body mass index("bmi"). On choosing these two columns for merging, the records where values of these two variables match in both data sets are combined together to form a single data frame.

```

library(MASS)

```



```
merged.Pima <- merge(x = Pima.te, y = Pima.tr,
  by.x = c("bp", "bmi"),
  by.y = c("bp", "bmi")
)
print(merged.Pima)
nrow(merged.Pima)
```

When we execute the above code, it produces the following result –

[illegible]

```
16 38 No
17 28 No
[1] 17
```

Melting and Casting

One of the most interesting aspects of R programming is about changing the shape of the data in multiple steps to get a desired shape. The functions used to do this are called **melt()** and **cast()**.

We consider the dataset called ships present in the library called "MASS".

```
library(MASS)
print(ships)
```

When we execute the above code, it produces the following result –

```
   type year period service incidents
1    A  60   60    127         0
2    A  60   75     63         0
3    A  65   60   1095         3
4    A  65   75   1095         4
5    A  70   60   1512         6
.....
.....
8    A  75   75   2244        11
9    B  60   60  44882        39
10   B  60   75  17176        29
11   B  65   60  28609        58
.....
.....
17   C  60   60   1179         1
18   C  60   75    552         1
19   C  65   60    781         0
.....
.....
```

Melt the Data

Now we melt the data to organize it, converting all columns other than type and year into multiple rows.

```
molten.ships <- melt(ships, id = c("type", "year"))
print(molten.ships)
```

When we execute the above code, it produces the following result –

```
   type year variable value
1    A  60   period    60
```

```

2   A  60  period    75
3   A  65  period    60
4   A  65  period    75
.....
.....
9   B  60  period    60
10  B  60  period    75
11  B  65  period    60
12  B  65  period    75
13  B  70  period    60
.....
.....
41  A  60  service   127
42  A  60  service    63
43  A  65  service  1095
.....
.....
70  D  70  service  1208
71  D  75  service    0
72  D  75  service  2051
73  E  60  service    45
74  E  60  service    0
75  E  65  service   789
.....
.....
101 C  70  incidents   6
102 C  70  incidents   2
103 C  75  incidents   0
104 C  75  incidents   1
105 D  60  incidents   0
106 D  60  incidents   0
.....
.....

```

Cast the Molten Data

We can cast the molten data into a new form where the aggregate of each type of ship for each year is created. It is done using the **cast()** function.

```

recasted.ship <- cast(molten.ships, type+year~variable,sum)

print(recasted.ship)

```

When we execute the above code, it produces the following result –

```

  type year period service incidents
1   A  60   135     190         0
2   A  65   135    2190         7

```


3	A	70	135	4865	24
4	A	75	135	2244	11
5	B	60	135	62058	68
6	B	65	135	48979	111
7	B	70	135	20163	56
8	B	75	135	7117	18
9	C	60	135	1731	2
10	C	65	135	1457	1
11	C	70	135	2731	8
12	C	75	135	274	1
13	D	60	135	356	0
14	D	65	135	480	0
15	D	70	135	1557	13
16	D	75	135	2051	4
17	E	60	135	45	0
18	E	65	135	1226	14
19	E	70	135	3318	17
20	E	75	135	542	1

Python:

Python Variables

Variable is a name which is used to refer memory location. Variable also known as identifier and used to hold value.

In Python, we don't need to specify the type of variable because Python is a type infer language and smart enough to get variable type.

Variable names can be a group of both letters and digits, but they have to begin with a letter or an underscore.

It is recommended to use lowercase letters for variable name. Rahul and rahul both are two different variables.

Note - Variable name should not be a keyword.

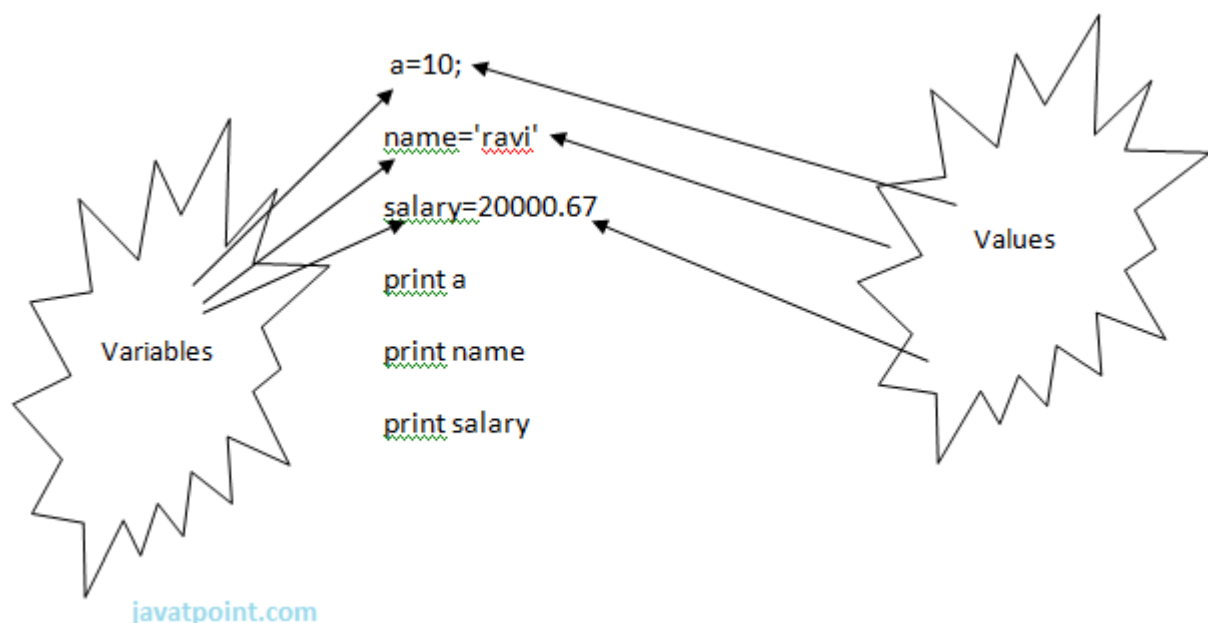
Declaring Variable and Assigning Values

Python does not bound us to declare variable before using in the application. It allows us to create variable at required time.

We don't need to declare explicitly variable in Python. When we assign any value to the variable that variable is declared automatically.

The equal (=) operator is used to assign value to a variable.

Eg:



Output:

1. >>>
2. 10
3. ravi
4. 20000.67
5. >>>

Multiple Assignment

Python allows us to assign a value to multiple variables in a single statement which is also known as multiple assignment.

We can apply multiple assignments in two ways either by assigning a single value to multiple variables or assigning multiple values to multiple variables. Lets see given examples.

1. Assigning single value to multiple variables

Eg:

1. x=y=z=50
2. `print` x
3. `print` y
4. `print` z

Output:

1. >>>
2. 50
3. 50
4. 50
5. >>>

2. Assigning multiple values to multiple variables:

Eg:

1. a,b,c=5,10,15
2. `print` a
3. `print` b
4. `print` c

Output:

1. >>>
2. 5
3. 10
4. 15
5. >>>

The values will be assigned in the order in which variables appears.

Basic Fundamentals:

This section contains the basic fundamentals of Python like :

i)Tokens and their types.

ii) Comments

a)Tokens:

- Tokens can be defined as a punctuator mark, reserved words and each individual word in a statement.
- Token is the smallest unit inside the given program.

There are following tokens in Python:

- Keywords.
- Identifiers.
- Literals.
- Operators.

Tuples:

- Tuple is another form of collection where different type of data can be stored.
- It is similar to list where data is separated by commas. Only the difference is that list uses square bracket and tuple uses parenthesis.
- Tuples are enclosed in parenthesis and cannot be changed.

Eg:

1. >>> tuple=('rahul',100,60.4,'deepak')
2. >>> tuple1=('sanjay',10)
3. >>> tuple
4. ('rahul', 100, 60.4, 'deepak')
5. >>> tuple[2:]

```

6. (60.4, 'deepak')
7. >>> tuple1[0]
8. 'sanjay'
9. >>> tuple+tuple1
10. ('rahul', 100, 60.4, 'deepak', 'sanjay', 10)
11. >>>

```

Dictionary:

- Dictionary is a collection which works on a key-value pair.
- It works like an associated array where no two keys can be same.
- Dictionaries are enclosed by curly braces ({}), and values can be retrieved by square bracket([]).

Eg:

```

1. >>> dictionary={'name':'charlie','id':100,'dept':'it'}
2. >>> dictionary
3. {'dept': 'it', 'name': 'charlie', 'id': 100}
4. >>> dictionary.keys()
5. ['dept', 'name', 'id']
6. >>> dictionary.values()
7. ['it', 'charlie', 100]
8. >>>

```

Python Keywords

Python Keywords are special reserved words which convey a special meaning to the compiler/interpreter. Each keyword has a special meaning and a specific operation. These keywords can't be used as variables. Following is the List of Python Keywords.

True	False	None	and	as
assert	def	class	continue	break
else	finally	elif	del	except
global	for	if	from	import
raise	try	or	return	pass

nonlocal	in	not	is	lambda
----------	----	-----	----	--------

Identifiers

Identifiers are the names given to the fundamental building blocks in a program.

These can be variables ,class ,object ,functions , lists , dictionaries etc.

There are certain rules defined for naming i.e., Identifiers.

I. An identifier is a long sequence of characters and numbers.

II.No special character except underscore (_) can be used as an identifier.

III.Keyword should not be used as an identifier name.

IV.Python is case sensitive. So using case is significant.

V.First character of an identifier can be character, underscore (_) but not digit.

Python Literals

Literals can be defined as a data that is given in a variable or constant.

Python support the following literals:

I. String literals:

String literals can be formed by enclosing a text in the quotes. We can use both single as well as double quotes for a String.

Eg:

"Aman" , '12345'

Types of Strings:

There are two types of Strings supported in Python:

a).Single line String- Strings that are terminated within a single line are known as Single line Strings.

Eg:

1. >>> text1='hello'

b).Multi line String- A piece of text that is spread along multiple lines is known as Multiple line String.

There are two ways to create Multiline Strings:

1). Adding black slash at the end of each line.

Eg:

```
1. >>> text1='hello\  
2. user'  
3. >>> text1  
4. 'hellouser'  
5. >>>
```

2).Using triple quotation marks:-

Eg:

```
1. >>> str2="""welcome  
2. to  
3. SSSIT"  
4. >>> print str2  
5. welcome  
6. to  
7. SSSIT  
8. >>>
```

II.Numeric literals:

Numeric Literals are immutable. Numeric literals can belong to following four different numerical types.

Int(signed integers)	Long(long integers)	float(floating point)	Complex(complex)
Numbers(can be both positive and negative) with no fractional part.eg: 100	Integers of unlimited size followed by lowercase or uppercase L eg: 87032845L	Real numbers with both integer and fractional part eg: -26.2	In the form of a+bj where a forms the real part and b forms the imaginary part of complex number. eg: 3.14j

III. Boolean literals:

A Boolean literal can have any of the two values: True or False.

IV. Special literals.

Python contains one special literal i.e., None.

None is used to specify to that field that is not created. It is also used for end of lists in Python.

Eg:

1. >>> val1=10
2. >>> val2=None
3. >>> val1
4. 10
5. >>> val2
6. >>> **print** val2
7. None
8. >>>

V.Literal Collections.

Collections such as tuples, lists and Dictionary are used in Python.

List:

- List contain items of different data types. Lists are mutable i.e., modifiable.

- The values stored in List are separated by commas(,) and enclosed within a square brackets([]). We can store different type of data in a List.
- Value stored in a List can be retrieved **using the slice operator([] and [:]).**
- The plus sign (+) is the list concatenation and asterisk(*) is the repetition operator.

Eg:

1. >>> list=['aman',678,20.4,'saurav']
2. >>> list1=[456,'rahul']
3. >>> list
4. ['aman', 678, 20.4, 'saurav']
5. >>> list[1:3]
6. [678, 20.4]
7. >>> list+list1
8. ['aman', 678, 20.4, 'saurav', 456, 'rahul']
9. >>> list1*2
10. [456, 'rahul', 456, 'rahul']
11. >>>

Python Operators

Operators are particular symbols that are used to perform operations on operands. It returns result that can be used in application.

Example

1. $4 + 5 = 9$

Here 4 and 5 are Operands and (+) , (=) signs are the operators. This expression produces the output 9.

Types of Operators

Python supports the following operators

1. Arithmetic Operators.
2. Relational Operators.
3. Assignment Operators.
4. Logical Operators.
5. Membership Operators.
6. Identity Operators.

7. Bitwise Operators.

Arithmetic Operators

The following table contains the arithmetic operators that are used to perform arithmetic operations.

Operators	Description
//	Perform Floor division(gives integer value after division)
+	To perform addition
-	To perform subtraction
*	To perform multiplication
/	To perform division
%	To return remainder after division(Modulus)
**	Perform exponent(raise to power)

Example

1. >>> 10+20
2. 30
3. >>> 20-10
4. 10
5. >>> 10*2
6. 20
7. >>> 10/2
8. 5
9. >>> 10%3
10. 1
11. >>> 2**3
12. 8
13. >>> 10//3
14. 3
15. >>>

Relational Operators

The following table contains the relational operators that are used to check relations.

Operators	Description
<	Less than
>	Greater than
<=	Less than or equal to
>=	Greater than or equal to
==	Equal to
!=	Not equal to
<>	Not equal to(similar to !=)

eg:

1. >>> 10<20
2. True
3. >>> 10>20
4. False
5. >>> 10<=10
6. True
7. >>> 20>=15
8. True
9. >>> 5==6
10. False
11. >>> 5!=6
12. True
13. >>> 10<>2
14. True
15. >>>

Assignment Operators

The following table contains the assignment operators that are used to assign values to the variables.

Operators	Description
-----------	-------------

=	Assignment
/=	Divide and Assign
+=	Add and assign
-=	Subtract and Assign
*=	Multiply and assign
%=	Modulus and assign
**=	Exponent and assign
//=	Floor division and assign

Example

1. >>> c=10
2. >>> c
3. 10
4. >>> c+=5
5. >>> c
6. 15
7. >>> c-=5
8. >>> c
9. 10
10. >>> c*=2
11. >>> c
12. 20
13. >>> c/=2
14. >>> c
15. 10
16. >>> c%=3
17. >>> c
18. 1
19. >>> c=5
20. >>> c**=2
21. >>> c
22. 25
23. >>> c//=2
24. >>> c

25. 12

26. >>>

Logical Operators

The following table contains the arithmetic operators that are used to perform arithmetic operations.

Operators	Description
and	Logical AND(When both conditions are true output will be true)
or	Logical OR (If any one condition is true output will be true)
not	Logical NOT(Compliment the condition i.e., reverse)

Example

1. a=5>4 **and** 3>2
2. **print** a
3. b=5>4 **or** 3<2
4. **print** b
5. c=**not**(5>4)
6. **print** c

Output:

1. >>>
2. True
3. True
4. False
5. >>>

Membership Operators

The following table contains the membership operators.

Operators	Description
in	Returns true if a variable is in sequence of another variable, else false.
not in	Returns true if a variable is not in sequence of another variable, else false.

Example

1. a=10
2. b=20
3. list=[10,20,30,40,50];
4. **if** (a **in** list):
5. **print** "a is in given list"
6. **else:**
7. **print** "a is not in given list"
8. **if**(b **not in** list):
9. **print** "b is not given in list"
10. **else:**
11. **print** "b is given in list"

Output:

1. >>>
2. a **is in** given list
3. b **is** given **in** list
4. >>>

Identity Operators

The following table contains the identity operators.

Operators	Description
is	Returns true if identity of two operands are same, else false
is not	Returns true if identity of two operands are not same, else false.

Example

1. a=20
2. b=20
3. **if**(a **is** b):
4. **print** a,b have same identity
5. **else:**
6. **print** a, b are different
7. b=10
8. **if**(a **is not** b):
9. **print** a,b have different identity

10. **else:**

11. **print** a,b have same identity

Output

1. >>>
2. a,b have same identity
3. a,b have different identity
4. >>>

Python Comments

Python supports two types of comments:

1) Single lined comment:

In case user wants to specify a single line comment, then comment must start with #?

Eg:

1. **#** This is single line comment.

2) Multi lined Comment:

Multi lined comment can be given inside triple quotes.

eg:

1. **"""** This
2. **Is**
3. **Multipline comment"""**

eg:

1. **#single line comment**
2. **print "Hello Python"**
3. **"""This is**
4. **multiline comment"""**

Control statements:

Python If Statements

The Python if statement is a statement which is used to test specified condition. We can use if statement to perform conditional operations in our Python application.

The if statement executes only when specified condition is **true**. We can pass any valid expression into the if parentheses.

There are various types of if statements in Python.

- if statement
- if-else statement
- nested if statement

Python If Statement Syntax

1. **if**(condition):
2. statements

Python If statement flow chart

Python If Statement Example

1. a=10
2. **if** a==10:
3. **print** "Welcome to javatpoint"

Output:

```
Hello User
```

```
*****
```

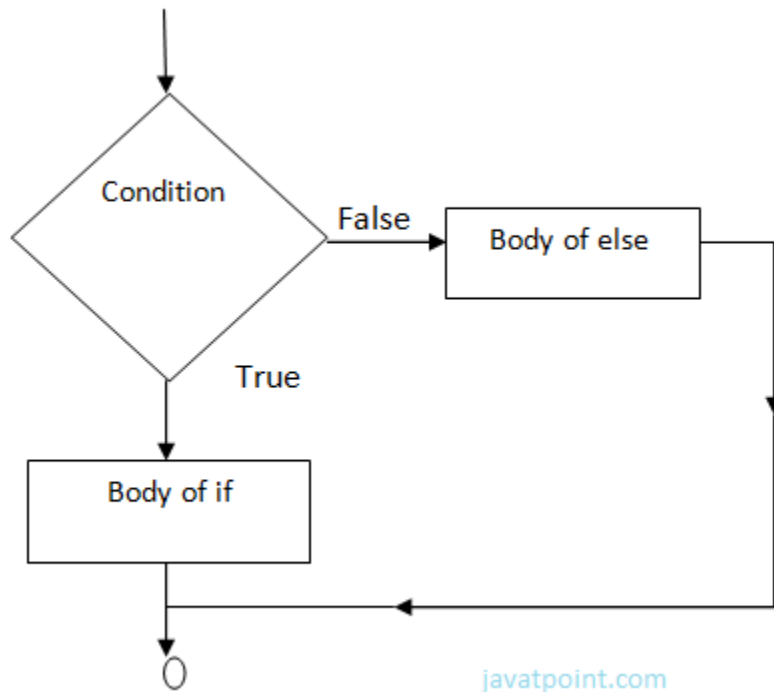
Python If Else Statements

The If statement is used to test specified condition and if the condition is true, if block executes, otherwise else block executes.

The else statement executes when the if statement is false.

Python If Else Syntax

1. **if**(condition): False
2. statements
3. **else**: True
4. statements



Example-

1. year=2000
2. **if** year%4==0:
3. **print** "Year is Leap"
4. **else**:
5. **print** "Year is not Leap"

Output:

Year is Leap

Python Nested If Else Statement

In python, we can use nested If Else to check multiple conditions. Python provides **elif** keyword to make nested If statement.

This statement is like executing a if statement inside a else statement.

Python Nested If Else Syntax

1. If statement:
2. Body
3. **elif** statement:
4. Body
5. **else**:
6. Body

Python Nested If Else Example

1. a=10
2. **if** a>=20:
3. **print** "Condition is True"
4. **else**:
5. **if** a>=15:
6. **print** "Checking second value"
7. **else**:
8. **print** "All Conditions are false"

Output:

All Conditions are false.

For Loop

Python **for loop** is used to iterate the elements of a collection in the order that they appear. This collection can be a sequence(list or string).

Python For Loop Syntax

1. **for** <variable> **in** <sequence>:

Output:

1. 1
2. 7
3. 9

Explanation:

- Firstly, the first value will be assigned in the variable.
- Secondly all the statements in the body of the loop are executed with the same value.
- Thirdly, once step second is completed then variable is assigned the next value in the sequence and step second is repeated.
- Finally, it continues till all the values in the sequence are assigned in the variable and processed.

Python For Loop Simple Example

1. num=2
2. **for** a **in** range (1,6):
3. **print** num * a

Output:

1. 2
- 2.
3. 4
- 4.
5. 6
- 6.
7. 8
- 8.
9. 10

Python Example to Find Sum of 10 Numbers

1. sum=0
2. **for** n **in** range(1,11):
3. sum+=n
4. **print** sum

Output:

1. 55

Python Nested For Loops

Loops defined within another Loop are called Nested Loops. Nested loops are used to iterate matrix elements or to perform complex computation.

When an outer loop contains an inner loop in its body it is called Nested Looping.

Python Nested For Loop Syntax

1. **for** <expression>:
2. **for** <expression>:
3. Body

Python Nested For Loop Example

1. **for** i **in** range(1,6):
2. **for** j **in** range (1,i+1):
3. **print** i,
4. **print**

Output:

1. >>>
2. 1
3. 2 2
4. 3 3 3
5. 4 4 4 4
6. 5 5 5 5 5
7. >>>

Explanation:

For each value of Outer loop the whole inner loop is executed.

For each value of inner loop the Body is executed each time.

Python Nested Loop Example 2

1. **for** i **in** range (1,6):
2. **for** j **in** range (5,i-1,-1):
3. **print** "*",
4. **print**

Output:

1. >>>
2. * * * * *
3. * * * *
4. * * *
5. * *

6. *

Python While Loop

In Python, while loop is used to execute number of statements or body till the specified condition is true. Once the condition is false, the control will come out of the loop.

Python While Loop Syntax

1. **while** <expression>:
2. Body

Here, loop Body will execute till the expression passed is true. The Body may be a single statement or multiple statement.

Python While Loop Example 1

1. a=10
2. **while** a>0:
3. **print** "Value of a is",a
4. a=a-2

print "Loop is Completed"

Output:

1. >>>
2. Value of a **is** 10
3. Value of a **is** 8
4. Value of a **is** 6
5. Value of a **is** 4
6. Value of a **is** 2
7. Loop **is** Completed
8. >>>

Explanation:

- Firstly, the value in the variable is initialized.
- Secondly, the condition/expression in the while is evaluated. Consequently if condition is true, the control enters in the body and executes all the statements . If the condition/expression passed results in false then the control exists the body and straight away control goes to next instruction after body of while.

- Thirdly, in case condition was true having completed all the statements, the variable is incremented or decremented. Having changed the value of variable step second is followed. This process continues till the expression/condition becomes false.
- Finally Rest of code after body is executed.

Python While Loop Example 2

```
1. n=153
2. sum=0
3. while n>0:
4.     r=n%10
5.     sum+=r
6.     n=n/10
7. print sum
```

Output:

```
1. >>>
2. 9
3. >>>
```

Python Break

Break statement is a jump statement which is used to transfer execution control. It breaks the current execution and in case of inner loop, inner loop terminates immediately.

When break statement is applied the control points to the line following the body of the loop, hence applying break statement makes the loop to terminate and controls goes to next line pointing after loop body.

Python Break Example 1

```
1. for i in [1,2,3,4,5]:
2.     if i==4:
3.         print "Element found"
4.         break
5.     print i,
```

Output:

```
1. >>>
2. 1 2 3 Element found
```

3. >>>

Python Break Example 2

1. **for** letter **in** 'Python3':
2. **if** letter == 'o':
3. **break**
4. **print** (letter)

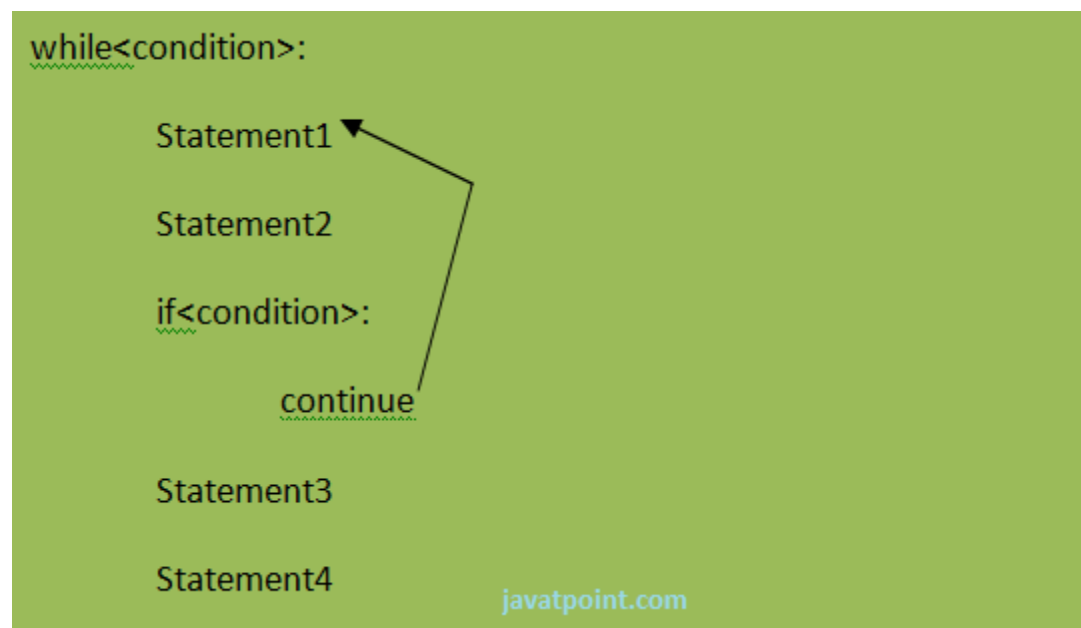
Output:

1. P
2. y
3. t
4. h

Python Continue Statement

Python Continue Statement is a jump statement which is used to skip execution of current iteration. After skipping, loop continue with next iteration.

We can use continue statement with for as well as while loop in Python.



Python Continue Statement Example

1. a=0

```
2. while a<=5:
3.     a=a+1
4.     if a%2==0:
5.         continue
6.     print a
7. print "End of Loop"
```

Output:

```
1. >>>
2. 1
3. 3
4. 5
5. End of Loop
6. >>>
```

Python Pass

In Python, pass keyword is used to execute nothing; it means, when we don't want to execute code, the pass can be used to execute empty. It is same as the name refers to. It just makes the control to pass by without executing any code. If we want to bypass any code pass statement can be used.

Python Pass Syntax

```
1. pass
```

Python Pass Example

```
1. for i in [1,2,3,4,5]:
2.     if i==3:
3.         pass
4.         print "Pass when value is",i
5.     print i,
```

Output:

```
1. >>>
2. 1 2 Pass when value is 3
3. 3 4 5
```


4. >>>

*****g

Python oops:

Python OOPs Concepts

Python is an object-oriented programming language. It allows us to develop applications using Object Oriented approach. In Python, we can easily create and use classes and objects.

Major principles of object-oriented programming system are given below

- Object
- Class
- Method
- Inheritance
- Polymorphism
- Data Abstraction
- Encapsulation

Object

Object is an entity that has state and behavior. It may be anything. It may be physical and logical. For example: mouse, keyboard, chair, table, pen etc.

Everything in Python is an object, and almost everything has attributes and methods. All functions have a built-in attribute `__doc__`, which returns the doc string defined in the function source code.

Class

Class can be defined as a collection of objects. It is a logical entity that has some specific attributes and methods. For example: if you have an employee class then it should contain an attribute and method i.e. an email id, name, age, salary etc.

Syntax:

1. **class** ClassName:
2. <statement-1>
3. .

4. .
5. .
6. <statement-N>

Method

Method is a function that is associated with an object. In Python, method is not unique to class instances. Any object type can have methods.

Inheritance

Inheritance is a feature of object-oriented programming. It specifies that one object acquires all the properties and behaviors of parent object. By using inheritance you can define a new class with a little or no changes to the existing class. The new class is known as derived class or child class and from which it inherits the properties is called base class or parent class.

It provides re-usability of the code.

Polymorphism

Polymorphism is made by two words "poly" and "morphs". Poly means many and Morphs means form, shape. It defines that one task can be performed in different ways. For example: You have a class animal and all animals talk. But they talk differently. Here, the "talk" behavior is polymorphic in the sense and totally depends on the animal. So, the abstract "animal" concept does not actually "talk", but specific animals (like dogs and cats) have a concrete implementation of the action "talk".

Encapsulation

Encapsulation is also the feature of object-oriented programming. It is used to restrict access to methods and variables. In encapsulation, code and data are wrapped together within a single unit from being modified by accident.

Data Abstraction

Data abstraction and encapsulation both are often used as synonyms. Both are nearly synonym because data abstraction is achieved through encapsulation.

Abstraction is used to hide internal details and show only functionalities. Abstracting something means to give names to things, so that the name captures the core of what a function or a whole program does.

Object-oriented vs Procedure-oriented Programming languages

Index	Object-oriented Programming	Procedural Programming
1.	Object-oriented programming is an problem solving approach and used where computation is done by using objects.	Procedural programming uses a list of instructions to do computation step by step.
2.	It makes development and maintenance easier.	In procedural programming, It is not easy to maintain the codes when project becomes lengthy.
3.	It simulates the real world entity. So real world problems can be easily solved through oops.	It doesn't simulate the real world. It works on step by step instructions divided in small parts called functions.
4.	It provides data hiding. so it is more secure than procedural languages. You cannot access private data from anywhere.	Procedural language doesn't provide any proper way for data binding so it is less secure.
5.	Example of object-oriented programming languages are: C++, Java, .Net, Python, C# etc.	Example of procedural languages are: C, Fortran, Pascal, VB etc.

Python Object

Python is an object oriented programming language. So, its main focus is on objects unlike procedure oriented programming languages which mainly focuses on functions.

In object oriented programming language, object is simply a collection of data (variables) and methods (functions) that act on those data.

Python Class

A class is a blueprint for the object. Let's understand it by an example:

Suppose a class is a prototype of a building. A building contains all the details about the floor, doors, windows, etc. we can make another buildings (as many as we want) based on these details. So building is a class and we can create many objects from a class.

An object is also called an instance of a class and the process of creating this object is known as instantiation.

Python classes contain all the standard features of Object Oriented Programming. A python class is a mixture of class mechanism of C++ and Modula-3.

Define a class in Python

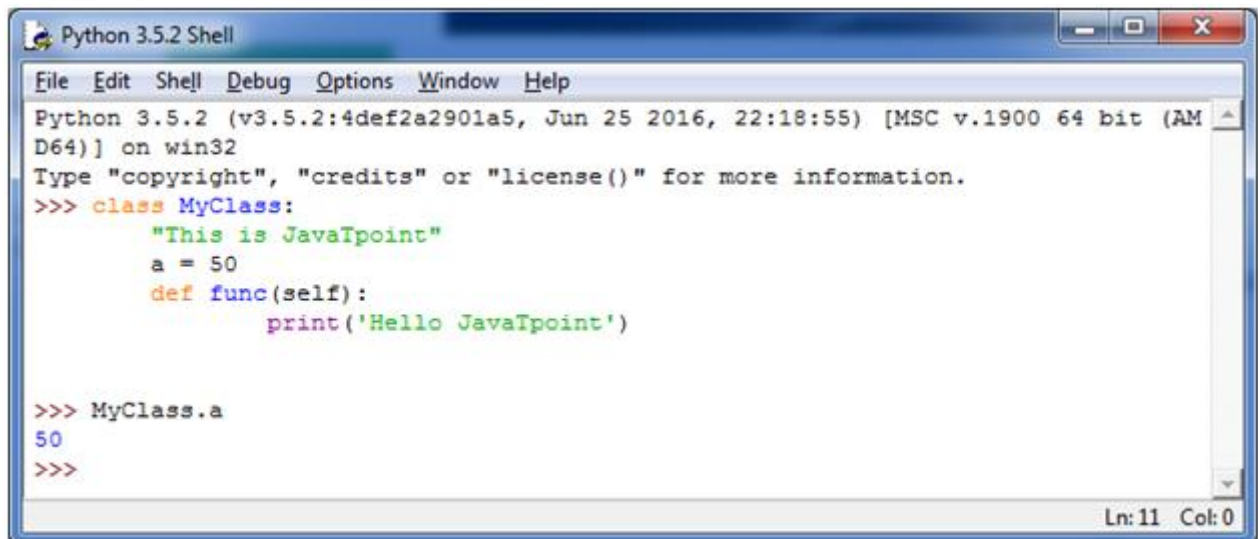
In Python, a class is defined by using a keyword **class** like a function definition begins with the keyword **def**.

Syntax of a class definition:

1. **class** ClassName:
2. <statement-1>
3. .
4. .
5. .
6. <statement-N>

A class creates a new local namespace to define its all attributes. These attributes may be data or functions.

See this example:

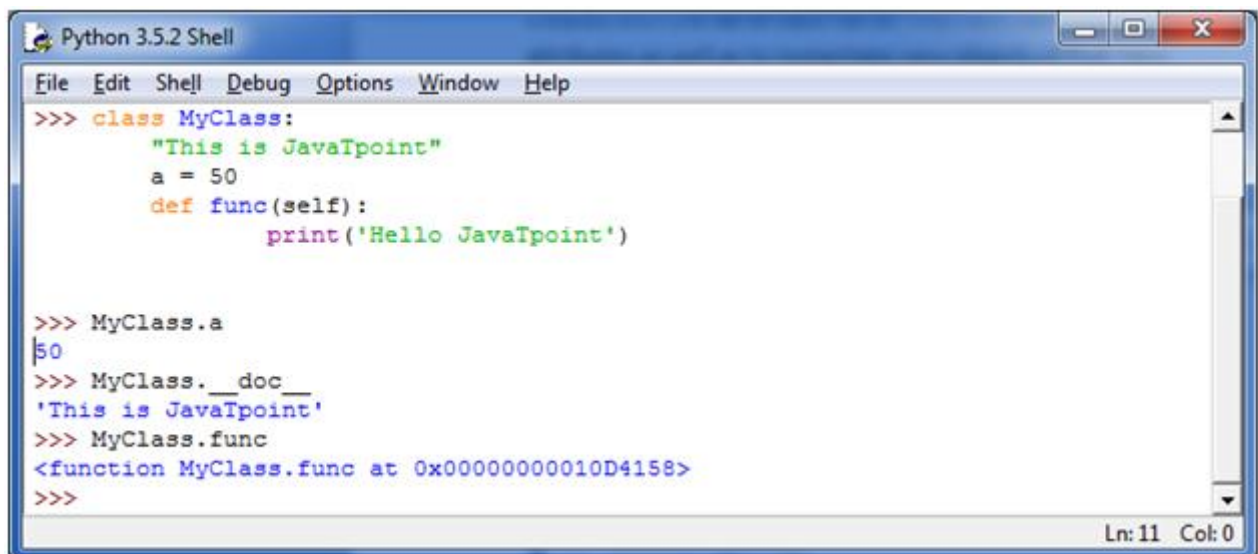


```
Python 3.5.2 Shell
File Edit Shell Debug Options Window Help
Python 3.5.2 (v3.5.2:4def2a2901a5, Jun 25 2016, 22:18:55) [MSC v.1900 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>> class MyClass:
    "This is JavaTpoint"
    a = 50
    def func(self):
        print('Hello JavaTpoint')

>>> MyClass.a
50
>>>
```

There are also some special attributes that begins with double underscore (__). For example: __doc__ attribute. It is used to fetch the docstring of that class. When we define a class, a new class object is created with the same class name. This new class object provides a facility to access the different attributes as well as to instantiate new objects of that class.

See this example:



```
Python 3.5.2 Shell
File Edit Shell Debug Options Window Help
>>> class MyClass:
    "This is JavaTpoint"
    a = 50
    def func(self):
        print('Hello JavaTpoint')

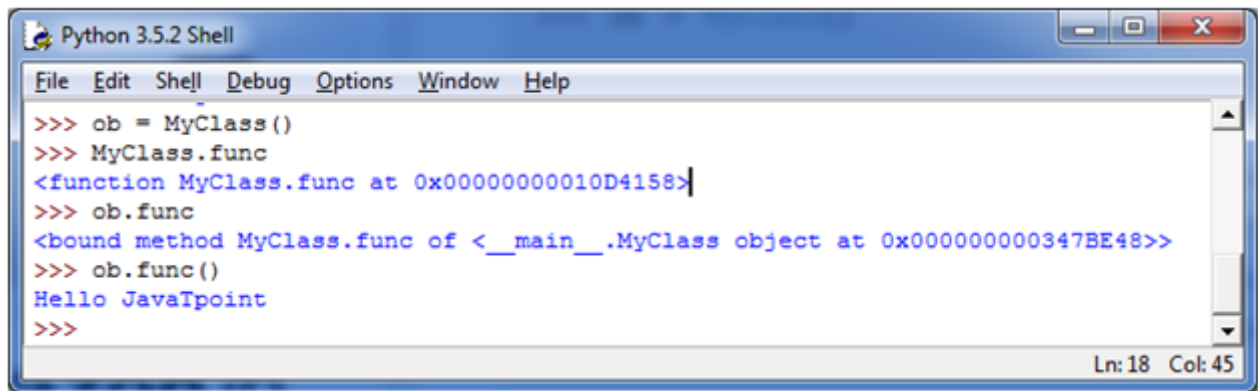
>>> MyClass.a
50
>>> MyClass.__doc__
'This is JavaTpoint'
>>> MyClass.func
<function MyClass.func at 0x00000000010D4158>
>>>
```

Create an Object in Python

We can create new object instances of the classes. The procedure to create an object is similar to a function call.

Let's take an example to create a new instance object **ob**. We can access attributes of objects by using the object name prefix.

See this example:



```
Python 3.5.2 Shell
File Edit Shell Debug Options Window Help
>>> ob = MyClass()
>>> MyClass.func
<function MyClass.func at 0x00000000010D4158>
>>> ob.func
<bound method MyClass.func of <__main__.MyClass object at 0x0000000000347BE48>>
>>> ob.func()
Hello JavaTpoint
>>>
```

Here, attributes may be data or method. Method of an object is corresponding functions of that class. For example: MyClass.func is a function object and ob.func is a method object.

Python Object Class Example

1. **class** Student:
2. **def** __init__(self, rollno, name):
3. self.rollno = rollno
4. self.name = name
5. **def** displayStudent(self):
6. **print** "rollno : ", self.rollno, ", name: ", self.name
7. emp1 = Student(121, "Ajeet")
8. emp2 = Student(122, "Sonoo")
9. emp1.displayStudent()
10. emp2.displayStudent()

Output:

- 1.
2. rollno : 121 , name: Ajeet
3. rollno : 122 , name: Sonoo

*****8

Python Constructors

A constructor is a special type of method (function) which is used to initialize the instance members of the class. Constructor can be parameterized and non-parameterized as well. Constructor definition executes when we create object of the class. Constructors also verify that there are enough resources for the object to perform any start-up task.

Creating a Constructor

A constructor is a class function that begins with double underscore (`__`). The name of the constructor is always the same `__init__()`.

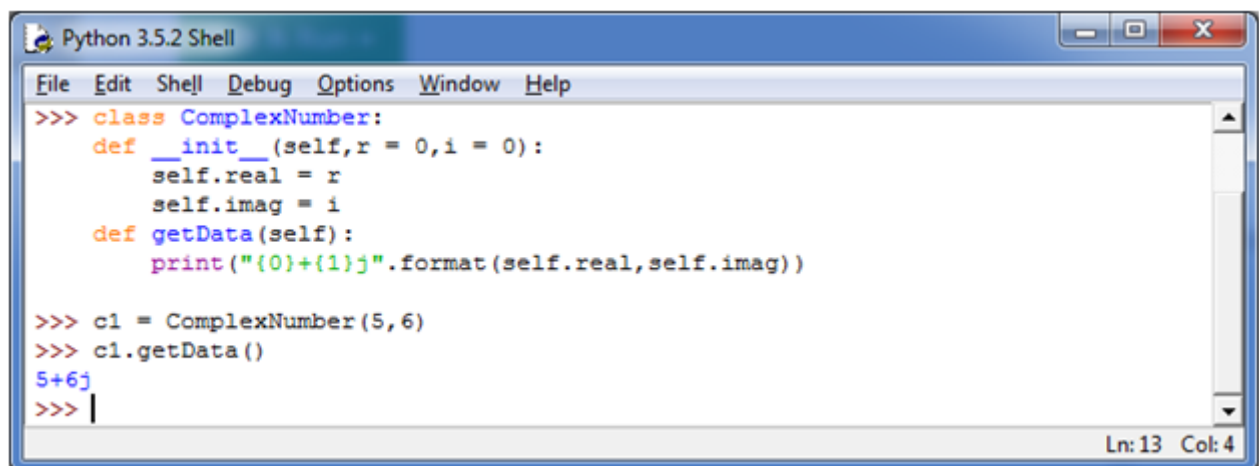
While creating an object, a constructor can accept arguments if necessary. When we create a class without a constructor, Python automatically creates a default constructor that doesn't do anything.

Every class must have a constructor, even if it simply relies on the default constructor.

Python Constructor Example

Let's create a class named `ComplexNumber`, having two functions `__init__()` function to initialize the variable and `getData()` to display the number properly.

See this example:

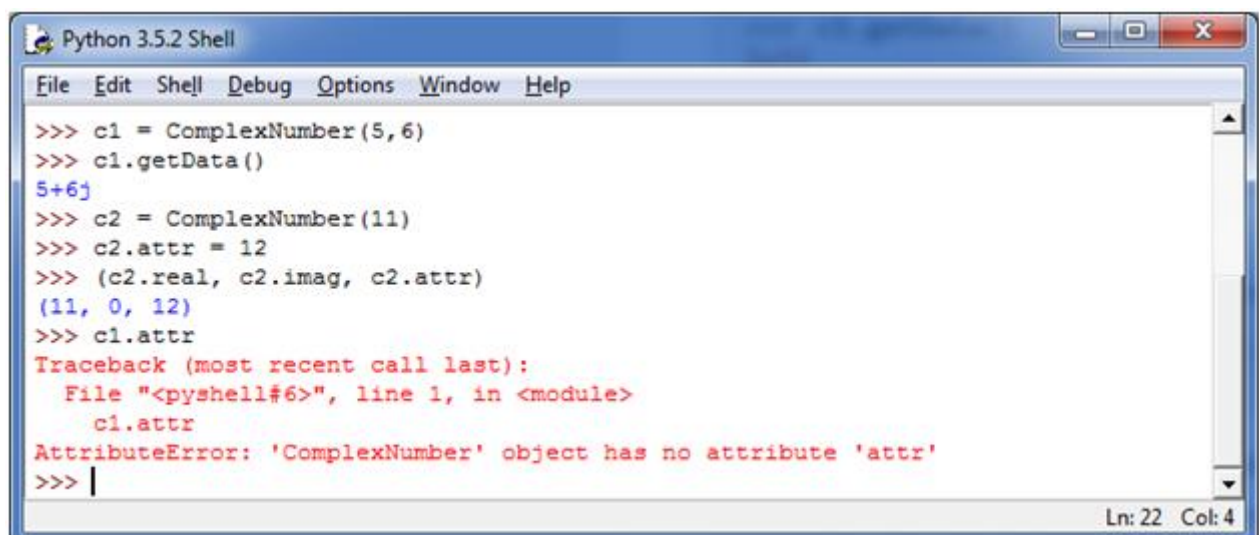


```
Python 3.5.2 Shell
File Edit Shell Debug Options Window Help
>>> class ComplexNumber:
>>>     def __init__(self,r = 0,i = 0):
>>>         self.real = r
>>>         self.imag = i
>>>     def getData(self):
>>>         print("{0}+{1}j".format(self.real,self.imag))
>>>
>>> c1 = ComplexNumber(5,6)
>>> c1.getData()
5+6j
>>> |
```

Ln: 13 Col: 4

You can create a new attribute for an object and read it well at the time of defining the values. But you can't create the attribute for already defined objects.

See this example:



```
Python 3.5.2 Shell
File Edit Shell Debug Options Window Help
>>> c1 = ComplexNumber(5,6)
>>> c1.getData()
5+6j
>>> c2 = ComplexNumber(11)
>>> c2.attr = 12
>>> (c2.real, c2.imag, c2.attr)
(11, 0, 12)
>>> c1.attr
Traceback (most recent call last):
  File "<pysHELL#6>", line 1, in <module>
    c1.attr
AttributeError: 'ComplexNumber' object has no attribute 'attr'
>>> |
```

Ln: 22 Col: 4

In Python, Constructors can be parameterized and non-parameterized as well. The parameterized constructors are used to set custom value for instance variables that can be used further in the application.

Let's see an example, here, we are creating a non parameterized constructor.

Python Non Parameterized Constructor Example

```
1. class Student:
2.     # Constructor - non parameterized
3.     def __init__(self):
4.         print("This is non parametrized constructor")
5.     def show(self,name):
6.         print("Hello",name)
7. student = Student()
8. student.show("irfan")
```

Output:

```
This is non parametrized constructor
Hello irfan
```

Let's see an example, here, we are creating a parameterized constructor.

Python Parameterized Constructor Example

```
1. class Student:
2.     # Constructor - parameterized
3.     def __init__(self, name):
4.         print("This is parametrized constructor")
5.         self.name = name
6.     def show(self):
7.         print("Hello",self.name)
8. student = Student("irfan")
9. student.show()
```

Output:

```
This is parametrized constructor
Hello irfan
```

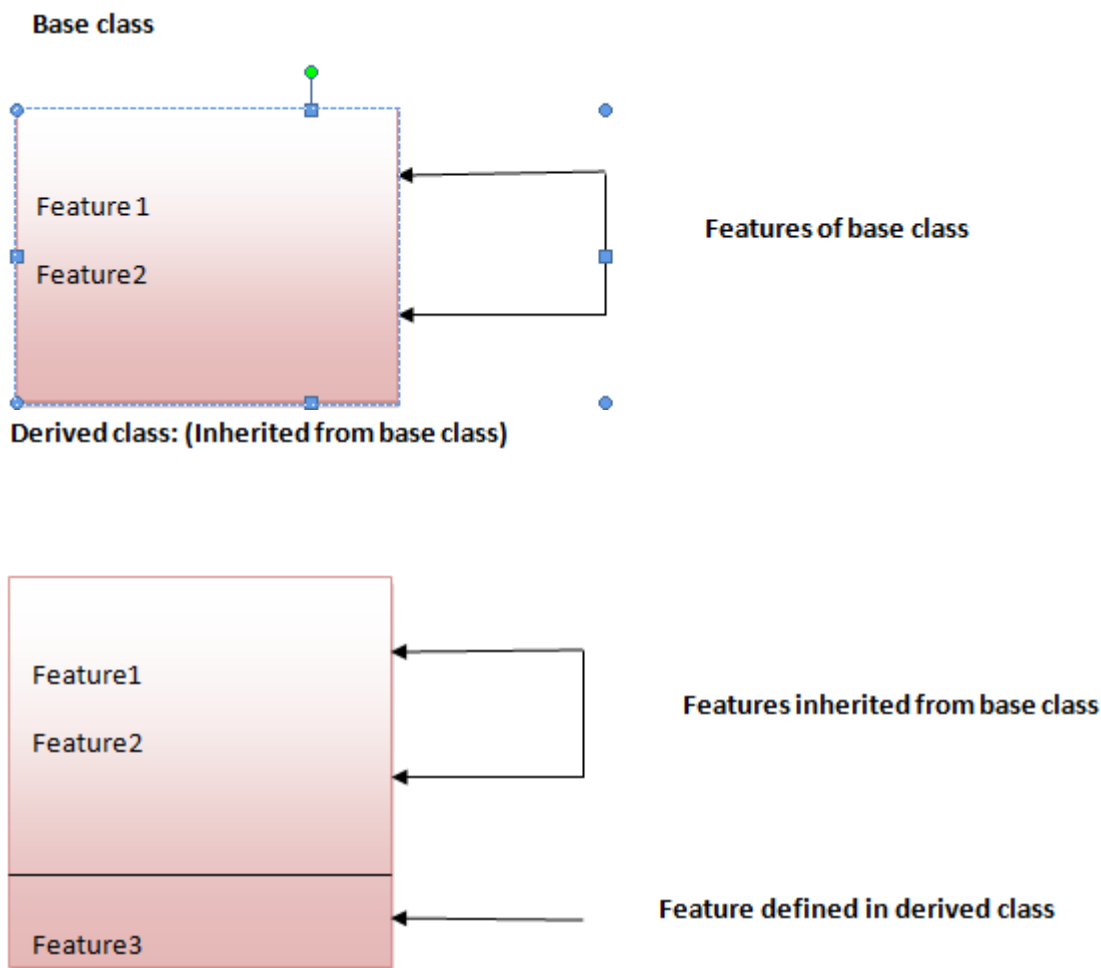
Python Inheritance

What is Inheritance

Inheritance is a feature of Object Oriented Programming. It is used to specify that one class will get most or all of its features from its parent class. It is a very powerful feature which facilitates users to create a new class with a few or more modification to an existing class. The new class is called child class or derived class and the main class from which it inherits the properties is called base class or parent class.

The child class or derived class inherits the features from the parent class, adding new features to it. It facilitates **re-usability of code**.

Image representation:



The following are the syntax to achieve inheritance. We can either pass parent class name or parent class name with module name as we did in the below example.

Python Inheritance Syntax

1. **class** DerivedClassName(BaseClassName):
2. <statement-1>
3. .
4. .
5. .
6. <statement-N>

Python Inheritance Syntax 2

1. **class** DerivedClassName(modulename.BaseClassName):
2. <statement-1>
3. .
4. .
5. .
6. <statement-N>

Parameter explanation

The name BaseClassName must be defined in a scope containing the derived class definition. We can also use other arbitrary expressions in place of a base class name. This is used when the base class is defined in another module.

Python Inheritance Example

Let's see a simple python inheritance example where we are using two classes: Animal and Dog. Animal is the parent or base class and Dog is the child class.

Here, we are defining eat() method in Animal class and bark() method in Dog class. In this example, we are creating instance of Dog class and calling eat() and bark() methods by the instance of child class only. Since, parent properties and behaviors are inherited to child object automatically, we can call parent and child class methods by the child instance only.

1. **class** Animal:
2. **def** eat(self):
3. **print** 'Eating...'
4. **class** Dog(Animal):
5. **def** bark(self):
6. **print** 'Barking...'
7. d=Dog()
8. d.eat()
9. d.bark()

Output:

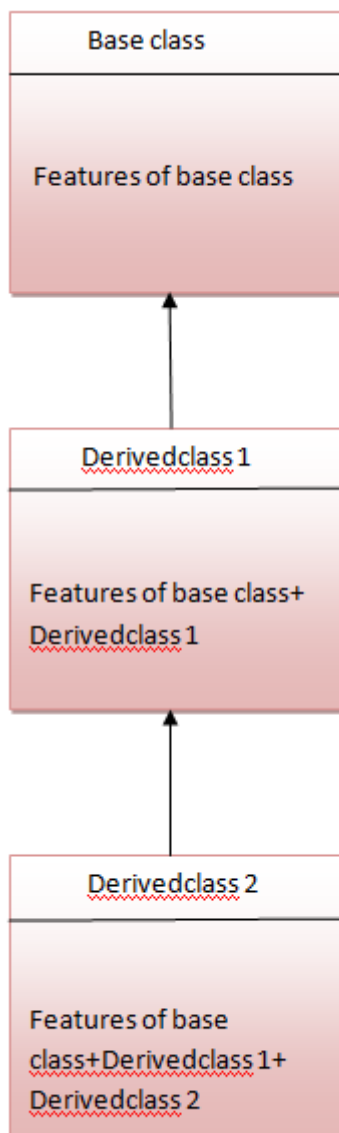
1. Eating...
2. Barking...

Python Multilevel Inheritance

Multilevel inheritance is also possible in Python like other Object Oriented programming languages. We can inherit a derived class from another derived class, this process is known as multilevel inheritance. In Python, multilevel inheritance can be done at any depth.

See the following example

Image representation:



Python Multilevel Inheritance Example

```
1. class Animal:
2.     def eat(self):
3.         print 'Eating...'
4. class Dog(Animal):
5.     def bark(self):
6.         print 'Barking...'
7. class BabyDog(Dog):
8.     def weep(self):
9.         print 'Weeping...'
10. d=BabyDog()
11. d.eat()
12. d.bark()
13. d.weep()
```

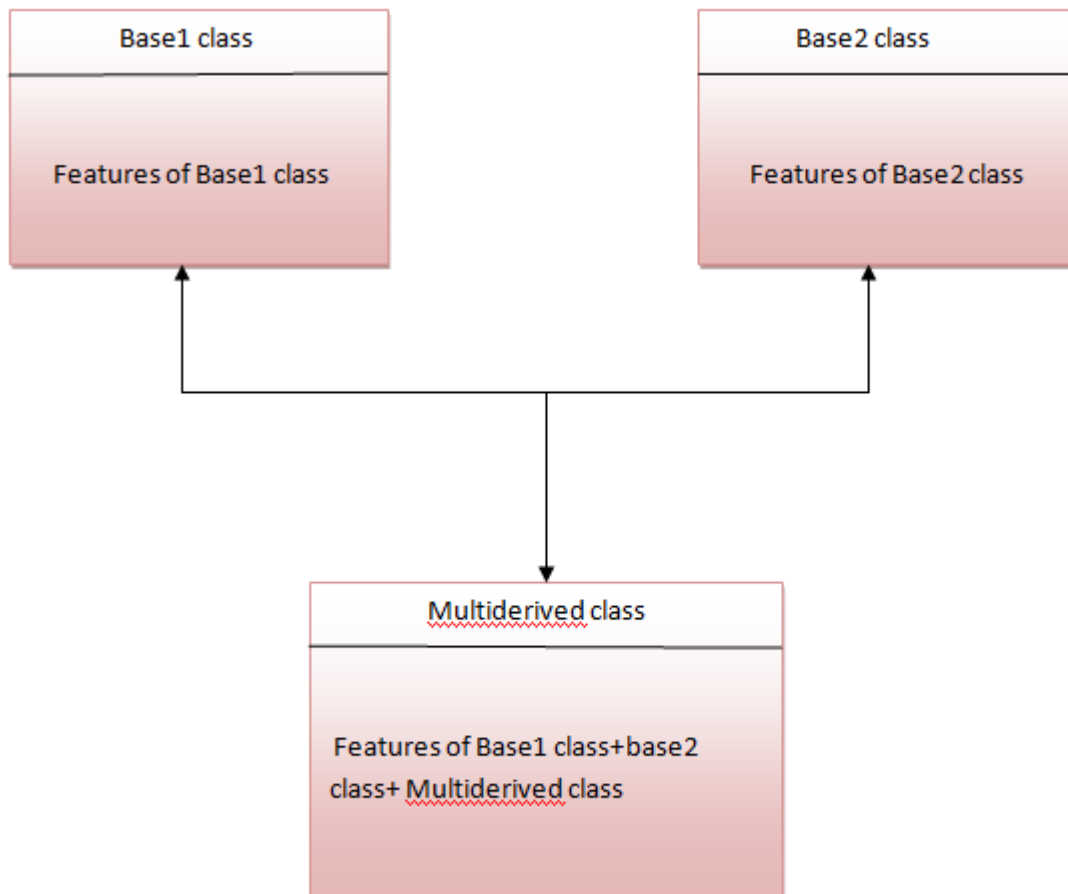
Output:

```
1. Eating...
2. Barking...
3. Weeping
```

Python Multiple Inheritance

Python supports multiple inheritance too. It allows us to inherit multiple parent classes. We can derive a child class from more than one base (parent) classes.

Image Representation



The multiderived class inherits the properties of both classes base1 and base2.

Let's see the syntax of multiple inheritance in Python.

Python Multiple Inheritance Syntax

1. **class** DerivedClassName(Base1, Base2, Base3):
2. <statement-1>
3. .
4. .
5. .
6. <statement-N>

Or

1. **class** Base1:
2. **pass**
- 3.
4. **class** Base2:

5. `pass`
- 6.
7. `class MultiDerived(Base1, Base2):`
8. `pass`

Python Multiple Inheritance Example

1. `class First(object):`
2. `def __init__(self):`
3. `super(First, self).__init__()`
4. `print("first")`
- 5.
6. `class Second(object):`
7. `def __init__(self):`
8. `super(Second, self).__init__()`
9. `print("second")`
- 10.
11. `class Third(Second, First):`
12. `def __init__(self):`
13. `super(Third, self).__init__()`
14. `print("third")`
- 15.
16. `Third();`

Output:

1. first
2. second
3. third

Why super () keyword

The super() method is most commonly used with __init__ function in base class. This is usually the only place where we need to do some things in a child then complete the initialization in the parent.

See this example:

1. `class Child(Parent):`
2. `def __init__(self, stuff):`
3. `self.stuff = stuff`

4. `super(Child, self).__init__()`

Composition in Python

Composition is used to do the same thing which can be done by inheritance.

PYTHON STRINGS

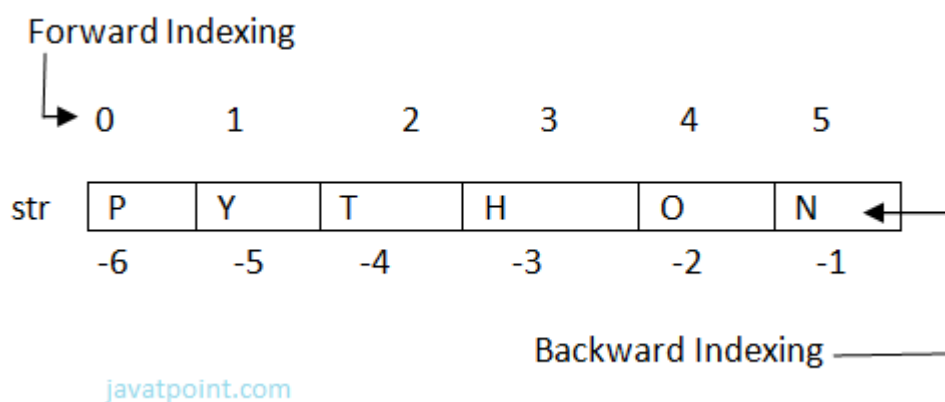
Python string is a built-in type text sequence. It is used to handle textual data in python. Python Strings are immutable sequences of Unicode points. Creating Strings are simplest and easy to use in Python.

We can simply create Python String by enclosing a text in single as well as double quotes. Python treat both single and double quotes statements same.

Accessing Python Strings

- In Python, Strings are stored as individual characters in a contiguous memory location.
- The benefit of using String is that it can be accessed from both the directions (forward and backward).
- Both forward as well as backward indexing are provided using Strings in Python.
 - Forward indexing starts with 0,1,2,3,....
 - Backward indexing starts with -1,-2,-3,-4,....

Example



1. `str[0]='P'=str[-6]` , `str[1]='Y' = str[-5]` , `str[2] = 'T' = str[-4]` , `str[3] = 'H' = str[-3]`
2. `str[4] = 'O' = str[-2]` , `str[5] = 'N' = str[-1]`.

Python String Example

Here, we are creating a simple program to retrieve String in reverse as well as normal form.

1. name="Rajat"
2. length=len(name)
3. i=0
4. for n in range(-1,(-length-1),-1):
5. print name[i],"\t",name[n]
6. i+=1

Output:

```
>>>
R      t
a      a
j      j
a      a
t      R
>>>
```

Python Strings Operators

To perform operation on string, Python provides basically 3 types of Operators that are given below.

1. Basic Operators.
2. Membership Operators.
3. Relational Operators.

Python String Basic Operators

There are two types of basic operators in String "+" and "*".

String Concatenation Operator (+)

The concatenation operator (+) concatenates two Strings and creates a new String.

Python String Concatenation Example

```
>>> "ravindra" + "babu"
```

Output:

```
'ravindrababu'
>>>
```

Expression	Output
'10' + '20'	'1020'
"s" + "007"	's007'
'abcd123' + 'xyz4'	'abcd123xyz4'

NOTE: Both the operands passed for concatenation must be of same type, else it will show an error.

Eg:

```
'abc' + 3
>>>
```

output:

```
Traceback (most recent call last):
  File "", line 1, in
    'abc' + 3
TypeError: cannot concatenate 'str' and 'int' objects
>>>
```

Python String Replication Operator (*)

Replication operator uses two parameters for operation, One is the **integer value** and the other one is the **String argument**.

The Replication operator is used to repeat a string number of times. The string will be repeated the number of times which is given by the integer value.

Python String Replication Example

1. >>> 5*"Vimal"

Output:

```
'VimalVimalVimalVimalVimal'
```

Expression	Output
------------	--------

"soono"*2	'soonosoono'
3*'1'	'111'
'\$'*5	'\$\$\$\$\$'

NOTE: We can use Replication operator in any way i.e., int * string or string * int. Both the parameters passed cannot be of same type.

Python String Membership Operators

Membership Operators are already discussed in the Operators section. Let see with context of String.

There are two types of Membership operators

1) in:"in" operator returns true if a character or the entire substring is present in the specified string, otherwise false.

2) not in:"not in" operator returns true if a character or entire substring does not exist in the specified string, otherwise false.

Python String membership operator Example

```

1. >>> str1="javatpoint"
2. >>> str2='sssit'
3. >>> str3="seomount"
4. >>> str4='java'
5. >>> st5="it"
6. >>> str6="seo"
7. >>> str4 in str1
8. True
9. >>> str5 in str2
10. >>> st5 in str2
11. True
12. >>> str6 in str3
13. True
14. >>> str4 not in str1
15. False
16. >>> str1 not in str4
17. True

```


Python Relational Operators

All the comparison (relational) operators i.e., (<,>,<=,>=,==,!=,<>) are also applicable for strings. The Strings are compared based on the ASCII value or Unicode(i.e., dictionary Order).

Python Relational Operators Example

1. >>> "RAJAT"=="RAJAT"
2. True
3. >>> "afsha">='Afsha'
4. True
5. >>> "Z"<>"z"
6. True

Explanation:

The ASCII value of a is 97, b is 98, c is 99 and so on. The ASCII value of A is 65,B is 66,C is 67 and so on. The comparison between strings are done on the basis on ASCII value.

Python String Slice Notation

Python String slice can be defined as a substring which is the part of the string. Therefore further substring can be obtained from a string.

There can be many forms to slice a string, as string can be accessed or indexed from both the direction and hence string can also be sliced from both the directions.

Python String Slice Syntax

1. <string_name>[startIndex:endIndex],
2. <string_name>[:endIndex],
3. <string_name>[startIndex:]

Python String Slice Example 1

1. >>> str="Nikhil"
2. >>> str[0:6]
3. 'Nikhil'
4. >>> str[0:3]
5. 'Nik'
6. >>> str[2:5]
7. 'khi'
8. >>> str[:6]

9. 'Nikhil'
10. >>> str[3:]
11. 'hil'

Note: startIndex in String slice is inclusive whereas endIndex is exclusive.

String slice can also be used with Concatenation operator to get whole string.

Python String Slice Example 2

1. >>> str="Mahesh"
2. >>> str[:6]+str[6:]
3. 'Mahesh'

//here 6 is the length of the string.

Python String Functions and Methods

Python provides various predefined or built-in string functions. They are as follows:

capitalize()	It capitalizes the first character of the String.
count(string,begin,end)	It Counts number of times substring occurs in a String between begin and end index.
endswith(suffix ,begin=0,end=n)	It returns a Boolean value if the string terminates with given suffix between begin and end.
find(substring ,beginIndex, endIndex)	It returns the index value of the string where substring is found between begin index and end index.
index(subsring, beginIndex, endIndex)	It throws an exception if string is not found and works same as find() method.
isalnum()	It returns True if characters in the string are alphanumeric i.e., alphabets or numbers and there is at least 1 character. Otherwise it returns False.
isalpha()	It returns True when all the characters are alphabets and there is at least one character, otherwise False.
isdigit()	It returns True if all the characters are digit and there is

	at least one character, otherwise False.
islower()	It returns True if the characters of a string are in lower case, otherwise False.
isupper()	It returns False if characters of a string are in Upper case, otherwise False.
isspace()	It returns True if the characters of a string are whitespace, otherwise false.
len(string)	It returns the length of a string.
lower()	It converts all the characters of a string to Lower case.
upper()	It converts all the characters of a string to Upper Case.
startswith(str ,begin=0,end=n)	It returns a Boolean value if the string starts with given str between begin and end.
swapcase()	It inverts case of all characters in a string.
lstrip()	It removes all leading whitespace of a string and can also be used to remove particular character from leading.
rstrip()	It removes all trailing whitespace of a string and can also be used to remove particular character from trailing.

Python String capitalize() Method Example

This method capitalizes the first character of the String.

1. `>>> 'abc'.capitalize()`

Output:

```
'Abc'
```

Python String count(string) Method Example

This method counts number of times substring occurs in a String between begin and end index.

1. msg = "welcome to sssit";
2. substr1 = "o";
3. **print** msg.count(substr1, 4, 16)
4. substr2 = "t";
5. **print** msg.count(substr2)

Output:

```
>>>
2
2
>>>
```

Python String endswith(string) Method Example

This method returns a Boolean value if the string terminates with given suffix between begin and end.

1. string1="Welcome to SSSIT";
2. substring1="SSSIT";
3. substring2="to";
4. substring3="of";
5. **print** string1.endswith(substring1);
6. **print** string1.endswith(substring2,2,16);
7. **print** string1.endswith(substring3,2,19);
8. **print** string1.endswith(substring3);

Output:

```
>>>
True
False
False
False
>>>
```

Python String find(string) Method Example

This method returns the index value of the string where substring is found between begin index and end index.

1. str="Welcome to SSSIT";
2. substr1="come";
3. substr2="to";

4. `print str.find(substr1);`
5. `print str.find(substr2);`
6. `print str.find(substr1,3,10);`
7. `print str.find(substr2,19);`

Output:

```
>>>
3
8
3
-1
>>>
```

Python String index() Method Example

This method returns the index value of the string where substring is found between begin index and end index.

1. `str="Welcome to world of SSSIT";`
2. `substr1="come";`
3. `substr2="of";`
4. `print str.index(substr1);`
5. `print str.index(substr2);`
6. `print str.index(substr1,3,10);`
7. `print str.index(substr2,19);`

Output:

```
>>>
3
17
3
Traceback (most recent call last):
  File "C:/Python27/fin.py", line 7, in
    print str.index(substr2,19);
ValueError: substring not found
>>>
```

Python String isalnum() Method Example

This method returns True if characters in the string are alphanumeric i.e., alphabets or numbers and there is at least 1 character. Otherwise it returns False.

1. `str="Welcome to sssit";`

2. `print str.isalnum();`
3. `str1="Python47";`
4. `print str1.isalnum();`

Output:

```
>>>
False
True
>>>
```

Python String isalpha() Method Example

It returns True when all the characters are alphabets and there is at least one character, otherwise False.

1. `string1="HelloPython"; # Even space is not allowed`
2. `print string1.isalpha();`
3. `string2="This is Python2.7.4"`
4. `print string2.isalpha();`

Output:

```
>>>
True
False
>>>
```

Python String isdigit() Method Example

This method returns True if all the characters are digit and there is at least one character, otherwise False.

1. `string1="HelloPython";`
2. `print string1.isdigit();`
3. `string2="98564738"`
4. `print string2.isdigit();`

Output:

```
>>>
False
True
>>>
```

Python String islower() Method Example

This method returns True if the characters of a string are in lower case, otherwise False.

1. string1="Hello Python";
2. **print** string1.islower();
3. string2="welcome to "
4. **print** string2.islower();

Output:

```
>>>
False
True
>>>
```

Python String isupper() Method Example

This method returns False if characters of a string are in Upper case, otherwise False.

1. string1="Hello Python";
2. **print** string1.isupper();
3. string2="WELCOME TO"
4. **print** string2.isupper();

Output:

```
>>>
False
True
>>>
```

Python String isspace() Method Example

This method returns True if the characters of a string are whitespace, otherwise false.

1. string1=" ";
2. **print** string1.isspace();
3. string2="WELCOME TO WORLD OF PYT"
4. **print** string2.isspace();

Output:

```
>>>
True
False
>>>
```

Python String len(string) Method Example

This method returns the length of a string.

1. `string1=" "`;
2. `print len(string1);`
3. `string2="WELCOME TO SSSIT"`
4. `print len(string2);`

Output:

```
>>>
4
16
>>>
```

Python String lower() Method Example

It converts all the characters of a string to Lower case.

1. `string1="Hello Python";`
2. `print string1.lower();`
3. `string2="WELCOME TO SSSIT"`
4. `print string2.lower();`

Output:

```
>>>
hello python
welcome to sssit
>>>
```

Python String upper() Method Example

This method converts all the characters of a string to upper case.

1. `string1="Hello Python";`
2. `print string1.upper();`
3. `string2="welcome to SSSIT"`
4. `print string2.upper();`

Output:

```
>>>
HELLO PYTHON
```

```
WELCOME TO SSSIT
>>>
```

Python String startswith(string) Method Example

This method returns a Boolean value if the string starts with given str between begin and end.

1. `string1="Hello Python";`
2. `print string1.startswith('Hello');`
3. `string2="welcome to SSSIT"`
4. `print string2.startswith('come',3,7);`

Output:

```
>>>
True
True
>>>
```

Python String swapcase() Method Example

It inverts case of all characters in a string.

1. `string1="Hello Python";`
2. `print string1.swapcase();`
3. `string2="welcome to SSSIT"`
4. `print string2.swapcase();`

Output:

```
>>>
hELLO pYTHON
WELCOME TO sssit
>>>
```

Python String lstrip() Method Example

It removes all leading whitespace of a string and can also be used to remove particular character from leading.

1. `string1=" Hello Python";`
2. `print string1.lstrip();`
3. `string2="@@@@@@@welcome to SSSIT"`
4. `print string2.lstrip('@');`

Output:

```
>>>
Hello Python
welcome to world to SSSIT
>>>
```

Python String rstrip() Method Example

It removes all trailing whitespace of a string and can also be used to remove particular character from trailing.

1. `string1=" Hello Python ";`
2. `print string1.rstrip();`
3. `string2="@welcome to SSSIT!!!"`
4. `print string2.rstrip('!');`

Output:

```
>>>
      Hello Python
@welcome to SSSIT
>>>
```

Python List

Python list is a data structure which is used to store various types of data.

In Python, lists are mutable i.e., Python will not create a new list if we modify an element of the list.

It works as a **container that holds other objects in a given order**. We can perform various operations like **insertion and deletion** on list.

A list can be composed by storing a sequence of different type of values separated by commas.

Python list is enclosed between square([]) brackets and elements are stored in the index basis with starting index 0.

Python List Example

1. `data1=[1,2,3,4];`
2. `data2=['x','y','z'];`

3. data3=[12.5,11.6];
4. data4=['raman','rahul'];
5. data5=[];
6. data6=['abhinav',10,56.4,'a'];

A list can be created by putting the value inside the square bracket and separated by comma.

Python List Syntax

1. <list_name>=[value1,value2,value3,...,valuen];

Syntax to Access Python List

1. <list_name>[index]

Python allows us to access value from the list by various ways.

Python Accessing List Elements Example

1. data1=[1,2,3,4];
2. data2=['x','y','z'];
3. **print** data1[0]
4. **print** data1[0:2]
5. **print** data2[-3:-1]
6. **print** data1[0:]
7. **print** data2[:2]

Output:

```
>>>
>>>
1
[1, 2]
['x', 'y']
[1, 2, 3, 4]
['x', 'y']
>>>
```

Elements in a Lists:

Following are the pictorial representation of a list. We can see that it allows to access elements from both end (forward and backward).

1. Data=[1,2,3,4,5];

Forward indexing

→ 0 1 2 3 4

1	2	3	4	5
---	---	---	---	---

-5 -4 -3 -2 -1

←
Backward indexing

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1. `Data[0]=1=Data[-5]` , `Data[1]=2=Data[-4]` , `Data[2]=3=Data[-3]` ,
2. `=4=Data[-2]` , `Data[4]=5=Data[-1]`.

Note: Internal Memory Organization:
List do not store the elements directly at the index. In fact a reference is stored at each index which subsequently refers to the object stored somewhere in the memory. This is due to the fact that some objects may be large enough than other objects and hence they are stored at some other memory location.

Python List Operations

Apart from creating and accessing elements from the list, Python allows us to perform various other operations on the list. Some common operations are given below

a) Adding Python Lists

In Python, lists can be added by using the concatenation operator(+) to join two lists.

Add lists Example 1

1. `list1=[10,20]`
2. `list2=[30,40]`
3. `list3=list1+list2`
4. `print list3`

Output:

1. `>>>`
2. `[10, 20, 30, 40]`
3. `>>>`

Note: '+' operator implies that both the operands passed must be list else error will be shown.

Add lists Example 2

1. list1=[10,20]
2. list1+30
3. **print** list1

Output:

1. Traceback (most recent call last):
2. File "C:/Python27/lis.py", line 2, in <module>
3. list1+30

b) Python Replicating lists

Replicating means repeating, It can be performed by using '*' operator by a specific number of time.

Python list Replication Example

1. list1=[10,20]
2. **print** list1*1

Output:

1. >>>
2. [10, 20]
3. >>>

c)Python List Slicing

A subpart of a list can be retrieved on the basis of index. This subpart is known as list slice. This feature allows us to get sub-list of specified start and end index.

Python List Slicing Example

1. list1=[1,2,4,5,7]
2. **print** list1[0:2]
3. **print** list1[4]
4. list1[1]=9
5. **print** list1

Output:

1. >>>
2. [1, 2]
3. 7
4. [1, 9, 4, 5, 7]
5. >>>

Note: If the index provided in the list slice is outside the list, then it raises an `IndexError` exception.

Python List Other Operations

Apart from above operations various other functions can also be performed on List such as Updating, Appending and Deleting elements from a List.

Python Updating List

To update or change the value of particular index of a list, assign the value to that particular index of the List.

Python Updating List Example

1. data1=[5,10,15,20,25]
2. `print "Values of list are: "`
3. `print data1`
4. data1[2]="Multiple of 5"
5. `print "Values of list are: "`
6. `print data1`

Output:

1. >>>
2. Values of list are:
3. [5, 10, 15, 20, 25]
4. Values of list are:
5. [5, 10, 'Multiple of 5', 20, 25]
6. >>>

Appending Python List

Python provides, `append()` method which is used to append i.e., add an element at the end of the existing elements.

Python Append List Example

1. list1=[10,"rahul",'z']
2. **print** "Elements of List are: "
3. **print** list1
4. list1.append(10.45)
5. **print** "List after appending: "
6. **print** list1

Output:

1. >>>
2. Elements of List are:
3. [10, 'rahul', 'z']
4. List after appending:
5. [10, 'rahul', 'z', 10.45]
6. >>>

Deleting Elements

In Python, **del** statement can be used to delete an element from the list. It can also be used to delete all items from startIndex to endIndex.

Python delete List Example

1. list1=[10,'rahul',50.8,'a',20,30]
2. **print** list1
3. **del** list1[0]
4. **print** list1
5. **del** list1[0:3]
6. **print** list1

Output:

1. >>>
2. [10, 'rahul', 50.8, 'a', 20, 30]
3. ['rahul', 50.8, 'a', 20, 30]
4. [20, 30]
5. >>>

Python lists Method

Python provides various Built-in functions and methods for Lists that we can apply on the list.

Following are the common list functions.

Function	Description
min(list)	It returns the minimum value from the list given.
max(list)	It returns the largest value from the given list.
len(list)	It returns number of elements in a list.
cmp(list1,list2)	It compares the two list.
list(sequence)	It takes sequence types and converts them to lists.

Python List min() method Example

This method is used to get min value from the list.

1. list1=[101,981,'abcd','xyz','m']
2. list2=['aman','shekhar',100.45,98.2]
3. **print** "Minimum value in List1: ",min(list1)
4. **print** "Minimum value in List2: ",min(list2)

Output:

1. >>>
2. Minimum value **in** List1: 101
3. Minimum value **in** List2: 98.2
4. >>>

Python List max() method Example

This method is used to get max value from the list.

1. list1=[101,981,'abcd','xyz','m']
2. list2=['aman','shekhar',100.45,98.2]
3. **print** "Maximum value in List : ",max(list1)
4. **print** "Maximum value in List : ",max(list2)

Output:

1. >>>
2. Maximum value **in** List : xyz
3. Maximum value **in** List : shekhar
4. >>>

Python List len() method Example

This method is used to get length of the the list.

1. list1=[101,981,'abcd','xyz','m']
2. list2=['aman','shekhar',100.45,98.2]
3. **print** "No. of elements in List1: ",len(list1)
4. **print** "No. of elements in List2: ",len(list2)

Output:

1. >>>
2. No. of elements **in** List1 : 5
3. No. of elements **in** List2 : 4
4. >>>

Python List cmp() method Example

Explanation: If elements are of the same type, perform the comparison and return the result. If elements are different types, check whether they are numbers.

- If numbers, perform comparison.
- If either element is a number, then the other element is returned.
- Otherwise, types are sorted alphabetically .

If we reached the end of one of the lists, the longer list is "larger." If both list are same it returns 0.

Python List cmp() method Example

1. list1=[101,981,'abcd','xyz','m']
2. list2=['aman','shekhar',100.45,98.2]
3. list3=[101,981,'abcd','xyz','m']
4. **print** cmp(list1,list2)
5. **print** cmp(list2,list1)
6. **print** cmp(list3,list1)

Output:

1. >>>
2. -1
3. 1
4. 0
5. >>>

Python List list(sequence) method Example

This method is used to form a list from the given sequence of elements.

1. seq=(145,"abcd",'a')
2. data=list(seq)
3. **print** "List formed is : ",data

Output:

1. >>>
2. List formed is : [145, 'abcd', 'a']
3. >>>

There are following built-in methods of List

Methods	Description
index(object)	It returns the index value of the object.
count(object)	It returns the number of times an object is repeated in list.
pop()/pop(index)	It returns the last object or the specified indexed object. It removes the p
insert(index,object)	It inserts an object at the given index.
extend(sequence)	It adds the sequence to existing list.
remove(object)	It removes the object from the given List.
reverse()	It reverses the position of all the elements of a list.
sort()	It is used to sort the elements of the List.

Python List index() Method Example

1. data = [786,'abc','a',123.5]
2. **print** "Index of 123.5:", data.index(123.5)

3. `print "Index of a is", data.index('a')`

Output:

1. `>>>`
2. Index of 123.5 : 3
3. Index of a is 2
4. `>>>`

Python List `count(object)` Method Example

1. `data = [786,'abc','a',123.5,786,'rahul','b',786]`
2. `print "Number of times 123.5 occurred is", data.count(123.5)`
3. `print "Number of times 786 occurred is", data.count(786)`

Output:

1. `>>>`
2. Number of times 123.5 occurred is 1
3. Number of times 786 occurred is 3
4. `>>>`

Python List `pop()/pop(int)` Method Example

1. `data = [786,'abc','a',123.5,786]`
2. `print "Last element is", data.pop()`
3. `print "2nd position element:", data.pop(1)`
4. `print data`

Output:

1. `>>>`
2. Last element is 786
3. 2nd position element:abc
4. `[786, 'a', 123.5]`
5. `>>>`

Python List `insert(index,object)` Method Example

1. `data=['abc',123,10.5,'a']`
2. `data.insert(2,'hello')`
3. `print data`

Output:

1. >>>
2. ['abc', 123, 'hello', 10.5, 'a']
3. >>>

Python List extend(sequence) Method Example

1. data1=['abc',123,10.5,'a']
2. data2=['ram',541]
3. data1.extend(data2)
4. **print** data1
5. **print** data2

Output:

1. >>>
2. ['abc', 123, 10.5, 'a', 'ram', 541]
3. ['ram', 541]
4. >>>

Python List remove(object) Method Example

1. data1=['abc',123,10.5,'a','xyz']
2. data2=['ram',541]
3. **print** data1
4. data1.remove('xyz')
5. **print** data1
6. **print** data2
7. data2.remove('ram')
8. **print** data2

Output:

1. >>>
2. ['abc', 123, 10.5, 'a', 'xyz']
3. ['abc', 123, 10.5, 'a']
4. ['ram', 541]
5. [541]
6. >>>

Python List reverse() Method Example

1. list1=[10,20,30,40,50]
2. list1.reverse()
3. **print** list1

Output:

1. >>>
2. [50, 40, 30, 20, 10]
3. >>>

Python List sort() Method Example

1. list1=[10,50,13,'rahul','aakash']
2. list1.sort()
3. **print** list1

Output:

1. >>>
2. [10, 13, 50, 'aakash', 'rahul']
3. >>>

Python Tuple

A tuple is a sequence of immutable objects, therefore tuple cannot be changed. It can be used to collect different types of object.

The objects are enclosed within parenthesis and separated by comma.

Tuple is similar to list. Only the difference is that list is enclosed between square bracket, tuple between parenthesis and List has mutable objects whereas Tuple has immutable objects.

Python Tuple Example

1. >>> data=(10,20,'ram',56.8)
2. >>> data2="a",10,20.9
3. >>> data
4. (10, 20, 'ram', 56.8)
5. >>> data2
6. ('a', 10, 20.9)

7. >>>

NOTE: If Parenthesis is not given with a sequence, it is by default treated as Tuple.

There can be an empty Tuple also which contains no object. Lets see an example of empty tuple.

Python Empty Tuple Example

1. tuple1=()

Python Single Object Tuple Example

For a single valued tuple, there must be a comma at the end of the value.

1. Tuple1=(10,)

Python Tuple of Tuples Example

Tuples can also be nested, it means we can pass tuple as an element to create a new tuple. See, the following example in which we have created a tuple that contains tuples as the object.

```
1. tupl1='a','mahesh',10.56
2.   tupl2=tupl1,(10,20,30)
3.   print tupl1
4.   print tupl2
```

Output:

```
1. >>>
2. ('a', 'mahesh', 10.56)
3. (('a', 'mahesh', 10.56), (10, 20, 30))
4. >>>
```

Accessing Tuple

Accessing of tuple is pretty easy, we can access tuple in the same way as List. See, the following example.

Accessing Tuple Example

```
1. data1=(1,2,3,4)
2. data2=('x','y','z')
```

3. `print data1[0]`
4. `print data1[0:2]`
5. `print data2[-3:-1]`
6. `print data1[0:]`
7. `print data2[:2]`

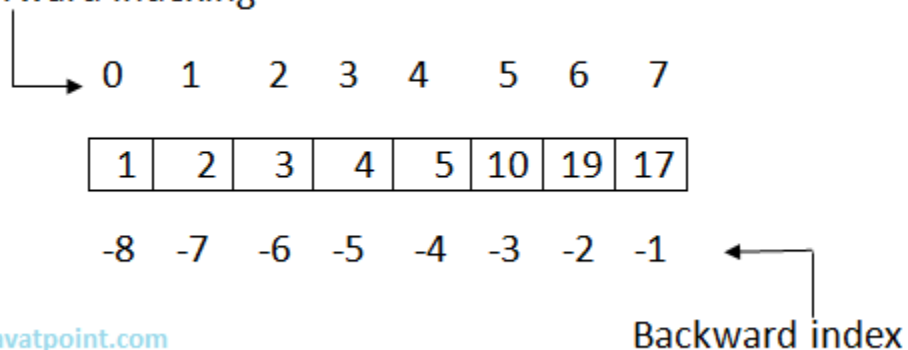
Output:

1. `>>>`
2. `1`
3. `(1, 2)`
4. `('x', 'y')`
5. `(1, 2, 3, 4)`
6. `('x', 'y')`
7. `>>>`

Elements in a Tuple

Data=(1,2,3,4,5,10,19,17)

Forward indexing



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1. Data[0]=1=Data[-8] , Data[1]=2=Data[-7] , Data[2]=3=Data[-6] ,
2. Data[3]=4=Data[-5] , Data[4]=5=Data[-4] , Data[5]=10=Data[-3],
3. Data[6]=19=Data[-2],Data[7]=17=Data[-1]

Python Tuple Operations

Python allows us to perform various operations on the tuple. Following are the common tuple operations.

Adding Tuples Example

Tuple can be added by using the concatenation operator(+) to join two tuples.

1. data1=(1,2,3,4)
2. data2=('x','y','z')
3. data3=data1+data2
4. **print** data1
5. **print** data2
6. **print** data3

Output:

```
>>>
(1, 2, 3, 4)
('x', 'y', 'z')
(1, 2, 3, 4, 'x', 'y', 'z')
>>>
```

Note: The new sequence formed is a new Tuple.

Replicating Tuple Example

Replicating means repeating. It can be performed by using '*' operator by a specific number of time.

1. tuple1=(10,20,30);
2. tuple2=(40,50,60);
3. **print** tuple1*2
4. **print** tuple2*3

Output:

```
>>>
(10, 20, 30, 10, 20, 30)
(40, 50, 60, 40, 50, 60, 40, 50, 60)
>>>
```

Python Tuple Slicing Example

A subpart of a tuple can be retrieved on the basis of index. This subpart is known as tuple slice.

1. data1=(1,2,4,5,7)
2. **print** data1[0:2]
3. **print** data1[4]
4. **print** data1[: -1]

5. `print data1[-5:]`
6. `print data1`

Output:

```
>>>
(1, 2)
7
(1, 2, 4, 5)
(1, 2, 4, 5, 7)
(1, 2, 4, 5, 7)
>>>
```

Note: If the index provided in the Tuple slice is outside the list, then it raises an `IndexError` exception.

Python Tuple other Operations

Updating elements in a List

Elements of the Tuple cannot be updated. This is due to the fact that Tuples are immutable. Whereas the Tuple can be used to form a new Tuple.

Example

1. `data=(10,20,30)`
2. `data[0]=100`
3. `print data`

Output:

```
>>>
Traceback (most recent call last):
  File "C:/Python27/t.py", line 2, in
    data[0]=100
TypeError: 'tuple' object does not support item assignment
>>>
```

Creating Tuple from Existing Example

We can create a new tuple by assigning the existing tuple, see the following example.

1. `data1=(10,20,30)`
2. `data2=(40,50,60)`
3. `data3=data1+data2`

4. **print** data3

Output:

```
>>>
(10, 20, 30, 40, 50, 60)
>>>
```

Python Tuple Deleting Example

Deleting individual element from a tuple is not supported. However the whole of the tuple can be deleted using the del statement.

1. data=(10,20,'rahul',40.6,'z')
2. **print** data
3. **del** data #will delete the tuple data
4. **print** data #will show an error since tuple data is already deleted

Output:

```
>>>
(10, 20, 'rahul', 40.6, 'z')
Traceback (most recent call last):
  File "C:/Python27/t.py", line 4, in
    print data
NameError: name 'data' is not defined
>>>
```

Functions of Tuple

There are following in-built Type Functions

Function	Description
min(tuple)	It returns the minimum value from a tuple.
max(tuple)	It returns the maximum value from the tuple.
len(tuple)	It gives the length of a tuple
cmp(tuple1,tuple2)	It compares the two Tuples.
tuple(sequence)	It converts the sequence into tuple.

Python Tuple min(tuple) Method Example

This method is used to get min value from the sequence of tuple.

1. data=(10,20,'rahul',40.6,'z')
2. **print** min(data)

Output:

```
>>>
10
>>>
```

Python Tuple max(tuple) Method Example

This method is used to get max value from the sequence of tuple.

1. data=(10,20,'rahul',40.6,'z')
2. **print** max(data)

Output:

```
>>>
z
>>>
```

Python Tuple len(tuple) Method Example

This method is used to get length of the tuple.

1. data=(10,20,'rahul',40.6,'z')
2. **print** len(data)

Output:

```
>>>
5
>>>
```

Python Tuple cmp(tuple1,tuple2) Method Example

This method is used to compare tuples.

Explanation: If elements are of the same type, perform the comparison and return the result. If elements are different types, check whether they are numbers.

- If numbers, perform comparison.
- If either element is a number, then the other element is returned.

- Otherwise, types are sorted alphabetically .

If we reached the end of one of the lists, the longer list is "larger." If both list are same it returns 0.

1. data1=(10,20,'rahul',40.6,'z')
2. data2=(20,30,'sachin',50.2)
3. **print** cmp(data1,data2)
4. **print** cmp(data2,data1)
5. data3=(20,30,'sachin',50.2)
6. **print** cmp(data2,data3)

Output:

```
>>>
-1
1
0
>>>
```

5) tuple(sequence):

Eg:

1. dat=[10,20,30,40]
2. data=tuple(dat)
3. **print** data

Output:

```
>>>
(10, 20, 30, 40)
>>>
```

Why should we use Tuple? (Advantages of Tuple)

1. Processing of Tuples are faster than Lists.
2. It makes the data safe as Tuples are immutable and hence cannot be changed.
3. Tuples are used for String formatting.

Python Dictionary

Dictionary is an unordered set of key and value pair. It is a container that contains data, enclosed within curly braces.

The pair i.e., key and value is known as item. The key passed in the item must be unique.

The key and the value is separated by a colon(:). This pair is known as item. Items are separated from each other by a comma(.). Different items are enclosed within a curly brace and this forms Dictionary.

Python Dictionary Example

1. data={100:'Ravi',101:'Vijay',102:'Rahul'}
2. **print** data

Output:

```
>>>
{100: 'Ravi', 101: 'Vijay', 102: 'Rahul'}
>>>
```

Note:

Dictionary is mutable i.e., value can be updated.

Key must be unique and immutable. Value is accessed by key. Value can be updated while key cannot be changed.

Dictionary is known as Associative array since the Key works as Index and they are decided by the user.

Python Dictionary Example

1. plant={}
2. plant[1]='Ravi'
3. plant[2]='Manoj'
4. plant['name']='Hari'
5. plant[4]='Om'
6. **print** plant[2]
7. **print** plant['name']
8. **print** plant[1]
9. **print** plant

Output:

```
>>>
Manoj
Hari
```

```
Ravi
{1: 'Ravi', 2: 'Manoj', 4: 'Om', 'name': 'Hari'}
>>>
```

Accessing Dictionary Values

Since Index is not defined, a Dictionary values can be accessed by their keys only. It means, to access dictionary elements we need to pass key, associated to the value.

Python Accessing Dictionary Element Syntax

1. <dictionary_name>[key]
2. </dictionary_name>

Accessing Elements Example

1. data1={'Id':100, 'Name':'Suresh', 'Profession':'Developer'}
2. data2={'Id':101, 'Name':'Ramesh', 'Profession':'Trainer'}
3. **print** "Id of 1st employer is",data1['Id']
4. **print** "Id of 2nd employer is",data2['Id']
5. **print** "Name of 1st employer:",data1['Name']
6. **print** "Profession of 2nd employer:",data2['Profession']

Output:

```
>>>
Id of 1st employer is 100
Id of 2nd employer is 101
Name of 1st employer is Suresh
Profession of 2nd employer is Trainer
>>>
```

Updating Python Dictionary Elements

The item i.e., key-value pair can be updated. Updating means new item can be added. The values can be modified.

Example

1. data1={'Id':100, 'Name':'Suresh', 'Profession':'Developer'}
2. data2={'Id':101, 'Name':'Ramesh', 'Profession':'Trainer'}
3. data1['Profession']='Manager'
4. data2['Salary']=20000
5. data1['Salary']=15000
6. **print** data1

7. `print` data2

Output:

```
>>>
{'Salary': 15000, 'Profession': 'Manager', 'Id': 100, 'Name': 'Suresh'}
{'Salary': 20000, 'Profession': 'Trainer', 'Id': 101, 'Name': 'Ramesh'}
>>>
```

Deleting Python Dictionary Elements Example

`del` statement is used for performing deletion operation.

An item can be deleted from a dictionary using the key only.

Delete Syntax

1. `del <dictionary_name>[key]`
2. `</dictionary_name>`

Whole of the dictionary can also be deleted using the `del` statement.

Example

1. `data={100:'Ram', 101:'Suraj', 102:'Alok'}`
2. `del data[102]`
3. `print data`
4. `del data`
5. `print data` #will show an error since dictionary is deleted.

Output:

```
>>>
{100: 'Ram', 101: 'Suraj'}

Traceback (most recent call last):
  File "C:/Python27/dict.py", line 5, in
    print data
NameError: name 'data' is not defined
>>>
```

Python Dictionary Functions and Methods

Python Dictionary supports the following Functions

Python Dictionary Functions

Functions	Description
<code>len(dictionary)</code>	It returns number of items in a dictionary.
<code>cmp(dictionary1,dictionary2)</code>	It compares the two dictionaries.
<code>str(dictionary)</code>	It gives the string representation of a dictionary.

Python Dictionary Methods

Methods	Description
<code>keys()</code>	It returns all the keys element of a dictionary.
<code>values()</code>	It returns all the values element of a dictionary.
<code>items()</code>	It returns all the items(key-value pair) of a dictionary.
<code>update(dictionary2)</code>	It is used to add items of dictionary2 to first dictionary.
<code>clear()</code>	It is used to remove all items of a dictionary. It returns <code>None</code> .
<code>fromkeys(sequence,value1)/ fromkeys(sequence)</code>	It is used to create a new dictionary from the sequence and all keys share the values <code>value1</code> . In case value is <code>None</code> .
<code>copy()</code>	It returns an ordered copy of the data.
<code>has_key(key)</code>	It returns a boolean value. True in case if key is present in the dictionary.
<code>get(key)</code>	It returns the value of the given key. If key is not present it returns <code>None</code> .

Python Dictionary `len(dictionary)` Example

It returns length of the dictionary.

1. `data={100:'Ram', 101:'Suraj', 102:'Alok'}`
2. `print data`
3. `print len(data)`

Output:

```
>>>
```

```
{100: 'Ram', 101: 'Suraj', 102: 'Alok'}
3
>>>
```

Python Dictionary cmp(dictionary1,dictionary2) Example

The comparison is done on the basis of key and value.

1. If, dictionary1 == dictionary2, returns 0.
 2. dictionary1 < dictionary2, returns -1.
 3. dictionary1 > dictionary2, returns 1.
-
1. data1={100:'Ram', 101:'Suraj', 102:'Alok'}
 2. data2={103:'abc', 104:'xyz', 105:'mno'}
 3. data3={'Id':10, 'First':'Aman','Second':'Sharma'}
 4. data4={100:'Ram', 101:'Suraj', 102:'Alok'}
 5. **print** cmp(data1,data2)
 6. **print** cmp(data1,data4)
 7. **print** cmp(data3,data2)

Output:

```
>>>
-1
0
1
>>>
```

Python Dictionary str(dictionary) Example

This method returns string formation of the value.

1. data1={100:'Ram', 101:'Suraj', 102:'Alok'}
2. **print** str(data1)

Output:

```
>>>
{100: 'Ram', 101: 'Suraj', 102: 'Alok'}
>>>
```

Python Dictionary keys() Method Example

This method returns all the keys element of a dictionary.

1. data1={100:'Ram', 101:'Suraj', 102:'Alok'}

2. **print** data1.keys()

Output:

```
>>>
[100, 101, 102]
>>>
```

Python Dictionary values() Method Example

This method returns all the values element of a dictionary.

1. data1={100:'Ram', 101:'Suraj', 102:'Alok'}
2. **print** data1.values()

Output:

```
>>>
['Ram', 'Suraj', 'Alok']
>>>
```

Python Dictionary items() Method Example

This method returns all the items(key-value pair) of a dictionary.

1. data1={100:'Ram', 101:'Suraj', 102:'Alok'}
2. **print** data1.items()

Output:

```
>>>
[(100, 'Ram'), (101, 'Suraj'), (102, 'Alok')]
>>>
```

Python Dictionary update(dictionary2) Method Example

This method is used to add items of dictionary2 to first dictionary.

1. data1={100:'Ram', 101:'Suraj', 102:'Alok'}
2. data2={103:'Sanjay'}
3. data1.update(data2)
4. **print** data1
5. **print** data2

Output:

```
>>>
{100: 'Ram', 101: 'Suraj', 102: 'Alok', 103: 'Sanjay'}
{103: 'Sanjay'}
>>>
```

Python Dictionary clear() Method Example

It returns an ordered copy of the data.

1. data1={100:'Ram', 101:'Suraj', 102:'Alok'}
2. **print** data1
3. data1.clear()
4. **print** data1

Output:

```
>>>
{100: 'Ram', 101: 'Suraj', 102: 'Alok'}
{}
>>>
```

Python Dictionary fromkeys(sequence)/ fromkeys(seq,value) Method Example

This method is used to create a new dictionary from the sequence where sequence elements forms the key and all keys share the values ?value1?. In case value1 is not give, it set the values of keys to be none.

1. sequence=('Id' , 'Number' , 'Email')
2. data={}
3. data1={}
4. data=data.fromkeys(sequence)
5. **print** data
6. data1=data1.fromkeys(sequence,100)
7. **print** data1

Output:

```
>>>
{'Email': None, 'Id': None, 'Number': None}
{'Email': 100, 'Id': 100, 'Number': 100}
>>>
```

Python Dictionary copy() Method Example

This method returns an ordered copy of the data.

1. data={'Id':100 , 'Name':'Aakash' , 'Age':23}
2. data1=data.copy()
3. **print** data1

Output:

```
>>>
{'Age': 23, 'Id': 100, 'Name': 'Aakash'}
>>>
```

Python Dictionary has_key(key) Method Example

It returns a boolean value. True in case if key is present in the dictionary, else false.

1. data={'Id':100 , 'Name':'Aakash' , 'Age':23}
2. **print** data.has_key('Age')
3. **print** data.has_key('Email')

Output:

```
>>>
True
False
>>>
```

Python Dictionary get(key) Method Example

This method returns the value of the given key. If key is not present it returns none.

1. data={'Id':100 , 'Name':'Aakash' , 'Age':23}
2. **print** data.get('Age')
3. **print** data.get('Email')

Output:

```
>>>
23
None
>>>
```

Python Functions

A Function is a self block of code which is used to organize the functional code.

Function can be called as a section of a program that is written once and can be executed whenever required in the program, thus making code reusability.

Function is a subprogram that works on data and produces some output.

Types of Functions:

There are two types of Functions.

a) Built-in Functions: Functions that are predefined and organized into a library. We have used many predefined functions in Python.

b) User- Defined: Functions that are created by the programmer to meet the requirements.

Defining a Function

A Function defined in Python should follow the following format:

1) Keyword **def** is used to start and declare a function. Def specifies the starting of function block.

2) def is followed by function-name followed by parenthesis.

3) Parameters are passed inside the parenthesis. At the end a colon is marked.

Python Function Syntax

1. **def** <function_name>(parameters):
2. </function_name>

Example

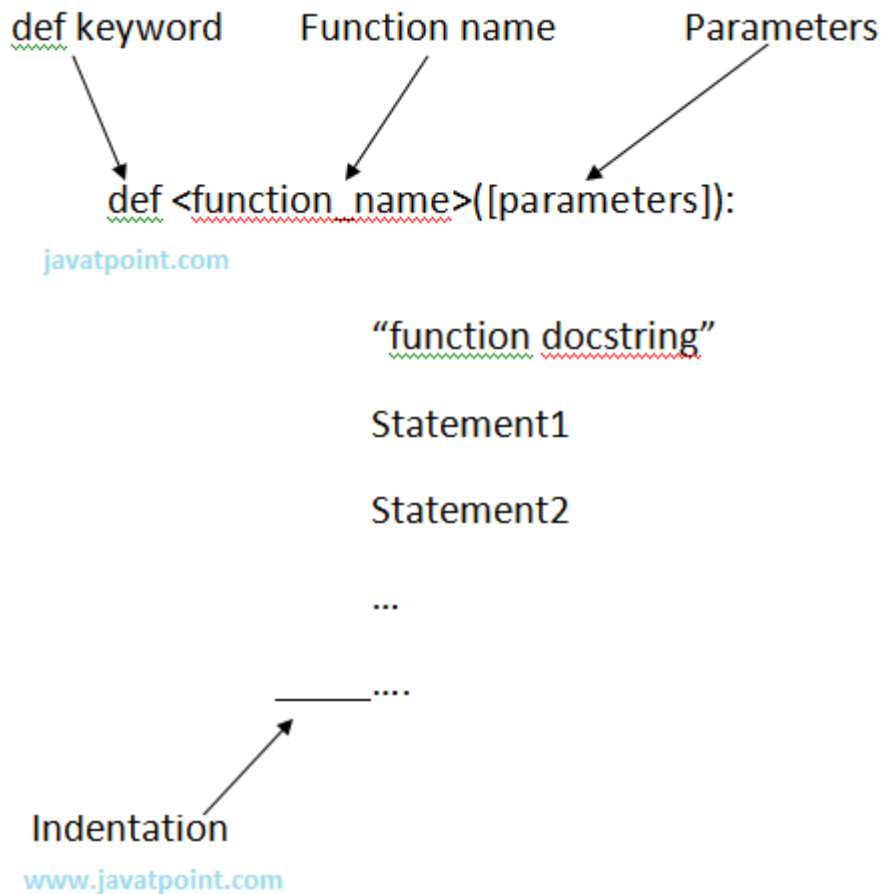
1. **def** sum(a,b):

4) Python code requires indentation (space) of code to keep it associate to the declared block.

5) The first statement of the function is optional. It is ?Documentation string? of function.

6) Following is the statement to be executed.

Syntax:



Invoking a Python Function

To execute a function it needs to be called. This is called function calling.

Function Definition provides the information about function name, parameters and the definition what operation is to be performed. In order to execute the function definition, we need to call the function.

Python Function Syntax

1. `<function_name>(parameters)`
2. `</function_name>`

Python Function Example

1. `sum(a,b)`

Here, `sum` is the function and `a, b` are the parameters passed to the function definition.

Let's have a look over an example.

Python Function Example 2

```
1. #Providing Function Definition
2. def sum(x,y):
3.     "Going to add x and y"
4.     s=x+y
5.     print "Sum of two numbers is"
6.     print s
7. #Calling the sum Function
8.     sum(10,20)
9.     sum(20,30)
```

Output:

```
1. >>>
2. Sum of two numbers is
3. 30
4. Sum of two numbers is
5. 50
6. >>>
```

NOTE: Function call will be executed in the order in which it is called.

Python Function return Statement

return[expression] is used to return response to the caller function. We can use expression with the return keyword. send back the control to the caller with the expression.

In case no expression is given after return it will return None.

In other words return statement is used to exit the function definition.

Python Function return Example

```
1. def sum(a,b):
2.     "Adding the two values"
3.     print "Printing within Function"
4.     print a+b
5.     return a+b
6. def msg():
7.     print "Hello"
8.     return
9.
```


10. total=sum(10,20)
11. **print** ?Printing Outside: ?,total
12. msg()
13. **print** "Rest of code"

Output:

1. >>>
2. Printing within Function
3. 30
4. Printing outside: 30
5. Hello
6. Rest of code
7. >>>

Python Function Argument and Parameter

There can be two types of data passed in the function.

- 1) The First type of data is the data passed in the function call. This data is called ?arguments?.
- 2) The second type of data is the data received in the function definition. This data is called ?parameters?.

Arguments can be literals, variables and expressions. Parameters must be variable to hold incoming values.

Alternatively, arguments can be called as actual parameters or actual arguments and parameters can be called as formal parameters or formal arguments.

Python Function Example

1. **def** addition(x,y):
2. **print** x+y
3. x=15
4. addition(x ,10)
5. addition(x,x)
6. y=20
7. addition(x,y)

Output:

1. >>>

2. 25
3. 30
4. 35
5. >>>

Passing Parameters

Apart from matching the parameters, there are other ways of matching the parameters.

Python supports following types of formal argument:

- 1) Positional argument (Required argument).
- 2) Default argument.
- 3) Keyword argument (Named argument)

Positional/Required Arguments:

When the function call statement must match the number and order of arguments as defined in the function definition. It is Positional Argument matching.

Python Function Positional Argument Example

1. **#Function definition of sum**
2. **def** sum(a,b):
3. "Function having two parameters"
4. c=a+b
5. **print** c
- 6.
7. sum(10,20)
8. sum(20)

Output:

1. >>>
2. 30
- 3.
4. Traceback (most recent call last):
5. File "C:/Python27/su.py", line 8, in <module>
6. sum(20)
7. TypeError: sum() takes exactly 2 arguments (1 given)
8. >>>
9. </module>

Explanation:

1) In the first case, when `sum()` function is called passing two values i.e., 10 and 20 it matches with function definition parameter and hence 10 and 20 is assigned to `a` and `b` respectively. The sum is calculated and printed.

2) In the second case, when `sum()` function is called passing a single value i.e., 20 , it is passed to function definition. Function definition accepts two parameters whereas only one value is being passed, hence it will show an error.

Python Function Default Arguments

Default Argument is the argument which provides the default values to the parameters passed in the function definition, in case value is not provided in the function call default value is used.

Python Function Default Argument Example

```
1. #Function Definition
2. def msg(Id,Name,Age=21):
3.     "Printing the passed value"
4.     print Id
5.     print Name
6.     print Age
7.     return
8. #Function call
9. msg(Id=100,Name='Ravi',Age=20)
10. msg(Id=101,Name='Ratan')
```

Output:

```
1. >>>
2. 100
3. Ravi
4. 20
5. 101
6. Ratan
7. 21
8. >>>
```

Explanation:

1) In first case, when msg() function is called passing three different values i.e., 100 , Ravi and 20, these values will be assigned to respective parameters and thus respective values will be printed.

2) In second case, when msg() function is called passing two values i.e., 101 and Ratan, these values will be assigned to Id and Name respectively. No value is assigned for third argument via function call and hence it will retain its default value i.e, 21.

Python Keyword Arguments

Using the Keyword Argument, the argument passed in function call is matched with function definition on the basis of the name of the parameter.

Python keyword Argument Example

```
1. def msg(id,name):
2.     "Printing passed value"
3.     print id
4.     print name
5.     return
6. msg(id=100,name='Raj')
7. msg(name='Rahul',id=101)
```

Output:

```
1. >>>
2. 100
3. Raj
4. 101
5. Rahul
6. >>>
```

Explanation:

1) In the first case, when msg() function is called passing two values i.e., id and name the position of parameter passed is same as that of function definition and hence values are initialized to respective parameters in function definition. This is done on the basis of the name of the parameter.

2) In second case, when msg() function is called passing two values i.e., name and id, although the position of two parameters is different it initialize the value of id in Function call to id in Function Definition. same with name parameter. Hence, values are initialized on the basis of name of the parameter.

Python Anonymous Function

Anonymous Functions are the functions that are not bond to name. It means anonymous function does not has a name.

Anonymous Functions are created by using a keyword "lambda".

Lambda takes any number of arguments and returns an evaluated expression.

Lambda is created without using the def keyword.

Python Anonymous Function Syntax

1. **lambda** arg1,args2,args3,?,argsn :expression

Python Anonymous Function Example

1. **#Function Definiton**
2. square=**lambda** x1: x1*x1
- 3.
4. **#Calling square as a function**
5. **print** "Square of number is",square(10)

Output:

1. >>>
2. Square of number **is** 100
3. >>>

Difference between Normal Functions and Anonymous Function:

Have a look over two examples:

Example:

Normal function:

1. **#Function Definiton**
2. **def** square(x):
3. **return** x*x
- 4.
5. **#Calling square function**
6. **print** "Square of number is",square(10)

Anonymous function:

1. **#Function Definiton**

2. square=**lambda** x1: x1*x1
- 3.
4. **#Calling square as a function**
5. **print "Square of number is",square(10)**

Explanation:

Anonymous is created without using def keyword.

lambda keyword is used to create anonymous function.

It returns the evaluated expression.

Scope of Variable:

Scope of a variable can be determined by the part in which variable is defined. Each variable cannot be accessed in each part of a program. There are two types of variables based on Scope:

- 1) Local Variable.
- 2) Global Variable.

1) Python Local Variables

Variables declared inside a function body is known as Local Variable. These have a local access thus these variables cannot be accessed outside the function body in which they are declared.

Python Local Variables Example

1. **def** msg():
2. a=10
3. **print** "Value of a is",a
4. **return**
- 5.
6. msg()
7. **print** a **#it will show error since variable is local**

Output:

1. >>>
2. Value of a **is** 10
- 3.
4. Traceback (most recent call last):

5. File "C:/Python27/lam.py", line 7, in <module>
6. `print a` #it will show error since variable is local
7. NameError: name 'a' is not defined
8. >>>
9. </module>

b) Python Global Variable

Variable defined outside the function is called Global Variable. Global variable is accessed all over program thus global variable have widest accessibility.

Python Global Variable Example

1. `b=20`
2. `def msg():`
3. `a=10`
4. `print "Value of a is",a`
5. `print "Value of b is",b`
6. `return`
- 7.
8. `msg()`
9. `print b`

Output:

1. >>>
2. Value of a is 10
3. Value of b is 20
4. 20
5. >>>

Python Input And Output

Python provides methods that can be used to read and write data. Python also provides supports of reading and writing data to Files.

Python "print" Statement

"print" statement is used to print the output on the screen.

print statement is used to take string as input and place that string to standard output.

Whatever you want to display on output place that expression inside the inverted commas. The expression whose value is to be printed place it without inverted commas.

Syntax:

1. `print "expression" or print expression.`

Example

1. `a=10`
2. `print "Welcome to the world of Python"`
3. `print a`

Output:

1. `>>>`
2. Welcome to the world of Python
3. 10
4. `>>>`

Input from Keyboard:

Python offers two built-in functions for taking input from user, given below:

1) input()

2) raw_input()

1) input() function input() function is used to take input from the user. Whatever expression is given by the user, it is evaluated and result is returned back.

Python input() Syntax:

1. `input("Expression")`

Python input() Function Example

1. `n=input("Enter your expression ");`
2. `print "The evaluated expression is ", n`

Output:

1. `>>>`
2. Enter your expression 10*2
3. The evaluated expression is 20

4. >>>

Python raw_input()

2) raw_input()raw_input() function is used to take input from the user. It takes the input from the Standard input in the form of a string and reads the data from a line at once.

Syntax:

1. raw_input(?statement?)

Python raw_input() Example

```
1. n=raw_input("Enter your name ");
2. print "Welcome ", n
```

Output:

```
1. >>>
2. Enter your name Rajat
3. Welcome Rajat
4. >>>
```

raw_input() function returns a string. Hence in case an expression is to be evaluated, then it has to be type casted to its following data type. Some of the examples are given below:

Program to calculate Simple Interest.

```
1. prn=int(raw_input("Enter Principal"))
2. r=int(raw_input("Enter Rate"))
3. t=int(raw_input("Enter Time"))
4. si=(prn*r*t)/100
5. print "Simple Interest is ",si
```

Output:

```
1. >>>
2. Enter Principal1000
3. Enter Rate10
4. Enter Time2
5. Simple Interest is 200
6. >>>
```


Program to enter details of an user and print them.

1. name=raw_input("Enter your name ")
2. math=float(raw_input("Enter your marks in Math"))
3. physics=float(raw_input("Enter your marks in Physics"))
4. chemistry=float(raw_input("Enter your marks in Chemistry"))
5. rollno=int(raw_input("Enter your Roll no"))
6. **print** "Welcome ",name
7. **print** "Your Roll no is ",rollno
8. **print** "Marks in Maths is ",math
9. **print** "Marks in Physics is ",physics
10. **print** "Marks in Chemistry is ",chemistry
11. **print** "Average marks is ",(math+physics+chemistry)/3

Output:

1. >>>
2. Enter your name rajat
3. Enter your marks **in** Math76.8
4. Enter your marks **in** Physics71.4
5. Enter your marks **in** Chemistry88.4
6. Enter your Roll no0987645672
7. Welcome rajat
8. Your Roll no **is** 987645672
9. Marks **in** Maths **is** 76.8
10. Marks **in** Physics **is** 71.4
11. Marks **in** Chemistry **is** 88.4
12. Average marks **is** 78.8666666667
13. >>>

Python File Handling

Python provides the facility of working on Files. A File is an external storage on hard disk from where data can be stored and retrieved.

Operations on Files:

1) Opening a File: Before working with Files you have to open the File. To open a File, Python built in function open() is used. It returns an object of File which is used with other functions. Having opened the file now you can perform read, write, etc. operations on the File.

Syntax:

1. `obj=open(filename , mode , buffer)`

here,

filename:It is the name of the file which you want to access.

mode:It specifies the mode in which File is to be opened.There are many types of mode. Mode depends the operation to be performed on File. Default access mode is read.

2) Closing a File:Once you are finished with the operations on File at the end you need to close the file. It is done by the `close()` method. `close()` method is used to close a File.

Syntax:

1. `fileobject.close()`

3) Writing to a File:`write()` method is used to write a string into a file.

Syntax:

1. `fileobject.write(string str)`

4) Reading from a File:`read()` method is used to read data from the File.

Syntax:

1. `fileobject.read(value)`

here, value is the number of bytes to be read. In case, no value is given it reads till end of file is reached.

Program to read and write data from a file.

```
1. obj=open("abcd.txt","w")
2. obj.write("Welcome to the world of Python")
3. obj.close()
4. obj1=open("abcd.txt","r")
5. s=obj1.read()
6. print s
7. obj1.close()
8. obj2=open("abcd.txt","r")
9. s1=obj2.read(20)
10. print s1
11. obj2.close()
```

Output:

1. >>>
2. Welcome to the world of Python
3. Welcome to the world
4. >>>

Attributes of File:

There are following File attributes.

Attribute	Description
Name	Returns the name of the file.
Mode	Returns the mode in which file is being opened.
Closed	Returns Boolean value. True, in case if file is closed else false.

Example

1. `obj = open("data.txt", "w")`
2. `print obj.name`
3. `print obj.mode`
4. `print obj.closed`

Output:

1. >>>
2. data.txt
3. w
4. False
5. >>>

Modes of File:

There are different modes of file in which it can be opened. They are mentioned in the following table.

A File can be opened in two modes:

- 1) Text Mode.

2) Binary Mode.

Mode	Description
R	It opens in Reading mode. It is default mode of File. Pointer is at beginning of the file.
rb	It opens in Reading mode for binary format. It is the default mode. Pointer is at beginning of file.
r+	Opens file for reading and writing. Pointer is at beginning of file.
rb+	Opens file for reading and writing in binary format. Pointer is at beginning of file.
W	Opens file in Writing mode. If file already exists, then overwrite the file else create a new file.
wb	Opens file in Writing mode in binary format. If file already exists, then overwrite the file else create a new file.
w+	Opens file for reading and writing. If file already exists, then overwrite the file else create a new file.
wb+	Opens file for reading and writing in binary format. If file already exists, then overwrite the file else create a new file.
a	Opens file in Appending mode. If file already exists, then append the data at the end of existing file.
ab	Opens file in Appending mode in binary format. If file already exists, then append the data at the end of existing file.
a+	Opens file in reading and appending mode. If file already exists, then append the data at the end of existing file.
ab+	Opens file in reading and appending mode in binary format. If file already exists, then append the data at the end of existing file. If file does not exist, then create a new file.

Methods:

There are many methods related to File Handling. They are given in the following table:

There is a module "os" defined in Python that provides various functions which are used to perform various operations on Files. To use these functions 'os' needs to be imported.

Method	Description
rename()	It is used to rename a file. It takes two arguments, existing_file_name and new_file_name.
remove()	It is used to delete a file. It takes one argument. Pass the name of the file which is to be deleted.

<code>mkdir()</code>	It is used to create a directory. A directory contains the files. It takes one argument which
<code>chdir()</code>	It is used to change the current working directory. It takes one argument which is the nam
<code>getcwd()</code>	It gives the current working directory.
<code>rmdir()</code>	It is used to delete a directory. It takes one argument which is the name of the direcory.
<code>tell()</code>	It is used to get the exact position in the file.

1) `rename()`:

Syntax:

1. `os.rename(existing_file_name, new_file_name)`

eg:

1. `import os`
2. `os.rename('mno.txt', 'pqr.txt')`

2) `remove()`:

Syntax:

1. `os.remove(file_name)`

eg:

1. `import os`
2. `os.remove('mno.txt')`

3) `mkdir()`

Syntax:

`os.mkdir("file_name")`

eg:

1. `import os`
2. `os.mkdir("new")`

4) `chdir()`

Syntax:

```
os.chdir("file_name")
```

Example

1. **import** os
2. os.chdir("new")

5) getcwd()

Syntax:

```
os.getcwd()
```

Example

1. **import** os
2. **print** os.getcwd()

6) rmdir()

Syntax:

```
os.rmdir("directory_name")
```

Example

1. **import** os
2. os.rmdir("new")

NOTE: In order to delete a directory, it should be empty. In case directory is not empty first delete the files.

Python Module

Modules are used to categorize Python code into smaller parts. A module is simply a Python file, where classes, functions and variables are defined. Grouping similar code into a single file makes it easy to access. Have a look at below example.

If the content of a book is not indexed or categorized into individual chapters, the book might have turned boring and hectic. Hence, dividing book into chapters made it easy to understand.

In the same sense python modules are the files which have similar code. Thus module is simplify a python code where classes, variables and functions are defined.

Python Module Advantage

Python provides the following advantages for using module:

1) Reusability: Module can be used in some other python code. Hence it provides the facility of code reusability.

2) Categorization: Similar type of attributes can be placed in one module.

Importing a Module:

There are different ways by which you we can import a module. These are as follows:

1) Using import statement:

"import" statement can be used to import a module.

Syntax:

1. **import** <file_name1, file_name2,...file_name(n)="">
2. </file_name1,>

Example

1. **def** add(a,b):
2. c=a+b
3. **print** c
4. **return**

Save the file by the name addition.py. To import this file "import" statement is used.

1. **import** addition
2. addition.add(10,20)
3. addition.add(30,40)

Create another python file in which you want to import the former python file. For that, import statement is used as given in the above example. The corresponding method can be used by file_name.method (). (Here, addition.add (), where addition is the python file and add () is the method defined in the file addition.py)

Output:

1. >>>

2. 30
3. 70
4. >>>

NOTE: You can access any function which is inside a module by module name and function name separated by dot. It is also known as period. Whole notation is known as dot notation.

Python Importing Multiple Modules Example

1) msg.py:

1. **def** msg_method():
2. **print** "Today the weather is rainy"
3. **return**

2) display.py:

1. **def** display_method():
2. **print** "The weather is Sunny"
3. **return**

3) multiimport.py:

1. **import** msg,display
2. msg.msg_method()
3. display.display_method()

Output:

1. >>>
2. Today the weather **is** rainy
3. The weather **is** Sunny
4. >>>

2) Using from.. import statement:

from..import statement is used to import particular attribute from a module. In case you do not want whole of the module to be imported then you can use from ?import statement.

Syntax:

1. **from** <module_name> **import** <attribute1,attribute2,attribute3,...attributen>
2. </attribute1,attribute2,attribute3,...attributen></module_name>

Python from.. import Example

```
1. def circle(r):
2.     print 3.14*r*r
3.     return
4.
5. def square(l):
6.     print l*l
7.     return
8.
9. def rectangle(l,b):
10.    print l*b
11.    return
12.
13. def triangle(b,h):
14.    print 0.5*b*h
15.    return
```

2) area1.py

```
1. from area import square,rectangle
2. square(10)
3. rectangle(2,5)
```

Output:

```
1. >>>
2. 100
3. 10
4. >>>
```

3) To import whole module:

You can import whole of the module using "from? import *"

Syntax:

```
1. from <module_name> import *
2. </module_name>
```

Using the above statement all the attributes defined in the module will be imported and hence you can access each attribute.

1) area.py

Same as above example

2) area1.py

1. **from** area **import** *
2. square(10)
3. rectangle(2,5)
4. circle(5)
5. triangle(10,20)

Output:

1. >>>
2. 100
3. 10
4. 78.5
5. 100.0
6. >>>

Built in Modules in Python:

There are many built in modules in Python. Some of them are as follows:

math, random , threading , collections , os , mailbox , string , time , tkinter etc..

Each module has a number of built in functions which can be used to perform various functions.

Let's have a look over each module:

1) math:

Using math module , you can use different built in mathematical functions.

Functions:

Function	Description
ceil(n)	It returns the next integer number of the given number
sqrt(n)	It returns the Square root of the given number.

<code>exp(n)</code>	It returns the natural logarithm e raised to the given number
<code>floor(n)</code>	It returns the previous integer number of the given number.
<code>log(n,baseto)</code>	It returns the natural logarithm of the number.
<code>pow(baseto, exp)</code>	It returns baseto raised to the exp power.
<code>sin(n)</code>	It returns sine of the given radian.
<code>cos(n)</code>	It returns cosine of the given radian.
<code>tan(n)</code>	It returns tangent of the given radian.

Python Math Module Example

```

1. import math
2. a=4.6
3. print math.ceil(a)
4. print math.floor(a)
5. b=9
6. print math.sqrt(b)
7. print math.exp(3.0)
8. print math.log(2.0)
9. print math.pow(2.0,3.0)
10. print math.sin(0)
11. print math.cos(0)
12. print math.tan(45)

```

Output:

```

1. >>>
2. 5.0
3. 4.0
4. 3.0
5. 20.0855369232
6. 0.69314718056
7. 8.0
8. 0.0
9. 1.0
10. 1.61977519054
11. >>>

```

Constants:

The math module provides two constants for mathematical Operations:

Constants	Descriptions
Pi	Returns constant $\pi = 3.14159...$
ceil(n)	Returns constant $e = 2.71828...$

Example

1. `import math`
- 2.
3. `print math.pi`
4. `print math.e`

Output:

1. `>>>`
2. `3.14159265359`
3. `2.71828182846`
4. `>>>`

2) random:

The random module is used to generate the random numbers. It provides the following two built in functions:

Function	Description
random()	It returns a random number between 0.0 and 1.0 where 1.0 is exclusive.
randint(x,y)	It returns a random number between x and y where both the numbers are inclusive.

Python Module Example

1. `import random`
- 2.
3. `print random.random()`
4. `print random.randint(2,8)`

Output:

1. >>>
2. 0.797473843839
3. 7
4. >>>

Other modules will be covered in their respective topics.

Python Package

A Package is simply a collection of similar modules, sub-packages etc..

Steps to create and import Package:

- 1) Create a directory, say Info
- 2) Place different modules inside the directory. We are placing 3 modules msg1.py, msg2.py and msg3.py respectively and place corresponding codes in respective modules. Let us place msg1() in msg1.py, msg2() in msg2.py and msg3() in msg3.py.
- 3) Create a file __init__.py which specifies attributes in each module.
- 4) Import the package and use the attributes using package.

Have a look over the example:

1) Create the directory:

1. `import os`
2. `os.mkdir("Info")`

2) Place different modules in package: (Save different modules inside the Info package)

msg1.py

1. `def msg1():`
2. `print "This is msg1"`

msg2.py

1. `def msg2():`
2. `print "This is msg2"`

msg3.py

1. `def msg3():`
2. `print "This is msg3"`

3) Create `__init__.py` file:

1. `from msg1 import msg1`
2. `from msg2 import msg2`
3. `from msg3 import msg3`

4) Import package and use the attributes:

1. `import Info`
2. `Info.msg1()`
3. `Info.msg2()`
4. `Info.msg3()`

Output:

1. `>>>`
2. This is msg1
3. This is msg2
4. This is msg3
5. `>>>`

What is `__init__.py` file?

`__init__.py` is simply a file that is used to consider the directories on the disk as the package of the Python. It is basically used to initialize the python packages.

Python Exception Handling

Exception can be said to be any abnormal condition in a program resulting to the disruption in the flow of the program.

Whenever an exception occurs the program halts the execution and thus further code is not executed. Thus exception is that error which python script is unable to tackle with.

Exception in a code can also be handled. In case it is not handled, then the code is not executed further and hence execution stops when exception occurs.

Common Exceptions

1. `ZeroDivisionError`: Occurs when a number is divided by zero.
2. `NameError`: It occurs when a name is not found. It may be local or global.
3. `IndentationError`: If incorrect indentation is given.

4. IOError: It occurs when Input Output operation fails.
5. EOFError: It occurs when end of the file is reached and yet operations are being performed.

etc..

Exception Handling:

The suspicious code can be handled by using the try block. Enclose the code which raises an exception inside the try block. The try block is followed except statement. It is then further followed by statements which are executed during exception and in case if exception does not occur.

Syntax:

1. **try:**
2. malicious code
3. **except** Exception1:
4. execute code
5. **except** Exception2:
6. execute code
7.
8.
9. **except** ExceptionN:
10. execute code
11. **else:**
12. In case of no exception, execute the **else** block code.

Python Exception Handling Example

1. **try:**
2. a=10/0
3. **print** a
4. **except** ArithmeticError:
5. **print** "This statement is raising an exception"
6. **else:**
7. **print** "Welcome"

Output:

1. >>>
2. This statement **is** raising an exception
3. >>>

Explanation:

1. The malicious code (code having exception) is enclosed in the try block.
2. Try block is followed by except statement. There can be multiple except statement with a single try block.
3. Except statement specifies the exception which occurred. In case that exception is occurred, the corresponding statement will be executed.
4. At the last you can provide else statement. It is executed when no exception is occurred.

Python Exception(Except with no Exception) Example

Except statement can also be used without specifying Exception.

Syntax:

1. **try:**
2. code
3. **except:**
4. code to be executed **in** case exception occurs.
5. **else:**
6. code to be executed **in** case exception does **not** occur.

Example

1. **try:**
2. a=10/0;
3. **except:**
4. **print "Arithmetic Exception"**
5. **else:**
6. **print "Successfully Done"**

Output:

1. >>>
2. Arithmetic Exception
3. >>>

Declaring Multiple Exception in Python

Python allows us to declare multiple exceptions using the same except statement.

Syntax:

1. **try:**
2. code
3. **except** Exception1,Exception2,Exception3,...,ExceptionN
4. execute this code **in** case any Exception of these occur.
5. **else:**
6. execute code **in** case no exception occurred.

Example

1. **try:**
2. a=10/0;
3. **except** ArithmeticError,StandardError:
4. **print** "Arithmetic Exception"
5. **else:**
6. **print** "Successfully Done"

Output:

1. >>>
2. Arithmetic Exception
3. >>>

Finally Block:

In case if there is any code which the user want to be executed, whether exception occurs or not then that code can be placed inside the finally block. Finally block will always be executed irrespective of the exception.

Syntax:

1. **try:**
2. Code
3. **finally:**
4. code which **is** must to be executed.

Example

1. **try:**
2. a=10/0;
3. **print** "Exception occurred"
4. **finally:**
5. **print** "Code to be executed"

Output:

1. >>>
2. Code to be executed
3. Traceback (most recent call last):
4. File "C:/Python27/noexception.py", line 2, in <module>
5. a=10/0;
6. ZeroDivisionError: integer division or modulo by zero
7. >>>

In the above example finally block is executed. Since exception is not handled therefore exception occurred and execution is stopped.

Raise an Exception:

You can explicitly throw an exception in Python using `raise` statement. `raise` will cause an exception to occur and thus execution control will stop in case it is not handled.

Syntax:

1. `raise Exception_class,<value>`

Example

1. `try:`
2. `a=10`
3. `print a`
4. `raise NameError("Hello")`
5. `except NameError as e:`
6. `print "An exception occurred"`
7. `print e`

Output:

1. >>>
2. 10
3. An exception occurred
4. Hello
5. >>>

Explanation:

i) To raise an exception, `raise` statement is used. It is followed by exception class name.

ii) Exception can be provided with a value that can be given in the parenthesis. (here, Hello)

iii) To access the value "as" keyword is used. "e" is used as a reference variable which stores the value of the exception.

Custom Exception:

Refer to this section after visiting Class and Object section:

Creating your own Exception class or User Defined Exceptions are known as Custom Exception.

Example

```
1. class ErrorInCode(Exception):
2.     def __init__(self, data):
3.         self.data = data
4.     def __str__(self):
5.         return repr(self.data)
6.
7. try:
8.     raise ErrorInCode(2000)
9. except ErrorInCode as ae:
10.    print "Received error:", ae.data
```

Output:

```
1. >>>
2. Received error : 2000
3. >>>
```

Python Date and Time

Python provides **time** package to deal with Date and time. It helps to retrieve current date and time and manipulation using built-in methods.

Retrieve Time

To retrieve current time, Python provides a predefined function `localtime()`, it receives a parameter `time.time()`. Here,

time is a module and time() is a function that returns the current system time in number of ticks since 12:00 am, January 1,1970. It is known as epoch.

Tick is simply a floating point number in seconds since epoch.

Python Retrieving Time Example

1. **import** time;
2. localtime = time.localtime(time.time())
3. **print** "Current Time is :", localtime

Output:

1. >>>
2. Current Time is :time.struct_time(tm_year=2014, tm_mon=6, tm_mday=18, tm_hour=12,
3. tm_min=35, tm_sec=44, tm_wday=2, tm_yday=169, tm_isdst=0)
4. >>>

Explanation:

The time returned is a time structure which includes 9 attributes. These are tabled in the below table.

Attribute	Description
tm_year	It returns the current year
tm_mon	It returns the current month
tm_mday	It returns the current month day
tm_hour	It returns the current hour.
tm_min	It returns the current minute
tm_sec	It returns current seconds
tm_wday	It returns the week day
tm_yday	It returns the year day.
tm_isdst	It returns -1,0 or 1.

Python Formatted Time

Python also supports formatted time. Proceed as follows:

1. Pass the time structure in a predefined function `asctime()`. It is a function defined in `time` module.
2. It returns a formatted time which includes Day ,month, date, time and year.
3. Print the formatted time.

Python Formatted Time Example

1. `import time;`
- 2.
3. `localtime = time.asctime(time.localtime(time.time()))`
4. `print "Formatted time :", localtime`

Output:

1. `>>>`
2. Formatted time : Sun Jun 22 18:54:20 2014
3. `>>>`

Python Time Module Methods

There are many built in functions defined in `time` module which are used to work with time.

Methods	Description
<code>time()</code>	It returns floating point value in seconds since epoch i. ,12:0
<code>asctime(time)</code>	It takes the tuple returned by <code>localtime()</code> as parameter It ret
<code>sleep(time)</code>	The execution will be stopped for the given interval of time.
<code>strptime(String,format)</code>	It returns an tuple with 9 time attributes. It receives an String
<code>gtime()/gtime(sec)</code>	It returns <code>struct_time</code> which contains 9 time attributes. In c current second from epoch.
<code>mktime()</code>	It returns second in floating point since epoch.
<code>strftime(format)/strftime(format,time)</code>	It returns time in particular format. If time is not given, curre

Python `time()` Method Example

This method is used to get current time using Python script. See, the following example.

1. **import** time
2. printtime.time()

Output:

1. >>>
2. 1403700740.39
3. >>>

Python asctime(time) Method Example

This method is used to return 24 character Date Time string using Python script. See, the following example.

1. **import** time
2. t = time.localtime()
3. printtime.asctime(t)

Output:

1. >>>
2. Wed Jun 25 18:30:25 2014
3. >>>

Python sleep(time) Method Example

This method is used to stop the execution of script for the given interval of time. See, the following example.

1. **import** time
- 2.
3. localtime = time.asctime(time.localtime(time.time()))
4. printlocaltime
5. time.sleep(10)
6. localtime = time.asctime(time.localtime(time.time()))
7. printlocaltime

Output:

1. >>>
2. Wed Jun 25 18:15:30 2014
3. Wed Jun 25 18:15:40 2014

4. >>>

Python strptime(String str,format f) Method Example

This method returns an tuple with 9 time's attributes. It receives an String of date and a format. See, the following example.

1. **import** time
- 2.
3. timerequired = time.strptime("26 Jun 14", "%d %b %y")
4. printtimerequired

Output:

1. >>>
2. time.struct_time(tm_year=2014, tm_mon=6, tm_mday=26, tm_hour=0, tm_min=0,
3. tm_sec=0, tm_wday=3, tm_yday=177, tm_isdst=-1)
4. >>>

Explanation:

The strptime() takes a String and format as argument. The format refers to String passed as an argument. "%a %b %d %H:%M:%S %Y" are the default directives. There are many other directives which can be used. In the given example we have used three directives: %d%b%y which specifies day of the month, month in abbreviated form and year without century respectively. Some of them are given as:

%a	weekday name.
%b	month name
%c	date and time
%e	day of a month
%m	month in digit.
%n	new line character.
%S	second
%t	tab character

etc...

Python gtime() Method Example

It returns struct_time which contains 9 time attributes. In case, seconds are not specified it takes current second from epoch. See, the following example.

1. **import** time
2. printtime.gmtime()

Output:

1. >>>
2. time.struct_time(tm_year=2014, tm_mon=6, tm_mday=28, tm_hour=9, tm_min=38, tm_sec=0,
3. tm_wday=5, tm_yday=179, tm_isdst=0)
4. >>>

Python mktime() Method Example

It returns second in floating point since epoch. See, the following example.

1. **import** time
2. t = (2014, 2, 17, 17, 3, 38, 1, 48, 0)
3. second = time.mktime(t)
4. **print** second

Output:

1. >>>
2. 1392636818.0
3. >>>

Python strftime() Method Example

It returns time in particular format. If time is not given, current time in seconds is fetched.. See, the following example.

1. **import** time
2. t = (2014, 6, 26, 17, 3, 38, 1, 48, 0)
3. t = time.mktime(t)
4. printtime.strftime("%b %d %Y %H:%M:%S", time.gmtime(t))

Output:

1. >>>

2. Jun 26 2014 11:33:38
3. >>>

Python Calendar

Python provides calendar module to display Calendar. In the following example, we are creating a calendar.

Python Calendar Example

1. **import** calendar
2. **print** "Current month is:"
3. cal = calendar.month(2014, 6)
4. printcal

Output:

1. >>>
2. Current month is:
3. June 2014
4. Mo Tu We Th Fr Sa Su
5. 1
6. 2 3 4 5 6 7 8
7. 9 10 11 12 13 14 15
8. 16 17 18 19 20 21 22
9. 23 24 25 26 27 28 29
10. 30
11. >>>

Python Calendar module

Python provides calendar module which provides many functions and methods to work on calendar. A list of methods and function used is given below:

Methods	Description
prcal(year)	It prints the whole calendar of the year.
firstweekday()	It returns the first week day. It is by default 0 which specifies Monday.
isleap(year)	It returns a Boolean value i.e., true or false. True in case given year is a leap year.
monthcalendar(year, month)	It returns the given month with each week as one list.

leapdays(year1,year2)	It returns number of leap days from year1 to year2
prmonth(year,month)	It prints the given month of the given year

Python prcal(year) Method Example

It prints the whole calendar of the year. See, the following example.

1. `import calendar`
2. `calendar.prcal(2014)`

Output:

1. `>>> ===== RESTART =====`
`=`
2. `>>>`

2014

January							February							March						
Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5			1	2						1	2					
6	7	8	9	10	11	12	3	4	5	6	7	8	9	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28			24	25	26	27	28	29	30
							31													

April							May							June						
Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5	6		1	2	3	4				1						
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
							30													

July							August							September javatpoint.com						
Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5	6		1	2	3					1	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	29	30					

October							November							December						
Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5			1	2						1	2	3	4	5	6	7
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28
27	28	29	30	31			24	25	26	27	28	29	30	29	30	31				

>>>

javatpoint.com

Python firstweekday() Method Example

It returns the first week day. It is by default 0 which specifies Monday. See, the following example.

1. `import calendar`
2. `printcalendar.firstweekday()`

Output:

1. `>>>`
2. `0`
3. `>>>`

Python isleap(year) Method Example

It returns a Boolean value i.e., true or false. True in case given year is leap else false. See, the following example.

1. `import calendar`
2. `printcalendar.isleap(2000)`

Output:

1. `>>>`
2. `True`
3. `>>>`

Python monthcalendar(year,month) Method Example

It returns the given month with each week as one list. See, the following example.

1. `import calendar`
2. `printcalendar.monthcalendar(2014,6)`

Output:

1. `>>>`
2. `[[0, 0, 0, 0, 0, 0, 1], [2, 3, 4, 5, 6, 7, 8], [9, 10, 11, 12, 13, 14, 15],`
3. `[16, 17, 18, 19, 20, 21, 22],`
4. `[23, 24, 25, 26, 27, 28, 29], [30, 0, 0, 0, 0, 0, 0]]`
5. `>>>`

Python prmonth(year,month) Method Example

It prints the given month of the given year. See, the following example.

```
import calendar
printcalendar.prmonth(2014,6)
```

Output:

1. `>>>`
2. `June 2014`
3. `Mo Tu We ThFrSa Su`
4. `1`
5. `2 3 4 5 6 7 8`
6. `9 10 11 12 13 14 15`

- 7. 16 17 18 19 20 21 22
- 8. 23 24 25 26 27 28 29
- 9. 30
- 10. None
- 11. >>>



B.V.RAJU COLLEGE

VISHNUPUR, BHIMAVARAM

NAAC 2021 DATA FOR THE FIVE YEARS

FACULTY EXCHANGE

S.NO	BRANCH	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
1.	UG	0	11	11	08	02
2.	PG	0	0	02	02	02
3.	MCA	0	01	05	04	03

2017-2018:

S.NO	DEPARTMENT	FACULTY	EVENT
1.	UG Computer Science	R Ramarao	Faculty Exchange
2.	UG Chemistry	CSP swapna	Faculty Exchange
3.	UG Chemistry	V Swamy Sabarinadh	Faculty Exchange
4.	UG Physics	B Kiran	Faculty Exchange
5.	UG Physics	Y Kiran Kumar	Faculty Exchange
6.	UG Physics	A.Padmanabham	Faculty Exchange
7.	UG Physics	V N V Radha Krishna Murthy	Faculty Exchange
8.	UG Life Sciences	D.Sridevi	Faculty Exchange
9.	UG Life Sciences	K.Sudha Madhavi	Faculty Exchange
10.	UG Commerce	K.Ganga Raju	Guest lecture
11.	UG Commerce	K.pavan	Guest lecture
12.	MCA	G.Ankamma Rao	Faculty Exchange



Smt. B. Seetha Polytechnic

Vishnupur, Bhimavaram,
West Godavari Dt., 534 202, India.
t : 08816 - 232439, 08816 - 250815
e : seethapolytechnic093@gmail.com
www.srivishnu.edu.in

DATE: 8-12-2017

Mr. /Mrs. V. SWAMY SABHARINADH,
Lecturer in chemistry,
Dept. of UG CHEMISTRY,
B V RAJU COLLEGE.

SUBJECT: - Letter of Invitation

Dear Sri V. SWAMY SABHARINADH,

On behalf of Smt. B. Seeta Polytechnic College, Vishnupur, Bhimavaram, I am very Pleased to have the honor of inviting you to deliver a lecture at our college as a part of the Guest Lecture Program. We would like to speak on,

TOPIC: - BASICS IN PERIODIC TABLE

We have arranged the lectures for four days From 11-12-2017 to 15-12-2017

We are expecting an audience of students from the AEI & EEE Branch of Electronics department.

Please let us know if you will require any audio-visual equipment or additional technological support.

I look forward to meeting you in this regard.

Best wishes.

Yours Sincerely,

PRINCIPAL
Smt. B. Seetha Polytechnic
Vishnupur, BHIMAVARAM-534 202.

Approved by : AICTE, New Delhi | Affiliated to : SBTE & T, ANDHRA PRADESH

DATE: 15-12-2017

Mr. /Mrs. V. SWAMY SABHARINADH,
Lecturer in chemistry,
Dept. of UG CHEMISTRY,
B V RAJU COLLEGE.

SUBJECT: - Letter of Appreciation

Dear Sri V. SWAMY SABHARINADH,

Thank you very much for delivering an informative & thought provoking lecture as Guest speaker on

“BASICS IN PERIODIC TABLE” held from
11-12-2017 to 15-12-2017 Smt. B. Seeta Polytechnic College, Vishnupur, Bhimavaram.
It was really a splendid presentation which exposed students to the basic needs.

All the students appreciated and got benefited from your views on the chemistry subject.
Looking forward for your cooperation for the next coming years.

Yours Sincerely,



PRINCIPAL
Smt. B. Seetha Polytechnic
Vishnupur, BHIMAVARAM-534 202.

DATE: 12-Feb-2018

Mr./Mrs. C. S. P. SWAPNA
Lecturer in chemistry,
Dept. of UG CHEMISTRY,
B V RAJU COLLEGE.

SUBJECT: - Letter of Invitation

Dear Sri C. S. P. SWAPNA,

On behalf of Smt. B. Seeta Polytechnic College, Vishnupur, Bhimavaram, I am very Pleased to have the honor of inviting you to deliver a lecture at our college as a part of the Guest Lecture Program. We would like to speak on,

TOPIC: - ATOMIC STRUCTURE

We have arranged the lectures for THREE DAYS From 14-16-Feb-2018

We are expecting an audience of students from the AET & EEE Branch of Electronic department.

Please let us know if you will require any audio-visual equipment or additional technological support.

I look forward to meeting you in this regard.

Best wishes.

Yours Sincerely,



PRINCIPAL
Smt. B. Seetha Polytechnic
Vishnupur, BHIMAVARAM-534 202.

DATE: 16-Feb-2018

Mr. /Mrs. C.S.P. SWAPNA
Lecturer in chemistry,
Dept. of UG CHEMISTRY,
B V RAJU COLLEGE.

SUBJECT: - Letter of Appreciation

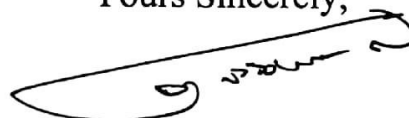
Dear Sri C.S.P. SWAPNA,

Thank you very much for delivering an informative & thought provoking lecture as Guest speaker on

" ATOMIC STRUCTURE " held from
14-Feb-2018 to 16-Feb-2018 Smt. B. Seeta Polytechnic College, Vishnupur, Bhimavaram.
It was really a splendid presentation which exposed students to the basic needs.

All the students appreciated and got benefited from your views on the chemistry subject.
Looking forward for your cooperation for the next coming years.

Yours Sincerely,



PRINCIPAL

Smt. B. Seetha Polytechnic
Vishnupur, BHIMAVARAM-534 202.

B.V. Raju College

(Formerly Dr. B.V. Raju Institute of Computer Education)

Affiliated to Adikavi Nannaya University

Vishnupur, BHIMAVARAM,

West Godavari Dist-534 202, A.P., India

Tel: 08816 - 250861/62,

Email: bvrcollege@rediffmail.com

www.bvricedegree.edu.in

Dr. CH.V.SRINIVAS, M.Sc., Ph.D.,
PRINCIPAL

Date: 01-02-2018.

To
The Principal,
G V V R INSTITUTE OF TECHNOLOGY,
VEMPA RAOD, TUNDURRU.

Respected Sir,

Sub: Relieving Letter- reg.

With reference to your request, B KIRAN, HOD, Department of PHYSICS & ELECTRONICS has been deputed for giving guest lecture "CRYSTAL STRUCTURES" and "DIELECTRICS" for your students on 02-02-2018 and 03-02-2018 in your college.

Thanking you Sir,



Srinivasa
PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202

College Code : JH
EAMCET Code : GVIT
Website : www.gvvit.org

Ph. : 08816 - 244949
08816 - 244919
Fax : 08816 - 244567



GRANDHI VARALAKSHMI VENKATARAO INSTITUTE OF TECHNOLOGY

(Approved by AICTE, New Delhi, Affiliated to JNTUK, KAKINADA)

Vempa Road, **TUNDURRU (PO), BHIMAVARAM - 534 207**, W.G. Dist., A.P.

Dr. K S N PRASAD, M.Tech., Ph.D.,
PRINCIPAL

Date: 03-02-2018.

To
B.Kiran,
Lecturer in Physics,
B V RAJU COLLEGE, VISHNUPUR,
BHIMAVARAM.
Respected Sir,

Sub: Letter of appreciation – reg.

Thank you very much for your presence as a Resource person, for two day seminar on "Crystal structures" and "Dielectrics" for our I semester students on 02-02-2018 and on 03-02-2018 at G V V R INSTITUTE OF TECHNOLOGY, TUNDURRU. All the students got benefitted understood well the subject.

Your role is truly commendable and we appreciate it, looking forward for your cooperation in future programmes and professional education in future as well.

Thank you,




PRINCIPAL,
Grandhi Varalakshmi Venkatarao
Institute of Technology (GVVIT),
TUNDURRU (P.O) BHIMAVARAM,

GUEST LECTURE GIVEN BY DR BRHAMANANDAM ON GEO-STATIONARY SATELLITES ON
22-01-2018 AT B V RAJU COLLEGE, VISHNUPUR, BHIMAVARAM



Dr. Ch.V.Srinivas, M.Sc., Ph.D.,
PRINCIPAL

Date: 06-02-2018.

To
Dr.P.S. Brahmanandam,
Professor, Department of B S&H,
Sri Vishnu College of Engineering for Women,
Vishnupur,
BHIMAVARAM-534202.

Respected Sir,

Sub: Letter of appreciation – reg.

Thank you very much for your presence as a Guest Lecturer, for one day seminar on
“GEO-STATIONARY SATELLITES” for our I semester students on 22-01-2018 at B V RAJU
COLLEGE, VISHNUPUR, BHIMAVARAM. All the students got benefitted and understood well
the subject.

Your role is truly commendable and we appreciate it, looking forward for your cooperation
in future programmes and professional education as well.

Thank you,



PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202

SMT. B. SEETHA POLYTECHNIC

Approved by All India Council for Technical Education, New Delhi.

Recognised by The State Board of Technical Education & Training, Hyderabad, A.P.

Vishnupur, **BHIMAVARAM - 534 202**, W.G.Dt.A.P. ☎ : 08816-250815, 250889, Fax :- 250891,250869.

Ref :-

Date:.....

18th Aug 2017

To

The Principal,
B V Raju College,
Vishnupur,
Bhimavaram.

Respected Sir,

Sub: Request for a Guest Lecture.

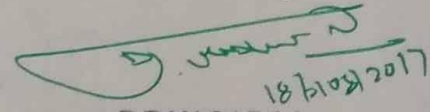
As a major requirement for the subject "Computer Graphics", we wish to conduct a guest lecture on the topic "Graphic Devices" for sixth semester students on August 23rd 2017, from 2:00 PM to 5:00 PM.

In this regard, we would like to request one of your computer science faculty members to be the Guest speaker for the said event to share their knowledge to all the students.

Your favourable response regarding this request will be highly appreciated.

Thank you.

Yours Sincerely



PRINCIPAL

Smt. B. Seetha Polytechnic
Vishnupur, BHIMAVARAM-534 202.



VISHNU
UNIVERSAL LEARNING

B.V. Raju College

(Formerly Dr. B.V. Raju Institute of Computer Education)

Affiliated to Adikavi Nannaya University

Vishnupur, BHIMAVARAM,

West Godavari Dist-534 202, A.P., India

Tel: 08816 - 250861/62,

Email: bvrcollege@rediffmail.com

www.bvricedegree.edu.in

19th Aug 2017

To

The Principal,

Smt.B.Seetha Polytechnic College,

Vishnupur,

Bhimavaram.

Respected sir,

Sub: Letter of Acceptance.

We are very glad to send Mr. R Rama Rao , HOD Dept., of Computer Science of our College as a guest faculty to **Smt.B.Seetha Polytechnic College-Bhimavaram** to give a lecture on "Computer Graphics-Graphic Devices" to the VI Semester students on 23rd Aug 2017 from 2 PM to 5 PM.

Thanking you.

Yours Sincerely

PRINCIPAL

B.V. RAJU COLLEGE

VISHNUPUR, BHIMAVARAM-534 202



SMT. B. SEETHA POLYTECHNIC

Approved by All India Council for Technical Education, New Delhi.

Recognised by The State Board of Technical Education & Training, Hyderabad, A.P.

Vishnupur, **BHIMAVARAM - 534 202**, W.G.Dt.A.P. ☎ : 08816-250815, 250889, Fax :- 250891,250869.

Ref :-

Date:.....
23rd Aug 2017

To

Mr. R Rama Rao,
HOD Dept., of Computer Science,
B V Raju College,
Vishnupur,
Bhimavaram.

Dear sir,

Sub: Letter of Appreciation

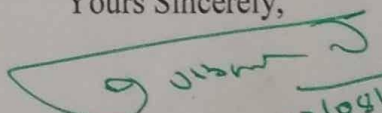
Thank you very much for delivering an informative and thought provoking lecture on "Computer Graphics- Graphic Devices" for sixth semester students of our college on 23rd Aug 2017 from 2:00 PM to 5:00 PM.

It was really a splendid lecture which exposed students to the field practices. All the students appreciated and got benefitted from your views on the subject.

Looking forward for your cooperation for promoting the education in future as well.

Thanking you.

Yours Sincerely,



23/08/2017
PRINCIPAL
Smt. B. Seetha Polytechnic
Vishnupur, BHIMAVARAM-534 202.



Sri Vishnu Educational Society's

VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

2nd Nov 2017.

To

The Principal,
B V Raju College,
Vishupur,
Bhimavaram.

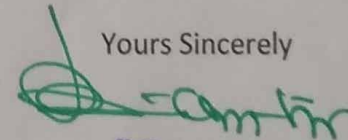
Respected sir,

Sub: Request for a Guest Faculty.

I request you to please kindly send one of your Computer Science faculty members as a guest faculty to teach "Web Technologies" to our 11th class students for the academic year 2017-18.

Thanking you.

Yours Sincerely


PRINCIPAL
VISHNU SCHOOL (E.M.)
Vishnupur, Kovvada,
BHIMAVARAM-534 202, W.G.DL.A.P.



..... Shaping tomorrow's world

Kovvada, Vishnupur, BHIMAVARAM - 534 202, W.G. Dist., A.P.

E-mail : vishnupublicschool@yahoo.co.in

Website : www.vishnuschool.edu.in

4th Nov 2017.

To

The Principal,

Vishnu School,

Bhimavaram.

Respected sir,

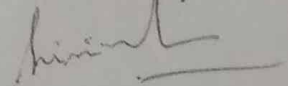
Sub: Letter of Acceptance.

We are very glad to send Mr. B Naresh , Lecturer in Computer Science of our College as a guest faculty to your Vishnu School-Bimavaram to teach "Web Technologies" to 11th class students. We send our faculty as per the schedule below from 6th Nov 2017 onwards.

Schedule: Monday, Thursday and Saturday from 8.45 AM to 9.45 AM.

Thanking you.

Yours Sincerely



PRINCIPAL
B.V. RAJU COLLEGE
VISHNUPUR, BHIMAVARAM-534 202



Sri Vishnu Educational Society's
VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

3rd Feb 2018

To

Mr B Naresh,
Lecturer in Computer Science,
B V Raju College,
Vishnupur,
Bhimavaram.

Dear Sir,

Sub: Letter of Appreciation.

Thank you very much for delivering an informative and thought provoking lecture series on "Web Technologies" held from 6th Nov 2017 to 3rd Feb 2018 at Vishnu School, Vishnupur, Bhimavaram.

It was really a splendid lecture which exposed students to the field practices. All the students appreciated and got benefitted from the views on the subject.

Looking forward for your cooperation for the promotion of profession as education in future as well.

Thanking you.



Yours Sincerely,

PRINCIPAL
VISHNU SCHOOL (E.M.)

..... Shaping tomorrow's world Vishnupur, Kovvada,

BHIMAVARAM-534 202, W.G. Dist., A.P.

Kovvada, Vishnupur, BHIMAVARAM - 534 202, W.G. Dist., A.P.

E-mail : vishnupublicschool@yahoo.co.in

Website : www.vishnuschool.edu.in

06 JUNE 2017.

To

The Principal,

Vishnu school,

Vishupur,

Bhimavaram.

Respected sir,

Sub: Request for a Guest Faculty.

I request you to please kindly send one of your biological Science faculty member as a guest faculty to teach "life science" students for the academic year 2017-18.

Thanking you.

Yours Sincerelys



PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202



Sri Vishnu Educational Society's

VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

05 JUN 2017.

To

The Principal,
B V Raju College,
Vishupur,
Bhimavaram.

Respected sir,

Sub: Request for a Guest Faculty.

I request you to please kindly send one of your Life Science faculty member as a guest faculty to teach "**Biology**" to our Inter students for the academic year 2017-18.

Thanking you.

A handwritten signature in blue ink, appearing to read 'D. Srinivas', is written over the printed name of the Principal.

Yours Sincerely

PRINCIPAL

VISHNU SCHOOL (E.M.)

Vishnupur, Kovvada,

BHIMAVARAM-534 202, W.G.Dt., A.P

..... **Shaping tomorrow's world**

Kovvada, Vishnupur, BHIMAVARAM - 534 202, W.G. Dist., A.P.

E-mail : vishnupublicschool@yahoo.co.in

Website : www.vishnuschool.edu.in



Sri Vishnu Educational Society's

VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

15th JUN 2017.

To

The Principal,
B V Raju College,
Vishupur,
Bhimavaram.

Respected sir,

Sub: Request for a Guest Faculty.

I request you to please kindly send one of your Life Science faculty member as a guest faculty to teach "**Biology**" to our Inter students for the academic year 2017-18.

Thanking you.

Yours Sincerely

PRINCIPAL

VISHNU SCHOOL (E.M.)

Vishnupur, Kovvada,

BHIMAVARAM-534 202, W.G.Dl., A.P

..... Shaping tomorrow's world

Kovvada, Vishnupur, BHIMAVARAM - 534 202, W.G. Dist., A.P.

E-mail : vishnupublicschool@yahoo.co.in

Website : www.vishnuschool.edu.in

03 Dec 2017.

To

The Principal,

Vishnu school,

Vishupur,

Bhimavaram.

Respected sir,

Sub: Request for a Guest Faculty.

I request you to please kindly send one of your biological Science faculty member as a guest faculty to teach "life science" students for the academic year 2017-18.

Thanking you.

Yours Sincerely



PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202



Sri Vishnu Educational Society's
VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

5th DEC 2017.

To

The Principal,
B V Raju College,
Vishupur,
Bhimavaram.

Respected sir,

Sub: Request for a Guest Faculty.

I request you to please kindly send one of your Life Science faculty member as a guest faculty to teach "**biological Science**" to our Inter students for the academic year 2017-18.

Thanking you.

Yours Sincerely

PRINCIPAL
VISHNU SCHOOL (E.M.)
Vishnupur, Kovvada,
BHIMAVARAM-534 202, W.G.Dt., A.P



Sri Vishnu Educational Society's

VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

12 DEC 2017.

To

The Principal,

B V Raju College,

Vishupur,

Bhimavaram.

Respected sir,

Sub: Request for a Guest Faculty.

I request you to please kindly send one of your Life Science faculty member as a guest faculty to teach "**Biology**" to our Inter students for the academic year 2017-18.

Thanking you.

Yours Sincerely

PRINCIPAL
VISHNU SCHOOL (E.M.)
Vishnupur, Kovvada,
BHIMAVARAM-534 202, W.G.Dt., A.P.

..... Shaping tomorrow's world

Kovvada, Vishnupur, BHIMAVARAM - 534 202, W.G. Dist., A.P.

E-mail : vishnupublicschool@yahoo.co.in

Website : www.vishnuschool.edu.in



Sri Vishnu Educational Society's

VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

5 DECEMBER 2017.

To

The Principal,
B V Raju College,
Vishupur,
Bhimavaram.

Respected sir,

Sub: Request for practical mock preparation.

I request you to accept to conduct practical's for higher secondary students in your premises for the academic year 2017-18.

List of practicals : 1)Haemotology (Haemoglobin , blood grouping, RBC ,WBC)

2) Electrophoresis demo

Thanking you.

Yours Sincerely

PRINCIPAL
VISHNU SCHOOL (E.M.)
Vishnupur, Kovvada,
BHIMAVARAM-534 202, W.G.Dt.,A.P

..... Shaping tomorrow's world

Kovvada, Vishnupur, BHIMAVARAM - 534 202, W.G. Dist., A.P.

E-mail : vishnupublicschool@yahoo.co.in

Website : www.vishnuschool.edu.in

10 Aug 2017.

To

The Principal,

Sri Vishnu Public School,

Bhimavaram.

Respected sir,

Sub: Letter of Acceptance.

We are very glad to send **Mrs. Sridevi**, Lecturer in Life Science B V Raju College as a guest faculty to **Sri Vishnu Public School-Bhimavaram** to teach "biological students" to Inter students. We send our faculty as per the schedule below from 10th Aug 2017 onwards.

Topic : Immunology

Schedule: Monday,wednesday and Saturday from 9.45 AM to 10.45 AM.

Thanking you.

Yours Sincerely



PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202

22 Aug 2017

To

The Principal,

Sri Vishnu Public School,

Bhimavaram.

Respected sir,

Sub: Letter of Acceptance.

We are very glad to send **Mrs. Sudha madhavi** Lecturer in Life science B V Raju College as a guest faculty to **Sri Vishnu Public School-Bhimavaram** to teach "biological science" to Inter students. We send our faculty as per the schedule below from 22 Aug 2017 onwards.

Topic : principles of inheritance

Schedule: Tuesday, wednesday and Friday from 10.45 AM to 11.45 AM.

Thanking you.

Yours Sincerely



PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202



Sri Vishnu Educational Society's
VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

6th Aug 2017.

To

The Principal,
B V Raju college,
Bhimavaram.

Respected sir,

Sub: Letter of Acceptance.

We are very glad to send **Mr. J Ramesh**, Lecturer in Biological science **Sri Vishnu Public School-Bhimavaram** as a guest faculty to B V Raju College -**Bhimavaram** to teach "degree students" . We send our faculty as per the schedule below from 6th Aug 2017 onwards.

Topic : Clinical biochemistry

Schedule: Monday, Thursday and Saturday from 9.00 PM to 10.00 PM.

Thanking you.

Yours Sincerely

PRINCIPAL
VISHNU SCHOOL (E.M.)
Vishnupur, Kovvada,
BHIMAVARAM-534 202. W.G.Dt., A.P

04 Jan2018

To

The Principal,

Sri Vishnu Public School,

Bhimavaram.

Respected sir,

Sub: Letter of Acceptance.

We are very glad to send **Mrs. Sudha madhavi** Lecturer in Life science B V Raju College as a guest faculty to **Sri Vishnu Public School-Bimavaram** to teach "biological science" to Inter students. We send our faculty as per the schedule below from 04 Jan2018 onwards.

Topic :biotechnology principles and applications

Schedule: Tuesday, wednesday and Friday from 1.45 PM to 2.45 PM.

Thanking you.

Yours Sincerely



PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202

03 Jan 2018.

To

The Principal,

Sri Vishnu Public School,

Bhimavaram.

Respected sir,

Sub: Letter of Acceptance.

We are very glad to send **Mrs. Sridevi**, Lecturer in Life Science B V Raju College as a guest faculty to **Sri Vishnu Public School-Bhimavaram** to teach "biological students" to Inter students. We send our faculty as per the schedule below from 04 Jan 2018 onwards.

Topic: microbes in human welfare

Schedule: Monday, Thursday and Friday from 9.00 AM to 9.45 AM.

Thanking you.

Yours Sincerely



PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202



Sri Vishnu Educational Society's

VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

3 Jan 2018.

To

The Principal,

B V Raju college,

Bhimavaram.

Respected sir,

Sub: Letter of Acceptance.

We are very glad to send **Mr. J Ramesh**, Lecturer in Biological science **Sri Vishnu Public School-Bhimavaram** as a guest faculty to B V Raju College -**Bhimavaram** to teach "degree students" . We send our faculty as per the schedule below from 5th Jan 2018 onwards.

Topic : Intermediary metabolism

Schedule: Tuesday, Thursday and Saturday from 11.00 AM to 12.00 PM.

Thanking you.

Yours Sincerely

PRINCIPAL
VISHNU SCHOOL (E.M.)
Vishnupur, Kovvada,
BHIMAVARAM-534 202- W.G.Dt., A.P

..... Shaping tomorrow's world

Kovvada, Vishnupur, BHIMAVARAM - 534 202, W.G. Dist., A.P.

E-mail : vishnupublicschool@yahoo.co.in

Website : www.vishnuschool.edu.in



Sri Vishnu Educational Society's

VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

24 Nov 2017

To

Mrs. K . sudha madhavi,

Lecturer in life Science,

B V Raju College,

Vishnupur,

Bhimavaram.

Dear Madam,


Sub: Letter of Appreciation.

Thank you very much for delivering an informative and though provoking lecture on "life Science" held on 22 Aug 2017 to 24 Nov 2017 at Sri Vishnu Public School, Vishnupur, Bhimavaram.

It was really a splendid lecture which exposed students to the field practices. All the students appreciated and got benefitted from your views on the subject.

Looking forward for your cooperation for the promotion of profession education in future as well.

Thanking you.


Yours Sincerely,
PRINCIPAL
VISHNU SCHOOL (E.M.)
Vishnupur, Kovvada,
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VISHNU SCHOOL

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13 NOV 2017

To

Mrs. D. sridevi,
Lecturer in life Science,
B V Raju College,
Vishnupur,
Bhimavaram.

Dear Madam,

Sub: Letter of Appreciation.

Thank you very much for delivering an informative and though provoking lecture on "Life Science" held on 11 Aug 2017 to 13 Nov 2017 at Sri Vishnu Public School, Vishnupur, Bhimavaram.

It was really a splendid lecture which exposed students to the field practices. All the students appreciated and got benefitted from your views on the subject.

Looking forward for your cooperation for the promotion of profession education in future as well.

Thanking you.

Yours Sincerely,
PRINCIPAL
VISHNU SCHOOL (E.M.)
Vishnupur, Kovvada,
BHIMAVARAM-534 202. W.G.Dt., A.P

..... Shaping tomorrow's world

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E-mail : vishnupublicschool@yahoo.co.in

Website : www.vishnuschool.edu.in

22 Nov 2017

To

Mr. J Ramesh,

Lecturer in Biological Science,

Vishnu school,

Vishnupur,

Bhimavaram.

Dear sir,

Sub: Letter of Appreciation.

Thank you very much for delivering an informative and though provoking lecture on " Biological science" held on 06 Aug 2017 to 22 Nov 2017 at B.V Raju college, Vishnupur, Bhimavaram.

It was really a splendid lecture which exposed students to the field practices. All the students appreciated and got benefitted from your views on the subject.

Looking forward for your cooperation for the promotion of profession education in future as well.

Thanking you.

Yours Sincerely,



PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202



Sri Vishnu Educational Society's
VISHNU SCHOOL

Affiliated to CBSE New Delhi Vide No.CBSE/AFF/SL-00206/1011/130240

02 Apr 2018

To

Mrs. D. sridevi,
Lecturer in life Science,
B V Raju College,
Vishnupur,
Bhimavaram.
Dear Madam,

Sub: Letter of Appreciation.

Thank you very much for delivering an informative and though provoking lecture on "Life Science" held on 04 Jan 2018 to 02 April 2018 at Sri Vishnu Public School, Vishnupur, Bhimavaram.

It was really a splendid lecture which exposed students to the field practices. All the students appreciated and got benefitted from your views on the subject.

Looking forward for your cooperation for the promotion of profession education in future as well.

Thanking you.

Yours Sincerely
PRINCIPAL
VISHNU SCHOOL (E.M.)
Vishnupur, Kovvada,
BHIMAVARAM-534 202. W.G.Dt..A.P

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VISHNU SCHOOL

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05 Apr 2018

To

Mrs. K . sudha madhavi,

Lecturer in life Science,

B V Raju College,

Vishnupur,

Bhimavaram.

Dear Madam,

Sub: Letter of Appreciation.

Thank you very much for delivering an informative and though provoking lecture on "life Science" held on 04 Jan 2018 to 05 Apr 2018 at Sri Vishnu Public School, Vishnupur, Bhimavaram.

It was really a splendid lecture which exposed students to the field practices. All the students appreciated and got benefitted from your views on the subject.

Looking forward for your cooperation for the promotion of profession education in future as well.

Thanking you.


Yours Sincerely,
PRINCIPAL
VISHNU SCHOOL (E.M.)
Vishnupur, Kovvada,
BHIMAVARAM-534 202. W.G.Dt., A.P

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E-mail : vishnupublicschool@yahoo.co.in

Website : www.vishnuschool.edu.in

04 Apr 2018

To

Mr. J Ramesh,

Lecturer in Biological Science,

Vishnu school,

Vishnupur,

Bhimavaram.

Dear sir,

Sub: Letter of Appreciation.

Thank you very much for delivering an informative and though provoking lecture on " Biological science" held on 03 Jan 2018 to 04 Apr 2018 at B.V Raju college, Vishnupur, Bhimavaram.

It was really a splendid lecture which exposed students to the field practices. All the students appreciated and got benefitted from your views on the subject.

Looking forward for your cooperation for the promotion of profession education in future as well.

Thanking you.

Yours Sincerely,



PRINCIPAL

B.V. RAJU COLLEGE

Vishnupur, BHIMAVARAM-534 202

Dr. Ch.V.Srinivas, M.Sc., Ph.D.,
PRINCIPAL

Date: 06-02-2018.

To
V N V RADHA KRISHNA MURTY,
Assistant Professor, BS&H,
G V V R INSTITUTE OF TECHNOLOGY,
TUNDURRU,
BHIMAVARAM-534207.

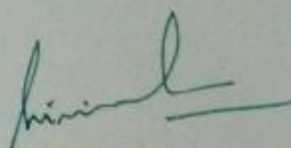
Respected Sir,

Sub: Letter of appreciation – reg.

Thank you very much for your presence as a Guest Lecturer, for two day seminar on "CENTRAL FORCES" and "RELATIVISTIC MECHANICS" for our I semester students on 05-02-2018 and on 06-02-2018 at B V RAJU COLLEGE, VISHNUPUR, BHIMAVARAM. All the students got benefitted and understood well the subject.

Your role is truly commendable and we appreciate it, looking forward for your cooperation in future programmes and professional education as well.

Thank you,



PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202

Guest lecture given by V N V RADHA KRISHNA MURTY ON CENTRAL FORCES AND RELATIVISTIC MECHNAICS AT B V RAJU COLLEGE, VISHNUPUR, BHIMAVARAM ON 05-02-2018 AND 06-02-2018





GRANDHI VARALAKSHMI VENKATARAO INSTITUTE OF TECHNOLOGY

(Approved by AICTE, New Delhi, Affiliated to JNTUK, KAKINADA)

Vempa Road, **TUNDURRU (PO), BHIMAVARAM - 534 207**, W.G. Dist., A.P.

Dr. K S N PRASAD, M.Tech., Ph.D.,
PRINCIPAL

Date: 03-02-2018.

To
The Principal,
B V RAJU COLLEGE,
VISHNUPUR,
BHIMAVARAM.

Respected Sir,

Sub: Relieving Letter— reg.

With reference to your request, Mr. V N V Radha Krishna Murty, Assistant Professor, Department of S&H has been deputed for giving guest lecture for your students on 05-02-2018 and 06-02-2018 in your college.

Thanking you Sir,



K. S. N. Prasad
PRINCIPAL,
Grandhi Varalakshmi Venkatarao
Institute of Technology (GVVIT)
TUNDURRU (P.O) BHIMAVARAM.

Dr. CH.V.SRINIVAS, M.Sc., Ph.D.,
PRINCIPAL

Date: 03-03-2018.

To
The Principal,
G V V R INSTITUTE OF TECHNOLOGY,
VEMPA RAOD, TUNDURRU.

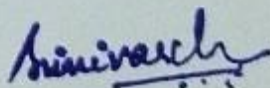
Respected Sir,

Sub: Relieving Letter- reg.

With reference to your request, B KIRAN, Lecturer, Department of PHYSICS & ELECTRONICS has been deputed for giving guest lecture "INTERFERENCE OF LIGHT" and "LASERS" for your students on 04-03-2018 and 05-03-2018 in your college.

Thanking you Sir,




PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534 202



GRANDHI VARALAKSHMI VENKATARAO INSTITUTE OF TECHNOLOGY

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Vempa Road, **TUNDURRU (PO), BHIMAVARAM - 534 207**, W.G. Dist., A.P.

Dr. K S N PRASAD, M.Tech., Ph.D.,
PRINCIPAL

Date: 05-03-2018.

To
Y.Kiran Kumar,
Lecturer in Physics,
B V RAJU COLLEGE, VISHNUPUR,
BHIMAVARAM.
Respected Sir,

Sub: Letter of appreciation – reg.

Thank you very much for your presence as a Resource person, for two day seminar on "Interference of Light" and "LASERS" for our I semester students on 04-03-2018 and on 05-03-2018 at G V V R INSTITUTE OF TECHNOLOGY, TUNDURRU. All the students got benefitted understood well the subject. Your role is truly commendable and we appreciate it, looking forward for your cooperation in future programmes and professional education in future as well.

Thank you,




PRINCIPAL,
Grandhi Varalakshmi Venkatarao
Institute of Technology (GVVIT)
TUNDURRU (P.O) BHIMAVARAM.