



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

31st July 2017

To

The Principal,
V S K Degree College,
Bhimavaram.

Respected sir,

Sub: Guest Speaker Invitation

The department of Computer Science wishes to conduct a seminar on "Advanced Excel Functions" for I BSc I Semester students of our college on 05-08-2017 from 10 AM to 12 PM.

Kindly depute one of your Computer Science faculty members as a resource person to deliver an expert lecture on "Advanced Excel Functions". We believe that your contribution to this field is unparalleled and a workshop on this topic will be of great benefit.

Thanking you.



Yours Sincerely

[Signature]
PRINCIPAL
B.V. RAJU COLLEGE
Vishnupur, BHIMAVARAM-534

VABILISSETTY SATYANARAYANA KRISHNAMURTHY DEGREE COLLEGE
(Affiliated to Adikavi Nannaya University)
Dirusumarru Road, BHIMAVARAM - 534 201



Off: 233794

Mobile: 8977826235

Smt.A.V.RAMANA,
M.A.,M.Phil.,
Principal (FAC)

Email.vskcollegebvr@gmail.com

Bhimavaram,

01-08-2017.

To,
The Principal,
B V Raju College,
Vishnupur,
Bhimavaram.
Respected sir,

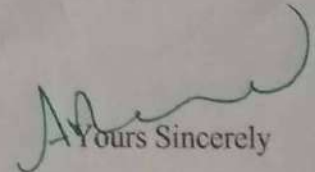
Sub: Acceptance of Invitation to Seminar

Thank you for your invitation to the seminar on “**Advanced Excel Functions**” hosted by Department of Computer Science on **05-08-2017** from 10 AM to 12 PM.

I am happy to inform you that **Mrs. I V SIVA KUMAR, M.Tech HOD of Computer Science** will be in the resource person. Please send more information about this seminar directly to my attention.

As mentioned in your letter, this is an excellent opportunity to enhance our working relationship. We look forward to it!

Thanking you.


Yours Sincerely

Mrs. I V Siva Kumar
V. S. K. Degree College
BHIMAVARAM-534201,

B V RAJU COLLEGE
VISHNUPUR::BHIMAVARAM

CIRCULAR

Date: 01st Aug 2017

It is informed to that; the department of Computer Science is conducting a seminar on
"Advanced Excel Functions" for I BSc I Semester students by **Mr. I V Siva Kumar, M.Tech**
HOD of Computer Science in V S K Degree College on 05th Aug 2017 from 10 AM to 12 PM.

Interested students could consult Mr. B Naresh to enrol your names.



HOD
Head of the Department,
Dept. of Computer Science
B.V.Raju College, BHIMAVARAM-2



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

B V Raju College
Vishnupur::Bhimavaram
Workshop on Advanced Excel Functions
Department of Computer Science

Date: 5th Aug 2017

I BSc (MECs, MPCs & MSCs)

Attendance Sheet

S No	Roll No	Student Name	Section	Signature
1	173117137243	AINAMPUDI RAMYA SUREKHA	MECs	A. Ramya Surekha
2	173117137245	ALLURI LAKSHMI PRASANNA	MECs	A. Lakshmi Prasanna
3	173117137247	AMANAPU SIVA PARVATHI	MECs	A - Siva Parvathi
4	173117137252	BADDI RAVINDRABHARATHI	MECs	B Ravindra Bharathi
5	173117137258	BANDI REKHA SATYA SREE	MECs	B. Satya Sree.
6	173117137263	CHENCHALA PAVANI	MECs	C. Pavani
7	173117137267	DANGETI NAVEEN	MECs	D. Naveen
8	173117137270	GALIDEVARA JAGADEESH	MECs	G. Jagadeesh
9	173117137276	GUDURI LAKSHMI PRIYANKA	MECs	G. Lakshmi Priyanka
10	173117137278	IMANDI SRIKAR KARUNA SAGAR	MECs	M.S.K. Sagar
11	173117137285	KADALI USHA DHARANI	MECs	K. Usha Dharani
12	173117137290	KATURI PRAVEENYA	MECs	K. Praveenya
13	173117137292	KODE PRAMODH	MECs	K. Pramodh
14	173117137296	KONITHIVADA ANUJA	MECs	Anuja
15	173117137300	KOSURI YAJNAPRIYA	MECs	K. Yajna priya
16	173117137303	K V V V BHAVA DURGA	MECs	K.V.V.V.B Durgan
17	173117137304	K LAKSHMI DURGA BHAVANI	MECs	K. Bhavani
18	173117137313	MUDUNURI DHARANI	MECs	M. Dharani
19	173117137315	N MOHINI GANGA BHAVANI	MECs	N. Ganga Bhavani.
20	173117137319	NANDYALA SIRISHA	MECs	N. Sirisha
21	173117137326	PENIMATHSA SIRISHA	MECs	P. Sirisha
22	173117137328	PENMETSA NAGA HARITHA	MECs	P. Naga Haritha
23	173117137331	POLIREDDI ROHINI DEVI	MECs	P. Rohini devi
24	173117137339	S SRI LALITHA RASMITHA	MECs	S.S.L. Rasmitha
25	173117137342	SHAIK ABDUL RAZAK	MECs	S. A Razak

26	173117137350	TOOPATI YOGAMBICA	MECs	YOGAMBICA
27	173117137355	VENDRA ADITYA KUMAR	MECs	V. Aditya kumar
28	173117137358	YADLA SRI RAMA SWAMY ANIL	MECs	Y. S. R. S. Anil
29	173117102062	ALLURI VALLI PRAVALLIKA	MPCs	A. Pravallika
30	173117102067	BALLARI SHABREEN	MPCs	B. ShaBreen
31	173117102069	CHENNAMSETTI VANI SRI LATHA	MPCs	C. V. S. Latha
32	173117102072	DAMISETTI SAI TEJA	MPCs	D. Sai Teja
33	173117102073	DARAPUREDDY HARINI SRI	MPCs	D. Harini Sri
34	173117102079	GUDDATI SRI SATYA HEMALATHA	MPCs	G. Hemalatha
35	173117102083	JUTTIGA VASUDHA	MPCs	J. Vasudha
36	173117102086	KOTHA RAMYA SRI	MPCs	K. Ramya Sri
37	173117102091	MADDALA NAGA SWATHI	MPCs	M. Naga Swathi
38	173117102096	MUCHATLA YAMINI DIVYA	MPCs	M. Yamini Divya
39	173117102098	MUKKU SITA MAHA LAKSHMI	MPCs	M. sitamahalakshmi
40	173117102102	PAMPANA DHARANI	MPCs	P. Dharani
41	173117102104	PATNALA S S MANOJ KUMAR	MPCs	P. S. S. Manoj Kumar
42	173117102113	R G N LAKSHMI PRASANNA	MPCs	R. Prasanana
43	173117102117	VALAVALA BALA TRIPURA SUNDARI	MPCs	V. B. T. Sundari
44	173117102120	YERRA YAMINI LAKSHMI	MPCs	Y. Yamini lakshmi
45	173117109124	AKULA SOWBHAGYA LAKSHMI	MSCs	A. Sowbhagya
46	173117109128	BOTTA LAHARI	MSCs	B. Lahari
47	173117109132	CH LEELA MANUSHA	MSCs	Ch. Manesha
48	173117109138	GUNTU SINDHU	MSCs	G. Sindhu
49	173117109143	KALIDINDI VIDYADEVI	MSCs	K. Vidyadevi
50	173117109148	K V RATNA DURGA SIRISHA	MSCs	K. V. R. Durga sirisha
51	173117109155	M V V SATYANARAYANA MURTHY	MSCs	M. V. V. S. Murthy
52	173117109166	POTTI JYOTHI SAI SRI LAKSHMI	MSCs	P. Lakshmi
53	173117109177	T NAGA SATYA SIVA SAI SRI	MSCs	Siva
54	173117109179	VANAPALLI PRATHYUSHA	MSCs	V. Prathysha

R. Prasad

Head of the Dept. HOD III.
Dept. of Computer Science
B.V. Raju College, BHIMAVARAM-2

05th Aug 2017

To

Mr. I V Siva Kumar,
HOD of Computer Science,
V S K Degree College,
Bhimavaram.

Dear Sir,

Sub: Letter of Appreciation.

Thank you very much for delivering an informative and thought provoking lecture on "Advanced Excel Functions" held on 05-08-2017 at B V Raju College, Vishnupur, Bhimavaram.

It is really a splendid lecture that exposed our students to the field practices. All the students appreciated and got benefitted from your views on the subject.

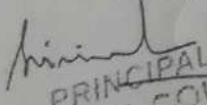
Looking forward for your cooperation for the promotion of compute education in future as well.



Thanking you.

Received copy by
J.V. Lakshmi

Yours Sincerely,


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

Introduction to Excel

I V SIVA KUMAR
HOD OF COMPUTER SCIENCE
V S K DEGREE COLLEGE
BHIMAVARAM

Worksheets

- Excel's main screen is called a "worksheet".
- Each worksheet is comprised of many boxes, called "cells".

Organize Information

- You can organize information by typing a single piece of data into each cell. (See next slides)

	A	B	C	D	E
1	Payroll	6/1/2008			
2	From	6/7/2008			
3	To				
4	Name	Hours	5 per hr	Payroll	
5	Sue	40	15 \$	600.00	
6	Joe	20	10 \$	200.00	
7	John	30	10 \$	300.00	
8	Meg	20	10 \$	200.00	
9	Abe	40	14 \$	560.00	
10					
11	Total				1,400.00
12					
13					
14					

Selecting a Cell

- "Select" a cell by clicking on it once (don't double click).
- You can move from cell to cell with the arrow keys or by pressing the "Enter" key.

Entering Information / The Formula Bar

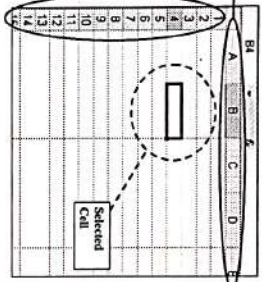
- To enter information in a cell, just start typing.
- When you are done either:
 - Press the Enter Key
 - Press an arrow key
 - Click on the "Enter" button (only visible when entering data into a cell)
- The information in the selected cell is also displayed in the "Formula Bar" above the worksheet.

Double Click to Modify a Cell

- To modify the contents of a cell double click on the cell.
- Then use the right, left arrow keys and the Insert and Delete keys to modify the data.
- When you are done:
 - Press the Enter key or
 - Click on the check box.

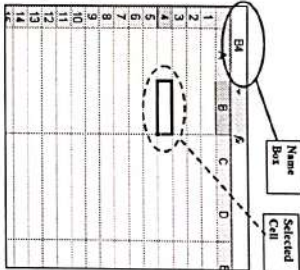
Column Names (letters) & Row Names (numbers)

- The columns of the worksheet are named with letters
- The rows are named with numbers



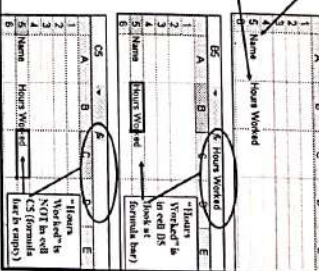
Cell Names (ex. B4)

- The name of a cell is a combination of the letter of the column that contains the cell and the number of the row that contains the cell. Example: B4
- Example: the selected cell in the previous example is B4 (row 4, column B)
- Excel automatically shows the name of the currently selected cell in the worksheet (shown above the worksheet)
- The letter and row number (e.g., B4) are separated by a space between the letter and the number.
- You will learn later why it is important to understand how to name cells.



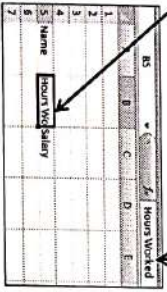
Information that is "too wide" for a cell

- The word "Name" is in cell A5
- The words "Hours Worked" are in cell B5 (NOT in cell C5). However, since the information is too wide for cell B5, it looks like it extends into cell C5.
- You can determine that the information is really only in cell B5 by selecting cell B5 and looking at the formula bar and then selecting cell C5 and looking at the formula bar.



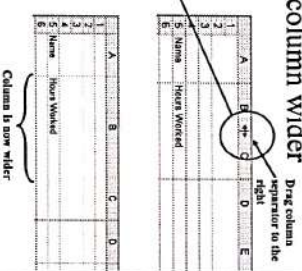
Information that is "Chopped Off"

- If there is information in the cell to the right, then the original cell still contains all of the data, but the data appears to be "chopped off"
- You can see the complete data by selecting the cell and looking in the formula bar.



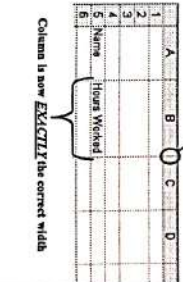
Make a column wider

- To make Column B wider, point the cursor to the column separator between columns B and column C.
- The cursor changes to a "Double headed arrow"
- Now, click the left mouse button and without letting go of the button, drag the separator to the right to make the column wider (or to the left to make the column narrower)



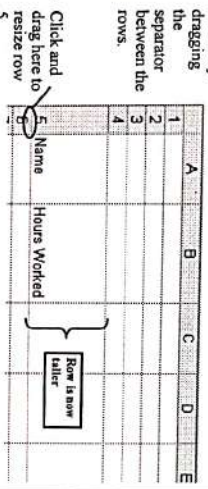
Getting the Exact Width

- To get the "exact" width, double click on the separator instead of dragging it.



Resizing a Row

- Make a row taller or shorter by dragging the separator between the rows.



- Click and drag here to resize row 5.

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Example – unformatted worksheet

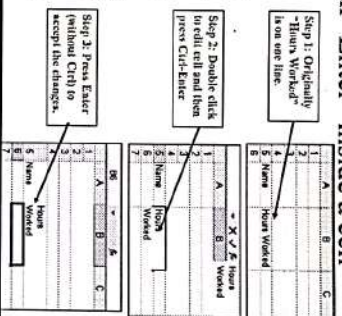
- Unformatted worksheet – see next slide for formatting.

1	A	B	C	D
2	Payroll	6/1/2008		
3	From	6/7/2008		
4	To			
5	Employee Name	Hours Worked	Salary Per Hour	Paycheck
6	Sue	40	15 \$	600.00
7	Joe	20	10 \$	200.00
8	Mag	30	20 \$	600.00
9	Ann	40	14 \$	560.00
10				
11	Total			\$1,960.00

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Putting an "Enter" inside a cell

- To add a new line inside a cell
 - Double click inside the cell where you want the new line.
 - Press Ctrl-Enter (ie. hold down the Ctrl key and press Enter while still holding down Ctrl).
 - When you are done editing, press Enter (without holding down Ctrl) to accept the changes.



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Example –making cells bold

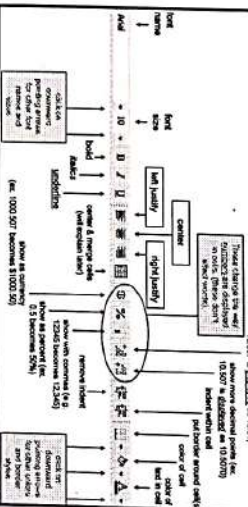
- Click on cell A1 and drag to cell A3.
- Then press the bold button to make cells A1:A3 bold.
- You could also press the font or background color buttons to change the color or apply any other formatting you like (this is not shown below).

1	A	B	C	D
2	Payroll	6/1/2008		
3	From	6/7/2008		
4	To			
5	Employee Name	Hours Worked	Salary Per Hour	Paycheck
6	Sue	40	15 \$	600.00
7	Joe	20	10 \$	200.00
8	Mag	30	20 \$	600.00
9	Ann	40	14 \$	560.00
10				
11	Total			\$1,960.00

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Formatting Cells

- Select one or more cells and then click on any of the formatting buttons (see below) to change the formatting of the selected cells.



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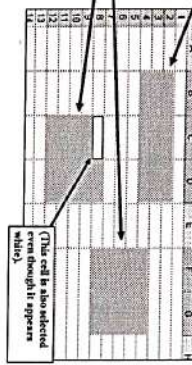
Other Ways of Selecting More Than One Cell

- To select a large range of cells, click on the upper left cell in the range. Then hold the shift key and click on the lower right cell in the range.
- You can select different "non-contiguous" areas of cells by holding down the Ctrl key while clicking and dragging.

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Selecting Non-Contiguous Ranges

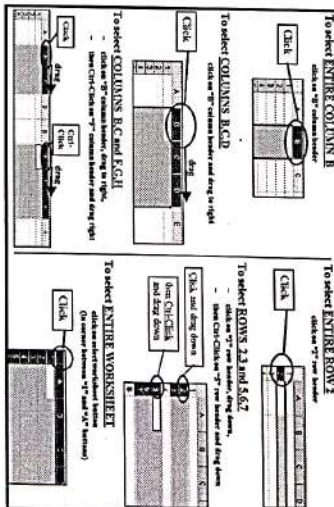
- Click and drag to select the first range.
- Ctrl-click and drag to select additional ranges



Selecting entire Rows, entire Columns or all cells on the worksheet.

- To select an entire column, click on the letter for the column header. To select several columns, click on the header for the first column and drag to the right.
- To select an entire row, click on the number for the row header. To select several rows, click on the header for the first row and drag down.
- To select all of the cells on the spreadsheet, click on the upper left hand corner of the spreadsheet (where the column headers meet the row headers)

Select Entire Columns/Rows/Worksheet



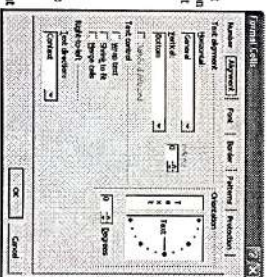
Example - continued

	A	B	C	D	E	F
1	Payroll	6/1/2008				
2	Form	6/7/2008				
3	To					
4						
5	Employee	Hours	Salary	Paycheck		
6	Sue	40	15 \$	600.00		
7	John	20	10 \$	200.00		
8	Mary	30	20 \$	600.00		
9	Abe	40	14 \$	560.00		
10						
11	Total			\$1960.00		
12						

- Step 1: Click on row header for row 2
- Step 2: Ctrl-click on row header for row 4
- Step 3: Press Ctrl and drag to select rows 6-10
- Note: After the "Employee" is now row wide, so make the column wider if necessary (this step is not shown).

Format Cells

- Using the formatting buttons only give you a limited amount of formatting ability.
- For more formatting ability, select one or more cells and right click on the selection. Then choose "Format cells" from the popup menu.
- Choose options from the Number, Alignment, Font, Border and Patterns tabs and press OK to change the way your information looks on the screen.
- The Protection tab is used to lock cells so that their contents can't be modified.
- We will not go into the details of using the format cells dialog box at this time but you should be able to figure out most of it by yourself.



Formatting changes how things LOOK, not how they WORK.

- NOTE: you will probably not understand this slide until after you learn about Excel Formulas.
- Formulas are covered later in this presentation.
- When you change the format of a cell, Excel still "remembers" the original value.
- Excel will use the un-formatted value when calculating formula values.
- Example: if you change numbers to appear with fewer decimal points the original number with all of its decimal points are used in calculations.

Excel Formulas

- You must have an equals sign (=) as the first character in a cell that contains a formula.
- The = sign tells excel that the contents of the cell is a formula
- Without the = sign, the formula will not calculate anything. It will simply display the text of the formula.

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Types of operations

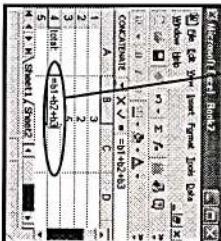
- You can use any of the following operations in a formula:

operation	symbol	example
addition:	+	=a1+3
subtraction:	-	=100-b3
multiplication:	*	=a1*b1
division:	/	=d1/100
exponentiation	^	=a2^2
negation (same symbol as subtraction)	-	=-a2+3

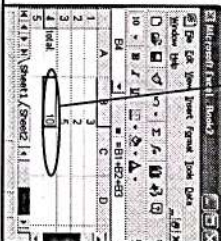
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Formulas - correct

formula with = sign



After pressing ENTER



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Explicit (literal) values and cell references

- You can use both explicit values and cell references in a formula
 - An explicit value is also called a literal value
- Formula with only cell references: =a1*b1
 - Formula with only literal values: =100/27
 - Formula with both cell references and literal values: =a1/100

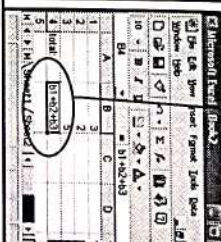
26

Missing = sign

Missing = sign
Before pressing enter



After pressing ENTER
(no change - not a function)



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Common Errors

- The following are some errors that may appear in a spreadsheet (there are others too):
 - #####
 - #DIV/0! - Cell contains a division formula, but the denominator contains either zero or the value zero. Excel will be unable to calculate the formula that references the cell. The error message will appear in the cell.
 - #NAME? - You used a cell reference in the formula, but it did not format correctly (e.g. =B3+10 instead of =B3+10)
 - #VALUE! - Check the format of things to do math with a normal value. Example: =A1+3 when A1 contains the word "hello".
 - #REF! - Trying to divide by zero. Example: =3/A1 when A1 contains 0 (zero)
- Circular Reference
 - Using a formula that contains a reference to the cell that the formula "lives in". Example: putting the formula =A1+1 in cell A1 or putting the formula =B10*(A1:B1) in any of the cells A1, B1, A2, B2

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Complex formulas

- You can use several operations in one function
- You can group those operations with parentheses

Examples

$$=3*2+1$$

$$=c1*(a1+b1)$$

$$=(100*a2-10)+(200*b3-20)+30$$

$$=(3+2*(50/b3+3)/7)*(3+h7)$$

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Order of operations

- When using several operations in one formula, Excel follows the order of operations for math.

- first: all parentheses - innermost first
- second: exponents (°)
- third: all multiplication (*) and division (/). Do these starting with the leftmost * or / and work to the right.
- fourth: all addition (+) and subtraction (-). Do these starting with the leftmost + or - and work to the right.

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Please Excuse My Dear Aunt Sally

- The sentence "Please excuse my dear aunt Sally" is a popular mnemonic to remember the order of operations:

Mnemonic	Meaning
– Please	parentheses
– Excuse	exponents
– My Dear	multiplication and division (going left to right)
– Aunt Sally	addition and subtraction (going left to right)

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Order of operations

- The value of

$$3 + 2 * 5$$

is

13

NOT 25!

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Order of operations

$$3 + (100 - 20) / 10 - 6 * 2 / 4 + 9$$

$$3 + 80 / 10 - 6 * 2 / 4 + 9$$

$$3 + 8 - 6 * 2 / 4 + 9$$

$$3 + 8 - (2 * 2) / 4 + 9$$

$$3 + 8 - 4 / 4 + 9$$

$$(3 + 8) - 3 + 9$$

$$11 - 3 + 9$$

$$8 + 9$$

answer: 17

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Cntrl-'

- To see the formulas in the worksheet
 - Press the Cntrl key at the same time as you press the ' key (i.e. Cntrl-')
 - Press Cntrl-' again to see the values

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What is a function?

- A function is a "named operation"
- Functions have
 - a name
 - parentheses
 - parameters/arguments inside the parentheses
- The words parameter and argument mean the same thing
- you can have many parameters for one function separated with commas ()
- The number of parameters is one more than the number of commas

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The SUM function

- Examples

Function	Result
=SUM(1,2,3,4,5)	15
=SUM(a1,b1,c1)	a1+b1+c1
=SUM(9,a1,b2,5,c1)	9+a1+b2+5+c1

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Terminology

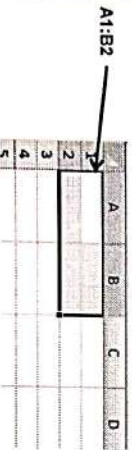
SUM(1,2,3,4,5)

- The name of the function is "SUM"
 - The parameters or arguments to this function are 1,2,3,4 and 5
 - The entire thing, i.e. SUM(1,2,3,4,5), is a function call
 - The value of this function call is 15.
- Another way to say this is that this function call returns 15.

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Ranges

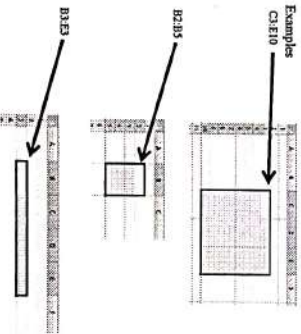
- A rectangular box of cells is called a "range".
- The name of a range is
 - the name of the upper left cell of the range
 - Followed by a colon
 - Followed by the lower right cell of the range
- Example: A1:B2 is shorthand for A1,A2,B1,B2
- See next slide for more examples



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Examples of Range Names

- Examples



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Using a range as a parameter

- Ranges can be specified as a parameters to a function call.
- Both of the following function calls produce the same result as =a1+b1+c1+a2+b2+c2+a3+b3+c3+a4+b4+c4 however the 2nd version uses a range and is much shorter.

without a range
=SUM(a1,b1,c1,a2,b2,c2,a3,b3,c3,a4,b4,c4)

with a range
=SUM(a1:c4)

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Function calls with multiple parameters

- You can include multiple ranges and cells as parameters
- Example: the following function call has 3 parameters. There are two ranges (a1:b2 and c4:c7), one number (100) and one cell reference (d3)

=SUM(a1:b2,100,c4:c7,d3)

Is the same as:

=SUM(a1,a2,b1,b2,100,c4,c5,c6,c7,d3)

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DEPARTMENT OF COMPUTER SCIENCE

DATE: 5th Aug 2017

PARTICIPANT FEEDBACK FORM

Name of the Student: A. Ramya Surekha

Register Number: 173117137243

Course & Group: I. BSc MECs

Contact Number: 7702563889

Email ID: RamyaSurekha@gmail.com

Future events you are expecting: —

How do you rate the event conducted: 1/2/3/4/5 ✓

Are you satisfied with event conduction: Yes/No ✓

Comments or Suggestions: Nothing

A. Surekha
Signature of the student

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DEPARTMENT OF COMPUTER SCIENCE

DATE: 5th Aug 2017

PARTICIPANT FEEDBACK FORM

Name of the Student: A. Lakshmi prasanna

Register Number: 173117137243

Course & Group: IBSc - MECS

Contact Number: 7981983820

Email ID: lakshmiprasanna@gmail.com

Future events you are expecting: —

How do you rate the event conducted: 1/2/3/4/5

Are you satisfied with event conduction: Yes/No

Comments or Suggestions:

A. prasanna
Signature of the student

B V RAJU COLLEGE

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DEPARTMENT OF COMPUTER SCIENCE

DATE: 5th Aug 2017

PARTICIPANT FEEDBACK FORM

Name of the Student: A. Siva Parvathi

Register Number: 173111137247

Course & Group: IBSc - MECS

Contact Number: 8309135357

Email ID: parvathi268@gmail.com

Future events you are expecting:

How do you rate the event conducted: 1/2/3/4/5

Are you satisfied with event conduction: Yes/No

Comments or Suggestions: nothing

A. S. Parvathi
Signature of the student

B V RAJU COLLEGE

VISHNUPUR::BHIMAVARAM

DEPARTMENT OF COMPUTER SCIENCE

DATE: 5th Aug 2017

PARTICIPANT FEEDBACK FORM

Name of the Student: B. Ravindra Bharathi

Register Number: 173117137252

Course & Group: 1st B.sc mecs

Contact Number: 7013551438

Email ID: RavindraBharathi@gmail.com

Future events you are expecting:

How do you rate the event conducted: 1/2/3/4/5

Are you satisfied with event conduction: Yes/No

Comments or Suggestions: Nothing

B. Ravindra Bharathi,
Signature of the student