

# MICROSOFT EXCEL STEP BY STEP

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## Identifying the different Excel 2013

The Microsoft Office 2013 suite includes programs that give you the ability to create and manage every type of file you need to work effectively at home, business, or school.

The programs include Microsoft Word 2013, Excel 2013, Outlook 2013, PowerPoint 2013, Access 2013, InfoPath 2013, Lync 2013, OneNote 2013, and Publisher 2013. You can purchase the programs as part of a package that includes multiple programs or purchase most of the programs individually.

With the Office 2013 programs, you can find the tools you need quickly and, because they were designed as an integrated package, you'll find that most of the skills you learn in one program transfer readily to the others.

That flexibility extends well beyond your personal computer. In addition to the traditional desktop Excel program, you can also use Excel 2013 on devices with ARM chips and over the web. The following describes the different Excel 2013 programs that are available to you:

**Microsoft Excel 2013 desktop edition** This program is installed directly on your computer. It includes all of the capabilities built into Excel 2013. You can purchase the desktop edition as part of an Office program suite, as a separate program, or as part of the Office 365 subscription package that lets you install the desktop versions of Office programs over the Internet.

**Microsoft Excel Mobile** If you have a Windows Phone 8 device, you can use Excel Mobile to view and manipulate your workbooks. You can create formulas, change the formatting of worksheet cells, sort and filter your data, and summarize your data by using charts. You can also connect your phone to your SkyDrive account, so all of those files will be available even if you don't have a notebook or other computer to work with at the moment.

## New features in 2013

**Windows 8 functionality** Excel 2013, like all Office 2013 programs, takes full advantage of the capabilities of the Windows 8 operating system. When it is running on a computer running Windows 8, Excel embodies the new presentation elements and enables you to use a touch interface to interact with your data.

**A window for each workbook** Every workbook now has its own program window.

**New functions** More than 50 new functions are available, which you can use to summarize your data, handle errors in your formulas, and bring in data from online resources.

**Flash Fill** If your data is in list form, you can combine, extract, or format the data in a cell. When you continue the operation, Excel detects your pattern and offers to extend it for every row in the list.

**Quick Analysis Lens** Clicking the Quick Analysis action button, which appears next to a selected cell range, displays different ways to visually represent your data. Clicking an icon creates the analysis instantly.

**Recommended PivotTable** PivotTables create interactive and flexible data summaries. You can have Excel recommend a series of PivotTables to create from your data, click the one you want, and keep working.

**Recommended Charts** As with Recommended PivotTables, Excel recommends the most suitable charts based on patterns in your data. You can display the suggested charts, click the one you want, and modify it so it's perfect.

**Chart formatting control** You can fine-tune your charts quickly and easily. Change the title, layout, or other elements of your charts from a new and interactive interface.

**Chart animations** When you change the underlying data in a chart, Excel updates your chart and highlights the change by using an animation.

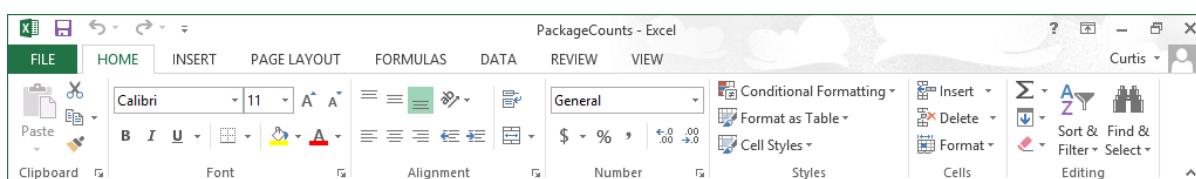
**Cloud capability** You can now share workbooks stored online or post part of a workbook to your social network by posting a link to the file.

**Online presentation capability** You can share your workbook and collaborate in real time with others as part of a Microsoft Lync conversation or meeting. You can also allow others to take control of your workbook during the conversation or meeting.

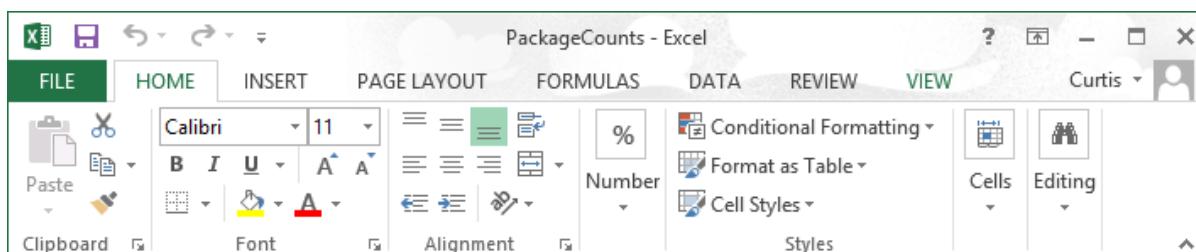
## Working with the ribbon

As with all Office 2013 programs, the Excel ribbon is dynamic, meaning that as its width changes, its buttons adapt to the available space. As a result, a button might be large or small, it might or might not have a label, or it might even be an entry in a list.

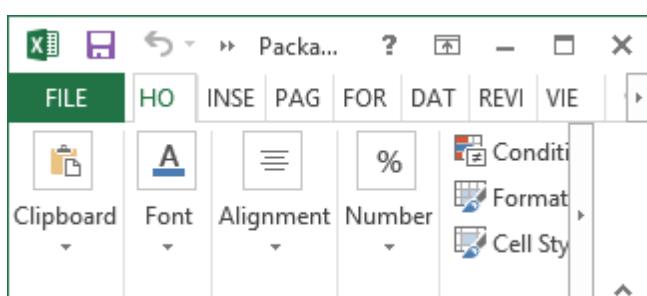
For example, when sufficient horizontal space is available, the buttons on the Home tab are spread out, and the available commands in each group are visible.



If you decrease the horizontal space available to the ribbon, small button labels disappear and entire groups of buttons might hide under one button that represents the entire group. Clicking the group button displays a list of the commands available in that group.



When the ribbon becomes too narrow to display all the groups, a scroll arrow appears at its right end. Clicking the scroll arrow displays the hidden groups.



The width of the ribbon depends on three factors:

**Program window width** Maximizing the program window provides the most space for the ribbon. To maximize the window, click the Maximize button, drag the borders of a non-maximized window, or drag the window to the top of the screen.

Accept the data in same cell

Normally if you type some data in a cell and press enter to accept, cursor moves to the next cell if you want cursor to be retained in the same cell hold **Ctrl** & press **Enter**

## Fill Handle

Fill data into adjacent cells by using the fill handle

To quickly fill in several types of data series, you can select cells and drag the fill handle . To use the fill handle, you select the cells that you want to use as a basis for filling additional cells, and then drag the fill handle across or down the cells that you want to fill.

In our first exercise we have enter Jan and Ctrl + Enter, then move to the fill handle and drag and drop, you can notice other months will be filled (i.e: Jan, Feb, Mar .... Dec), see the

Picture 1

4	
5	Jan
6	Feb
7	Mar
8	Apr
9	May
10	Jun
11	Jul
12	Aug
13	Sep
14	Oct
15	Nov
16	Dec
17	

Picture 1

Like wise we can fill the other things like

January, February .... December

Sun, Mon .... Dec

1<sup>st</sup>,2<sup>nd</sup> .... (see Picture 2)

4					
5	Jan	January	Sun	Sunday	1st
6	Feb	February	Mon	Monday	2nd
7	Mar	March	Tue	Tuesday	3rd
8	Apr	April	Wed	Wednesday	4th
9	May	May	Thu	Thursday	5th
10	Jun	June	Fri	Friday	6th
11	Jul	July	Sat	Saturday	7th
12	Aug	August			8th
13	Sep	September			9th
14	Oct	October			10th
15	Nov	November			11th
16	Dec	December			12th
17					

Picture 2

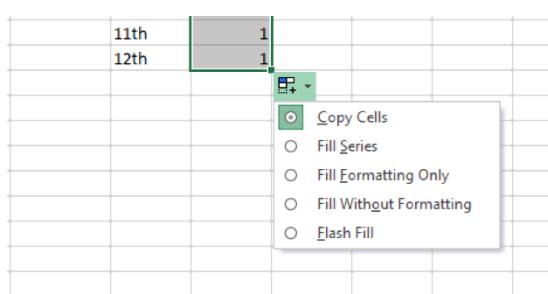
But if we enter 1 and use fill handle drag & drop, we can notice that it will fill with only 1  
(See Picture 3)

2					
3					
4					
5	Jan	January	Sun	Sunday	1st
6	Feb	February	Mon	Monday	2nd
7	Mar	March	Tue	Tuesday	3rd
8	Apr	April	Wed	Wednesday	4th
9	May	May	Thu	Thursday	5th
10	Jun	June	Fri	Friday	6th
11	Jul	July	Sat	Saturday	7th
12	Aug	August			8th
13	Sep	September			9th
14	Oct	October			10th
15	Nov	November			11th
16	Dec	December			12th
17					
18					
19					

Picture 3

But we want 1,2,3 to be filled, we can see there is tag appearing on the bottom 

Just click it, you can check some options are appearing

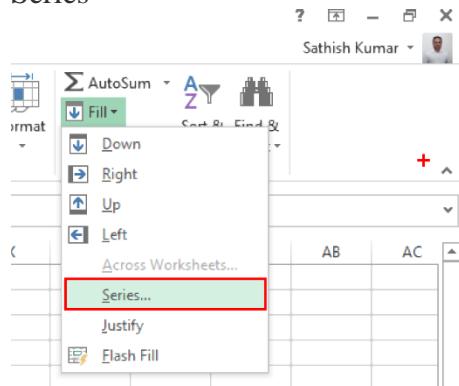


Just click on the Fill Series where you can notice it will be filled with 1,2,3..., but this option you can so when data is smaller, if we want more value like 1 to 5000 then you can follow the below steps

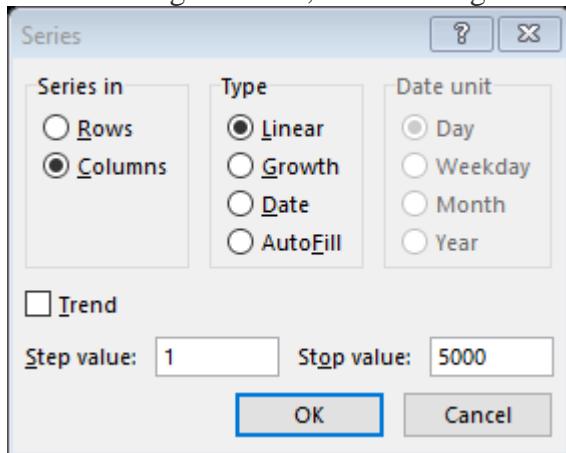
1. Type 1 in any cell and Press Ctrl Enter (to retain the cursor in same cell)
2. Goto Home Tab and click on Fill (Group of Editing)



3. After clicking on Fill, you can notice a new menu appears, where you can select Series



4. After clicking on series, a new dialog box will appear



5. If we want to fill the data in rows (left to right) select rows, want to fill it columns (top to bottom) select Columns
6. As we want to increase it by 1 have given the Step value 1 (can the value as you wish i.e: 2 if we want the odd number)
7. Change the Stop value as 5000 as I want to stop at 5000, you can check that it has been filled till 5000 in column wise.

## Combing the cells

Assume in one cell we have Microsoft and another we have Excel, and want to combine both the cell values into one value, 2 methods can be followed

### Method 1

Assume cell H1 we have “Microsoft” and H2 we have “Excel”

On the Cell I1 type the below formula = H1 & H2

Now you will be getting MicrosoftExcel in cell I1

The screenshot shows a Microsoft Excel spreadsheet with a single row of data. Column A contains the number 1. Column B contains the number 2. Column C contains the number 3. Column D is empty. Column E is empty. Column F is empty. Column G is empty. Column H contains the text "Microsoft". Column I contains the text "Excel". Column J is empty. Column K is empty. The formula bar at the top shows the formula =H1&H2. The status bar at the bottom right shows the name "Sathish Kumar".

The method 1 has some problem, where there is few limitation

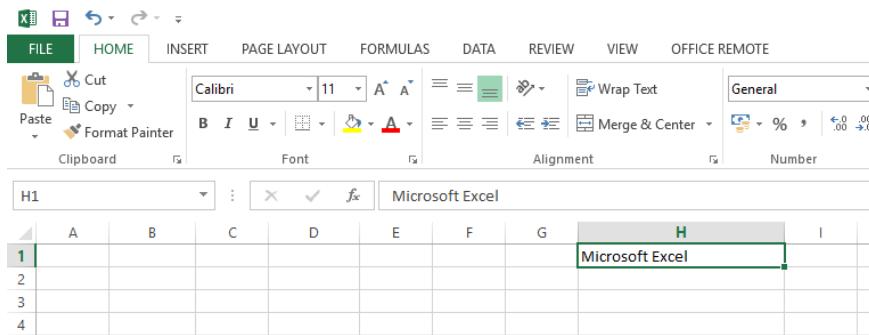
- i. No space between
- ii. Combine in another cell
- iii. Little bit complicated

I believe we can use the next simplest next method

### Method 2

1. Increase the width of the column(i.e: Column I click and drag on the column edge)
2. Select boh the cells (H1 and H2) Click on Fill on the Home tab and select Justify, now “Microsoft Excel” will be combined in one cell

The screenshot shows a Microsoft Excel spreadsheet with a single row of data. Column A contains the number 1. Column B contains the number 2. Column C contains the number 3. Column D is empty. Column E is empty. Column F is empty. Column G is empty. Column H contains the text "Microsoft". Column I contains the text "Excel". Column J is empty. Column K is empty. Column L is empty. Column M is empty. Column N is empty. Column O is empty. Column P is empty. Column Q is empty. Column R is empty. Column S is empty. Column T is empty. Column U is empty. Column V is empty. The formula bar at the top shows the formula =H1&H2. The status bar at the bottom right shows the name "Sathish Kumar". The 'Fill' dropdown menu in the Home tab is open, and the 'Justify' option is highlighted.



By default, the fill handle is displayed, but you can hide it, or show it if it's hidden.

After you drag the fill handle, the **Auto Fill Options** button is displayed. If you don't want to display the **Auto Fill Options** button every time that you drag the fill handle, you can turn it off. Likewise, if the **Auto Fill Options** button does not appear when you drag the fill handle, you might want to turn it on.

### Show or hide the fill handle

1. Click the **File** tab, and then click **Options**.
2. Click **Advanced**, and then under **Editing options**, select or clear the **Enable fill handle and cell drag-and-drop** check box to show or hide the fill handle.
3. To avoid replacing existing data when you drag the fill handle, make sure that the **Alert before overwriting cells** check box is selected. If you don't want to see a message about overwriting nonblank cells, you can clear this check box.

### Date Formatting

#### Best approach for entering a Date

Assume I want to enter a date as 1<sup>st</sup> January 2018, prefer to enter the date as below

**01 Jan 2018**

01 jan 2018
-------------

As the date format may vary from system to system, the above format clearly understands the date, month & year

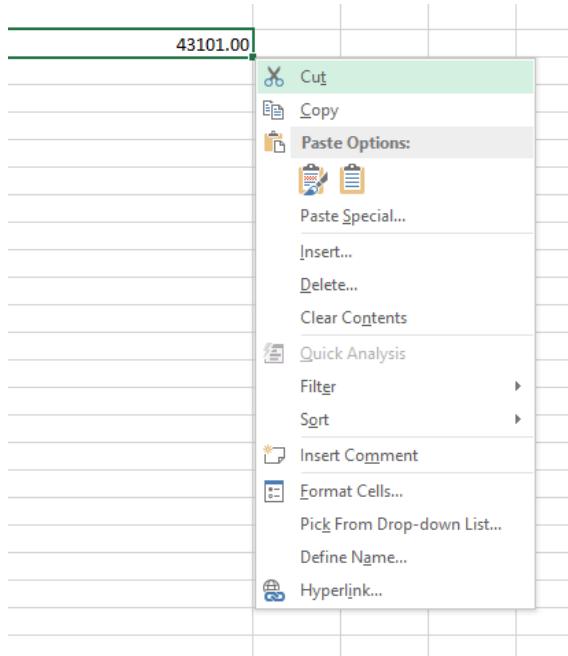
But when you enter, it display as number like the below

43101.00
----------

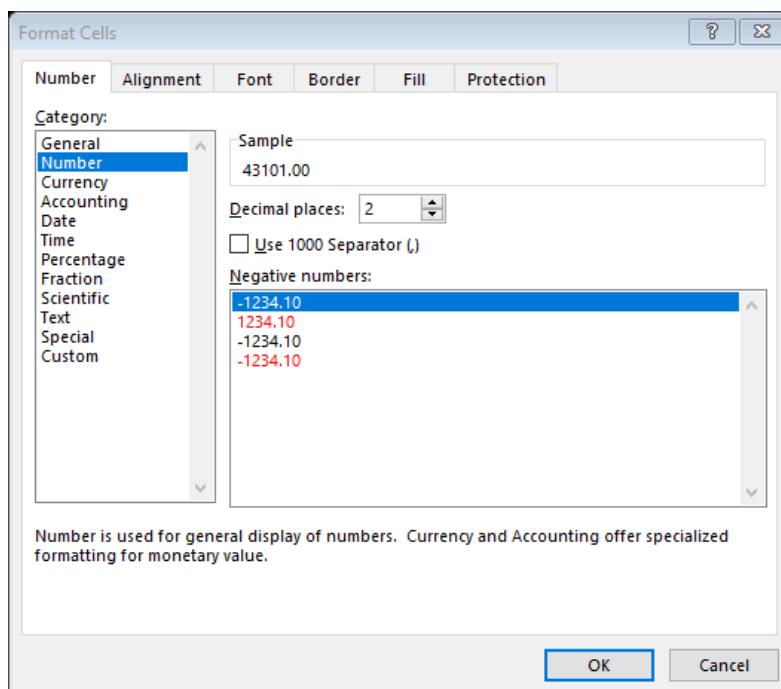
Excel displays 43101 because date as per Microsoft starts with 1<sup>st</sup> Jan 1900 and ends with 31<sup>st</sup> Dec 9999. It means starting from 01 Jan 1900 there are 43101 days till 01 Jan 2018.

If we want to convert to date format various method are available

Right click (Shift F10) on the mouse and

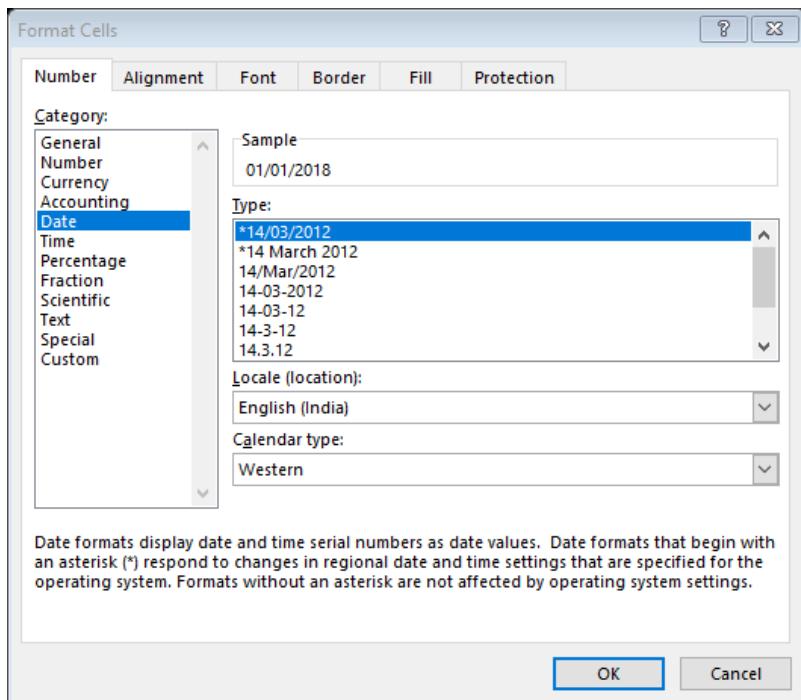


Select Format Cells using mouse or just press F underlined letter in Format Cells else use the short cut key Ctrl 1 which straight away move to the Format Cells dialog box



Tips: if we want to move within format cells use Tab to next or Shift Tab to the previous

You can select the Date, and select the format you wish



If you are satisfied with listed type of format, we can create own format by going to Custom and change Type which we want, for example below format can be entered

dd/mmmm/yyyy,dddd – to get 01/January/2018,Monday

Else we can use the shortcut key Ctrl Shift 3 for getting the default date format

Tips: Other shortcut keys are

Ctrl Shift 1 → Number format with decimal places (General Format)

Ctrl Shift 2 → Date format

Ctrl Shift 4 → Currency format

Ctrl Shift 5 → Percentage format

Ctrl Shift ~ → Number format without decimal places

Ctrl ; → Current date

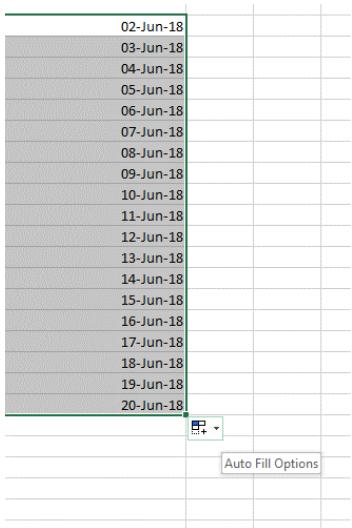
Ctrl Shift : → Current time

Ctrl ; Space bar Ctrl Shift : → Current date and time

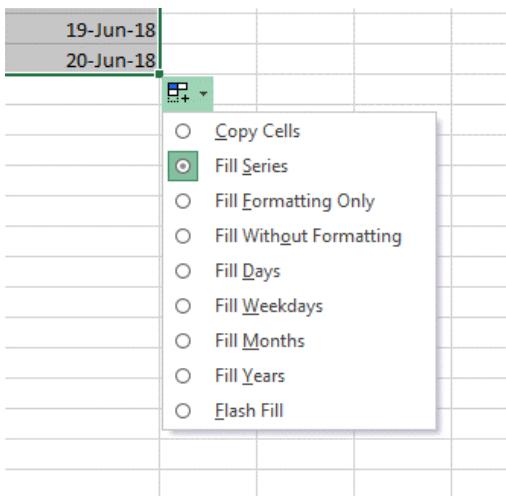
=Today() → Current date changes dynamically

-Now() → Current date & time changes dynamically

We are in the chapter of Fill Handle, for example enter the date (i.e: Ctrl ;), go to the fill handle drag and drop



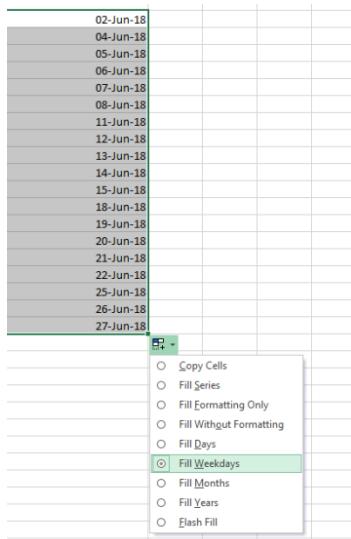
You can notice that date will be incremented, but assume if you don't want to change day instead we want to change Years, Months or Weekdays, then click on the Smart Tag or Auto Fill Options, where you can see new options will appear



Select the option which we want, for example I select Weekdays, where you can notice Weekdays will be updated (Sun-Fri only the working days).

Once again, a small range of dates can be filled, but if you want to fill large set of dates then you can use Fill → Series under Home.

For example if want to fill months wise starting from 01 Jan 2018 till 01 Dec 2100, which you can try



## Flash Fill

Flash Fill is used to fill the data automatically in values, based on the example you want as output.

Flash Fill saves time in writing formulas to extract part of data from a single column or combine data from two/more columns. Flash Fill identifies the first result which you provide and based on the result it fills the rest of Cells.

In the following data we extract only the first letter for the employee name

	A	B	C	D	E
1					
2					
3	empno	name	qualification	dbirth	
4	20910	Shiva N	ITI	10-May-54	
5	20917	Subramanian P	ITI	15-Feb-62	
6	20931	Saravanan V	ITI	20-May-64	
7	20934	Venkatesan G	ITI	05-Jun-64	
8	20912	SundaraJ.K	ITI	30-Apr-66	
9	20927	Jothi S	ITI	15-Jun-66	
10	20928	Ravinder A	ITI	17-Aug-66	
11	20932	Anandan C	ITI	01-Oct-66	
12	20913	Ravi K	ITI	03-Feb-67	
13	20935	Kalyanakumar C	ITI	11-May-67	
14	20943	MathewPaul L	ITI	25-Jun-67	
15	20902	Karthikeyan N	ITI	14-Jun-68	
16	20905	Sathyaranayanan G	ITI	16-Oct-68	
17	20911	Ravi L	ITI	10-Jan-69	
18	20901	Venkatesan P D	ITI	05-Mar-69	
19	20903	Vasudevan E	ITI	15-Jun-69	
20	20904	Sugumar S	ITI	15-Jun-69	
21	20942	Venkatesan S	ITI	08-Aug-69	
22	20918	Santhanam S	ITI	15-Jun-70	
23	20915	Babu S	ITI	03-Oct-70	
24	20923	Muthukumar L	ITI	22-Feb-71	
25	20922	Adhikesavan H	ITI	20-Mar-71	
26	20920	Kumaresan D	ITI	25-May-71	
27	20919	Nagarajan S	ITI	03-Jul-71	
28	20933	Mohan V	ITI	18-Sep-71	
29	20909	Velu S	ITI	18-Jan-72	
30	20941	Kumaran S	ITI	26-Jan-72	
31	20944	Bhaskaran V	ITI	29-Mar-72	
32	20907	Srinivasan J	ITI	12-Jul-72	
33	20926	Venkatraman K	ITI	25-Jul-72	
34	20916	Kumar S	ITI	15-Dec-72	
35	20924	Suresh G	ITI	22-Jun-73	
36	20914	Murugesh S	ITI	25-Jul-73	
37	20925	Pattabiraman S	ITI	12-Apr-74	
38	20921	Kannaiappan V	ITI	15-May-74	
39	20929	Dhanasekaran T	ITI	13-Mar-75	
40	20906	Sukumar K	ITI	31-Jul-64	
41	20908	Murugan S	ITI	05-Jan-68	
42	20930	Veerabhadiran K	ITI	03-Jun-68	
43	20940	Muthuswamy K	ITI	11-Jan-72	
44	1055	Reddy T P	MA	01-Jul-48	

For example we want S for Shiva, S for Subramanian, type the same 2 sample in next adjacent cell, may at the cell no. E4, E5 as shown below

A	B	C	D	E
1				
2				
3	empno	name	qualification	dbirth
4	20910	Shiva N	ITI	10-May-64 S
5	20917	Subramanian P	ITI	15-Feb-62 S
6	20931	Saravanan V	ITI	20-May-64 S
7	20934	Venkatesan G	ITI	05-Jun-64
8	20941	Sundaraj K	ITI	10-Apr-66

Now we can use Flash Fill by 3 ways

#### a. Home → Fill → Flash Fill

The screenshot shows the Microsoft Excel ribbon with the 'HOME' tab selected. In the 'Fill' section of the ribbon, the 'Flash Fill' button is highlighted with a red box. The main worksheet area displays the same data as the first table, with row 6 selected.

#### b. Data → Flash Fill

The screenshot shows the Microsoft Excel ribbon with the 'DATA' tab selected. In the 'Data Tools' section of the ribbon, the 'Flash Fill' button is highlighted with a red box. The main worksheet area displays the same data as the first table, with row 6 selected.

#### c. Ctrl E

Now you can notice entire would have filled

The screenshot shows the Microsoft Excel ribbon with the 'DATA' tab selected. The main worksheet area now contains a much larger dataset, starting from row 3 and extending down to row 54. The status bar at the bottom of the screen displays the message 'FLASH FILL CHANGED CELLS: 54'. The formula bar shows the formula '=EX02'.

On the status it gives a message that Flash Fill Changed Cells: 54

Let's try to do the same thing for extracting the initial for all the employee, once again I am using first 2 employee records as the sample (N, P and used Flash Fill), below seen are displayed

A	B	C	D	E	F
1					
2					
3	empno	name	qualification	dbrth	
4	20910	Shiva N	(T)	10-May-64	S
5	20917	Subramanian P	(T)	15-Feb-52	S
6	20912	Saravanan V	(T)	20-May-64	V
7	20914	Saravanan G	(T)	05-Jun-64	G
8	20912	Sundara R	(T)	30-Apr-66	S
9	20927	John S	(T)	15-Jun-66	J
10	20919	Bavinder A	(T)	17-Aug-66	R
11	20912	Anandan C	(T)	01-Oct-66	A
12	20913	Ravi K	(T)	09-Feb-67	K
13	20915	Kalvankumar C	(T)	11-May-67	K
14	20943	MathevePaul L	(T)	25-Jun-67	M
15	20910	Karthikayen N	(T)	15-Jun-68	N
16	20905	Sathyasaranan G	(T)	18-Oct-68	S
17	20911	Ravi L	(T)	10-Jan-69	R
18	20901	Venkatesan P D	(T)	05-Mar-69	V
19	20912	Sundara R	(T)	15-Jun-69	E
20	20904	Sugumar S	(T)	15-Jun-69	S
21	20942	Venkatesan S	(T)	08-Aug-69	V
22	20918	Santhanam S	(T)	15-Jun-70	S
23	20915	Sundara R	(T)	05-Jun-70	S
24	20913	Muthukumar L	(T)	22-Feb-71	M
25	20912	Adhikesavan H	(T)	20-Mar-71	A
26	20920	Kumarasan D	(T)	25-May-71	K
27	20919	Nagarajan S	(T)	05-Jun-71	S
28	20913	Sundara R	(T)	18-Sep-71	M
29	20909	Velu S	(T)	18-Jan-72	V
30	20941	Kumaras S	(T)	26-Jan-72	K
31	20944	Bhaskaran V	(T)	29-Mar-72	B
32	20907	Karthikayen I	(T)	12-Jun-72	I
33	20926	Venkatesan K	(T)	25-Jul-72	V
34	20916	Kumar S	(T)	15-Dec-72	K
35	20924	Suresh D	(T)	22-Jun-73	S
36	20925	Karthikayen S	(T)	15-Jun-73	M
37	20925	Pattabiraman S	(T)	12-Apr-74	P
38	20921	Kannappan V	(T)	15-May-74	V
39	20929	Dhanasekaran T	(T)	15-Mar-75	D
40	20910	John S	(T)	15-Jun-75	J
41	20912	Bavinder A	(T)	17-Aug-75	R
42	20911	Anandan C	(T)	01-Oct-66	A
43	20913	Ravi K	(T)	09-Feb-67	R
44	20915	Kalvankumar C	(T)	11-May-67	K
45	20912	Karthikayen N	(T)	15-Jun-68	M
46	20905	Sathyasaranan G	(T)	18-Oct-68	S
17	20911	Ravi L	(T)	10-Jan-69	R
18	20901	Venkatesan P D	(T)	05-Mar-69	V
19	20912	Sundara R	(T)	15-Jun-69	E
20	20904	Sugumar S	(T)	15-Jun-69	S
21	20942	Venkatesan S	(T)	08-Aug-69	V
22	20918	Santhanam S	(T)	15-Jun-70	S
23	20915	Sundara R	(T)	05-Jun-70	S
24	20913	Muthukumar L	(T)	22-Feb-71	M
25	20912	Adhikesavan H	(T)	20-Mar-71	A
26	20920	Kumarasan D	(T)	25-May-71	K
27	20919	Nagarajan S	(T)	05-Jun-71	S
28	20913	Sundara R	(T)	18-Sep-71	M
29	20909	Velu S	(T)	18-Jan-72	V
30	20941	Kumaras S	(T)	26-Jan-72	K
31	20919	Sundara R	(T)	29-Mar-72	B
32	20907	Srinivasan J	(T)	12-Jun-72	S
33	20926	Venkatesan K	(T)	25-Jul-72	V
34	20916	Kumar S	(T)	15-Dec-72	K
35	20914	Munugen S	(T)	22-Jun-73	S
36	20914	Munugen S	(T)	25-Jun-73	M
37	20925	Pattabiraman S	(T)	12-Apr-74	P
38	20921	Kannappan V	(T)	15-May-74	K
39	20929	Dhanasekaran T	(T)	15-Mar-75	D
40	20910	John S	(T)	15-Jun-75	J
41	20908	Murugesu S	(T)	09-Jan-88	M
42	20930	Veerabhadiran K	(T)	05-Jun-88	V
43	20940	Muthuswamy K	(T)	11-Jan-72	M
44	20912	Sundara R	(T)	01-Oct-66	A
45	20912	Adhish D	(T)	17-Sep-53	A
46	20908	Mohan R K	(BA)	14-Aug-57	M

But I believe it's not giving the correct result, marked employee is having 2 initials, but it displays only 1, to solve it we can enter 2 other better sample.

For example I am enter N for Shiva N and P D for Venkatesan P D and used Flash fill, now the entire record is filled properly

A	B	C	D	E	F
1					
2					
3	empno	name	qualification	dbrth	
4	20910	Shiva N	(T)	10-May-64	S
5	20917	Subramanian P	(T)	15-Feb-52	S
6	20912	Saravanan V	(T)	20-May-64	V
7	20914	Saravanan G	(T)	05-Jun-64	V
8	20912	Sundara R	(T)	30-Apr-66	S
9	20927	John S	(T)	15-Jun-66	J
10	20919	Bavinder A	(T)	17-Aug-66	R
11	20912	Anandan C	(T)	01-Oct-66	A
12	20913	Ravi K	(T)	09-Feb-67	R
13	20915	Kalvankumar C	(T)	11-May-67	K
14	20943	MathevePaul L	(T)	25-Jun-67	M
15	20902	Karthikayen N	(T)	14-Jun-68	K
16	20914	Sathyasaranan G	(T)	15-Dec-68	S
17	20911	Ravi L	(T)	30-Jan-69	R
18	20901	Venkatesan P D	(T)	05-Mar-69	V
19	20905	Vasudevan S	(T)	15-Jun-69	V
20	20942	Venkatesan S	(T)	15-Jun-69	S
21	20942	Venkatesan S	(T)	08-Aug-69	V
22	20918	Santhanam S	(T)	15-Jun-70	S
23	20915	BebuS	(T)	03-Oct-70	B
24	20912	Kalvankumar L	(T)	22-Feb-71	M
25	20912	Adhikesavan H	(T)	20-Mar-71	A
26	20920	Kumarasan D	(T)	25-May-71	K
27	20919	Nagarajan S	(T)	05-Jun-71	N
28	20913	Sundara R	(T)	18-Sep-71	M
29	20909	Mohan V	(T)	18-Jan-72	V
30	20941	Kumaras S	(T)	26-Jan-72	K
31	20944	Bhaskaran V	(T)	29-Mar-72	B
32	20916	Srinivasan V	(T)	12-Jun-72	S
33	20911	BebuS	(T)	25-Jun-72	V

Sometimes Flash Fill will suggest for the output, we can accept it by pressing Enter

For example if we want day from the dbrth in another cell (ie:E4 – May), if I type F, immediately Flash Fill gives suggestion like below screen

A	B	C	D	E	F	G
1						
2						
3	empno	name	qualification	dbrth		
4	20910	Shiva N	(T)	10-May-64	S	May
5	20917	Subramanian P	(T)	15-Feb-52	S	Feb
6	20912	Saravanan V	(T)	20-May-64	V	May
7	20914	Saravanan G	(T)	05-Jun-64	V	Jun
8	20912	Sundara R	(T)	30-Apr-66	S	Apr
9	20927	John S	(T)	15-Jun-66	J	Jun
10	20919	Bavinder A	(T)	17-Aug-66	R	Aug
11	20912	Anandan C	(T)	01-Oct-66	A	Oct
12	20913	Ravi K	(T)	09-Feb-67	R	Feb
13	20915	Kalvankumar C	(T)	11-May-67	K	May
14	20943	MathevePaul L	(T)	25-Jun-67	M	Jun
15	20902	Karthikayen N	(T)	14-Jun-68	K	Jun
16	20914	Sathyasaranan G	(T)	15-Dec-68	S	Dec
17	20911	Ravi L	(T)	30-Jan-69	R	Jan
18	20901	Venkatesan P D	(T)	05-Mar-69	V	Mar
19	20905	Vasudevan S	(T)	15-Jun-69	V	Jun
20	20942	Venkatesan S	(T)	15-Jun-69	S	Jun
21	20942	Venkatesan S	(T)	08-Aug-69	V	Aug
22	20918	Santhanam S	(T)	15-Jun-70	S	Jun
23	20915	BebuS	(T)	03-Oct-70	B	Oct
24	20912	Kalvankumar L	(T)	22-Feb-71	M	Feb
25	20912	Adhikesavan H	(T)	20-Mar-71	A	Mar
26	20920	Kumarasan D	(T)	25-May-71	K	May
27	20919	Nagarajan S	(T)	05-Jun-71	N	Jul
28	20913	Sundara R	(T)	18-Sep-71	M	Sep
29	20909	Mohan V	(T)	18-Jan-72	V	Jan
30	20941	Kumaras S	(T)	26-Jan-72	K	Jan
31	20944	Bhaskaran V	(T)	29-Mar-72	B	Mar
32	20916	Srinivasan V	(T)	12-Jun-72	S	Jul
33	20911	BebuS	(T)	25-Jun-72	V	Jul

Now press enter to accept the others

Flash Fill is not only used for extracting, can be used for combining also, for example in the below displayed record we want Last Name and First Name in adjacent column (at least 2 sample and use Flash Fill)

A	B	C	D	E	F
1					
2					
3	ID	Last Name	First Name		
4	2865	Abercrombie	Kim		
5	2673	Ackerman	Karen		
6	2598	Aienstat	Francois		
7	1450	Akers	Kim		
8	1622	Alberts	Amy E		
9	2877	Albright	Gregory P		
10	2877	Alexander	Sean P		
11	2803	Anderson	Nancy		
12	2847	Becon Jr.	Den K		
13	2407	Bentley	Julie		
14	1553	Bergfeld	Stephanie		
15	1422	Barnhill	Josh		
16	1325	Barr	Adam		
17	1978	Bashery	Shay		
18	1443	Battagley	Matthew		
19	1978	Ben-Sachar	Ido		
20	2226	Benson	Max		
21	1689	Berge	Karen		
22	2230	Bennell	Leanne		
23	1191	Bennett	Matthew		
24	2851	Berry	Jo		
25	1611	Bolander	Corlina		
26	1944	Bonham	John		
27	1685	Bosnian	Randall		
28	1020	Bourne	Stephanie		
29	2869	Bradley	David M.		
30	2869	Brealey	David M.		
31	1568	Bready	Richard		
32	2005	Bremer	Ted		
33	2898	Brouse	Jo		
34	2898	Brouse	Kevin P		
35	1668	Bryce	Michael		
36	2652	Burke	Briean		
37	1623	Campbell	David		
38	1285	Campbell	Matthew L		
39	1285	Campbell	Richard		
40	1271	Carlson	TyLoren		
41	1499	Caron	Rob		
42	2546	Cavallari	Matthew J.		
43	1271	Cavallari	Sean		
44	1093	Chapman	Greg		
45	2848	Cheney	Neil		
46	1944	Chen	John V		

A	B	C	D	E
1				
2	ID	Last Name	First Name	
3	2880	Abercrombie	Kim	Abercrombie Kim
4	2673	Ackerman	Pilar	Ackerman Pilar
5	2598	Aienstat	Francois	Aienstat Francois
6	1450	Akers	Kim	Akers Kim
7	1622	Alberts	Amy E	Alberts Amy E
8	2877	Albright	Gregory P	Albright Gregory P
9	2877	Alexander	Sean P	Alexander Sean P
10	2803	Anderson	Nancy	Anderson Nancy
11	2847	Becon Jr.	Den K	Becon Jr. Den K.
12	2407	Bentley	Julie	Bentley Julie
13	1553	Bergfeld	Stephanie	Bergfeld Stephanie
14	1422	Barnhill	Josh	Barnhill Josh
15	1325	Barr	Adam	Barr Adam
16	1978	Bashery	Shay	Bashery Shay
17	1443	Battagley	Matthew	Battagley Matthew
18	1978	Ben-Sachar	Ido	Ben-Sachar Ido
19	2226	Benson	Max	Benson Max
20	1689	Berge	Karen	Berge Karen
21	2230	Bennell	Leanne	Bennell Leanne
22	2789	Berlund	Andreas	Berlund Andreas
23	1191	Bennett	Matthew	Bennett Matthew
24	2851	Berry	Jo	Berry Jo
25	1611	Bolander	Corlina	Bolander Corlina
26	1944	Bonham	John	Bonham John
27	2764	Bonifac	Luis	Bonifac Luis
28	1885	Bosnian	Randall	Bosnian Randall
29	1020	Bourne	Stephanie	Bourne Stephanie
30	2869	Bradley	David M.	Bradley David M.
31	2869	Brealey	Richard	Brealey Richard
32	2005	Bremer	Ted	Bremer Ted
33	2898	Brouse	Jo	Brouse Jo
34	2901	Brown	Kevin P	Brown Kevin P
35	1668	Bryce	Michael	Bryce Michael
36	2652	Burke	Briean	Burke Briean
37	1623	Campbell	David	Campbell David
38	1285	Campbell	Michael L	Campbell Michael L
39	1500	Carrey	Richard	Carrey Richard
40	1271	Carlton	TyLoren	Carlton TyLoren
41	1499	Caron	Rob	Caron Rob
42	2546	Cavallari	Matthew J.	Cavallari Matthew J.
43	1271	Cavallari	Sean	Cavallari Sean
44	1093	Chapman	Greg	Chapman Greg
45	2848	Cheney	Neil	Cheney Neil
46	1944	Chen	John V	Chen John V

Another example we want to generate email ids for the below data, once again we use Flash Fill

A	B
1	
2	Name
3	DHARMAISINGH
4	DEEPAK
5	SUBRAMANIAN
6	SEVARASU
7	SVARAKUMAR
8	SEVARAKUMAR
9	SHANNIUGUSUNDARAM
10	ABIAS
11	THIRUVURUGAN
12	MAMTAJAH
13	JAYAKANTHAN
14	TANAJI
15	KUPUSUMI
16	PRASANTH KUMAR
17	RAMAISUBRAMANIAN
18	SARAVANAN
19	MAMESH BABU
20	PREMATH
21	GIBSON
22	GODINAHDHAN
23	SENTHILKUMAR
24	KALYAN
25	VENKATASUBBU
26	VENKAIDH
27	MUTHUM
28	JOVANNYKHAIR
29	ANTHONYSWAMY
30	GURUPRASAD
31	ARULKUMAR
32	KRISHNAKUMARTHY
33	MANOJKUMAR
34	ARAVINDA RAJ
35	MUNUGAPPAN
36	JAGDISH
37	LAJUZHARAN
38	EDAYARAJ
39	HARINATH BABU
40	GAYATHRI
41	RAJENDAR
42	RAGHUNATH
43	ASHOK SHARMA
44	KARTHIEKEYAN
45	THUVARAJA
46	SENTHILKUMAR

A	B	C	D	E
1				
2	Name	Initial		
3	DHARMAISINGH	R		Dharmaisingh R@sample.com
4	DEEPAK	K		Deeprak K@sample.com
5	SUBRAMANIAN	R		Subramanian R@sample.com
6	SEVARASU	P		Sevarasu P@sample.com
7	SVARAKUMAR	R		Svarakumar R@sample.com
8	SEVARAKUMAR	S		Sevarakumar S@sample.com
9	SHANNIUGUSUNDARAM	L		Shanniugusundaram L@sample.com
10	ABIAS	M		Abias M@sample.com
11	THIRUVURUGAN	D		Thiruvurugan D@sample.com
12	MAMTAJAH	T		Mamtajah T@sample.com
13	JAYAKANTHAN	R		Jayakanthan R@sample.com
14	TANAJI	P		Tanaji P@sample.com
15	KUPUSUMI	M		Kupusumi M@sample.com
16	PRASANTH KUMAR	B		Prasanth Kumar B@sample.com
17	RAMAISUBRAMANIAN	K		Ramaisubramanian K@sample.com
18	SARAVANAN	M		Saravanann M@sample.com
19	MAMESH BABU	P		Mamesh Babu P@sample.com
20	PREMATH	M		Premath M@sample.com
21	GIBSON	S		Gibson S@sample.com
22	GODINAHDHAN	M		Godinahdhan M@sample.com
23	SENTHILKUMAR	G		Senthilkumar G@sample.com
24	KALYAN	K		Kalyan K@sample.com
25	VENKATASUBBU	D		Venkatasubbu D@sample.com
26	VENKAIDH	K		Venkaidh K@sample.com
27	MUTHUM	J		Muthum J@sample.com
28	JOVANNYKHAIR	R		Jovannykhair R@sample.com
29	ANTHONYSWAMY	S		Anthonyswamy S@sample.com
30	GURUPRASAD	S		Guruprasad S@sample.com
31	ARULKUMAR	N		Arulkumar N@sample.com
32	KRISHNAKUMARTHY	S		Krishnakumartthy S@sample.com
33	MANOJCHARAN	A		Manojcharan A@sample.com
34	ARAVINDA RAJ	G		Aravinda Raj G@sample.com
35	MURUGEEAPPAN	M		Murugeeappan M@sample.com
36	JAGDISH	P		Jagdish P@sample.com
37	LAJUZHARAN	T		Lajuzharan T@sample.com
38	EDAYARAJ	M		Edayaraj M@sample.com
39	HARINATH BABU	A		Harinath Babu A@sample.com
40	GAYATHRI	R		Gayathri R@sample.com
41	RAJENDAR	S		Rajendar S@sample.com
42	RAGHUNATH	R		Raghunath R@sample.com
43	ASHOK SHARMA	A		Ashok Sharma A@sample.com
44	KARTHIEKEYAN	S		Karthiekeyan S@sample.com
45	THUVARAJA	M		Thuvaraja M@sample.com
46	YUVARAJA	Y		Yuvaraja Y@sample.com
47	SENTHILKUMAR	M		Senthilkumar M@sample.com

## Quick Analysis

To make it easier to visualize your data, the Quick Analysis tool was introduced with Excel 2013. This feature allows users to instantly create charts and graphs with the click of a button. It even suggests a visualization method that best fits your data, making picking the correct way to show the information far easier. You can even add miniature graphs to single cells – called Sparklines – that allow you to quickly spot trends without having to look at a full graph.

When you open the Quick Analysis gallery you will notice that you have five different options:

- i. Formatting – Lets you adjust the data you have highlighted. You can set a color for the data to set it apart and quickly see both high and low values, or even remove formatting altogether.
- ii. Charts – Lets you select different charts and graphs based on the data you have selected. This can include pie charts, bar graphs, line charts, etc. If you press More Charts you will be able to select from a larger list.

- iii. Totals – Lets you calculate numbers in rows or columns. Some useful options include Running Total which keeps a total even when you add more data, and Sum which will total either a column, row or the total sheet. Be sure to pay attention to the colored dots in the icon as they indicate whether a row or column will be calculated.
- iv. Tables – Allows you to create tables or sub-tables using just the selected data. You can also create a pivot table. You should also be able to select More if the type of table you need isn't there.
- v. Sparklines – Allows you to add small charts beside your data. These one to two cell visualizations are great for quickly identifying trends within your data.

For example in the below data we have to find the percentage of sales for each month

A	B	C	D
1			
2			
3	Month	Sales	Sales %
4	Jan-17	3226.00	
5	Feb-17	1429.00	
6	Mar-17	4103.00	
7	Apr-17	2522.00	
8	May-17	3155.00	
9	Jun-17	2101.00	
10	Jul-17	4889.00	
11	Aug-17	5600.00	
12	Sep-17	4818.00	
13	Oct-17	4321.00	
14	Nov-17	4744.00	
15	Dec-17	2781.00	

### 1. Select the Sales Data

A	B	C
1		
2		
3	Month	Sales
4	Jan-17	3226.00
5	Feb-17	1429.00
6	Mar-17	4103.00
7	Apr-17	2522.00
8	May-17	3155.00
9	Jun-17	2101.00
10	Jul-17	4889.00
11	Aug-17	5600.00
12	Sep-17	4818.00
13	Oct-17	4321.00
14	Nov-17	4744.00
15	Dec-17	2781.00
16		
17		

- 2. On the bottom you can notice a small tag will appear, just click on the tag or use Ctrl Q to activate the quick analysis
- 3. After activating below dialog box appears

A	B	C	D	E	F	G
1						
2						
3	Month	Sales	Sales %			
4	Jan-17	3226.00				
5	Feb-17	1429.00				
6	Mar-17	4103.00				
7	Apr-17	2522.00				
8	May-17	3155.00				
9	Jun-17	2101.00				
10	Jul-17	4889.00				
11	Aug-17	5600.00				
12	Sep-17	4818.00				
13	Oct-17	4321.00				
14	Nov-17	4744.00				
15	Dec-17	2781.00				
16						
17						

- 4. As we want to find the percentage of sales, can select TOTALS
- 5. Screen changes as below

A	B	C	D	E	F	G
1						
2						
3	Month	Sales	Sales %			
4	Jan-17	3226.00				
5	Feb-17	1429.00				
6	Mar-17	4103.00				
7	Apr-17	2522.00				
8	May-17	3155.00				
9	Jun-17	2101.00				
10	Jul-17	4889.00				
11	Aug-17	5600.00				
12	Sep-17	4818.00				
13	Oct-17	4321.00				
14	Nov-17	4744.00				
15	Dec-17	2781.00				
16						
17						

- 6. You can see Sum appears, on the left is Sum by row wise and on the right is Sum by column wise, as we want percentage in column wise, click on arrow on the right as highlighted
- 7. Below screen appears

Month	Sales	Sales %
Jan-17	3226.00	
Feb-17	1426.00	
Mar-17	4101.00	
Apr-17	2521.00	
May-17	3155.00	
Jun-17	2100.00	
Jul-17	4899.00	
Aug-17	5000.00	
Sep-17	4811.00	
Oct-17	4321.00	
Nov-17	4744.00	
Dec-17	2781.00	

8. Select % Total, which will generate the Sales % on the next column as below

Month	Sales	Sales %
Jan-17	3226.00	7.49%
Feb-17	1426.00	3.22%
Mar-17	4101.00	9.12%
Apr-17	2521.00	5.85%
May-17	3155.00	7.32%
Jun-17	2100.00	4.88%
Jul-17	4899.00	11.55%
Aug-17	5000.00	11.40%
Sep-17	4811.00	11.18%
Oct-17	4321.00	10.03%
Nov-17	4744.00	11.01%
Dec-17	2781.00	6.45%

Likewise you can use other formulas by the Quick Analysis

## Conditional Formatting

From the below table, in the Region 1 want to highlight the cell where the value is more than 1000

A	B	C	D	E	F	G
1						
2						
3	Month	Region 1	Region 2	Region 3	Region 4	Region 5
4	Jan/2016	539	1245	952	1256	1194
5	Feb/2016	1299	810	1065	708	1244
6	Mar/2016	1001	1318	1241	989	1148
7	Apr/2016	872	458	916	649	893
8	May/2016	1201	547	1341	1126	487
9	Jun/2016	1401	1004	1027	970	1155
10	Jul/2016	1466	2004	885	207	720
11	Aug/2016	338	1151	691	662	1193
12	Sep/2016	503	1268	1026	957	1410
13	Oct/2016	1128	1493	1020	918	1090
14	Nov/2016	1129	1093	1083	670	1138
15	Dec/2016	1209	1457	1168	1105	1248
16	Jan/2017	700	294	909	1251	1447
17	Feb/2017	903	203	326	392	416
18	Mar/2017	1201	1084	976	476	1455
19	Apr/2017	1401	1499	1004	971	1448
20	May/2017	1292	472	526	383	498
21	Jun/2017	304	741	947	515	897
22	Jul/2017	391	1074	211	239	900
23	Aug/2017	503	333	715	315	834
24	Sep/2017	555	1340	1119	986	448
25	Oct/2017	1059	529	1312	406	304
26	Nov/2017	720	677	1469	482	795
27	Dec/2017	1059	529	1312	406	561

1. Let us select the Region 1 data

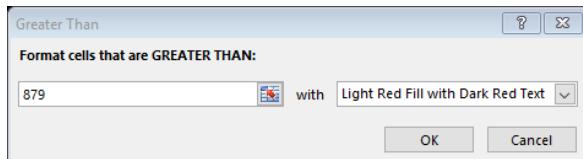
Tips: Click on cell B4 and press Ctrl Shift Down Arrow

2. Once again click on the Quick Analysis or Ctrl Q

A	B	C	D	E	F	
1						
2						
3	Month	Region 1	Region 2	Region 3	Region 4	Region 5
4	Jan/2016	539	1245	952	1256	1194
5	Feb/2016	1299	810	1065	708	1244
6	Mar/2016	1001	1318	1241	989	1148
7	Apr/2016	872	458	916	649	893
8	May/2016	1201	547	1341	1126	487
9	Jun/2016	1401	1004	1027	970	1155
10	Jul/2016	1466	2004	885	207	720
11	Aug/2016	338	1151	691	662	1193
12	Sep/2016	503	1268	1026	957	1447
13	Oct/2016	1128	1493	1083	670	918
14	Nov/2016	1129	1093	1083	670	1138
15	Dec/2016	1209	1457	1168	1105	1248
16	Jan/2017	700	294	909	1251	1447
17	Feb/2017	903	203	326	392	416
18	Mar/2017	1201	1084	976	476	1455
19	Apr/2017	1401	1499	1004	971	1448
20	May/2017	1292	472	526	383	498
21	Jun/2017	304	741	947	515	897
22	Jul/2017	391	1074	211	239	900
23	Aug/2017	503	333	715	315	834
24	Sep/2017	555	1340	1119	986	448
25	Oct/2017	1059	529	1312	406	304
26	Nov/2017	720	677	1469	482	795
27	Dec/2017	1059	529	1312	406	561

3. Select Greater Than option under FORMATTING

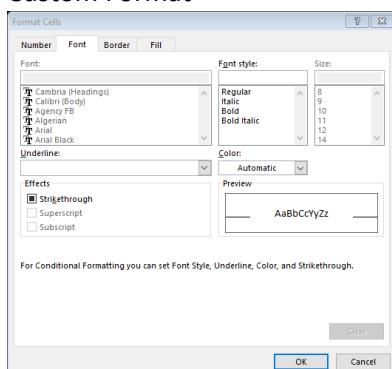
4. It open a new dialog box appears



5. Where it display 879, change it to 1000, you can see wherever it's more than 1000 on would have changed into Light Red Fill with Dark Red Text, if you are not satisfied the format we can change it by clicking on the Drop Down



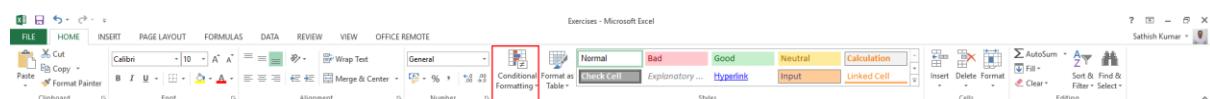
6. Change the format available in the Drop Down, still if you are satisfied change from the Custom Format



7. We change any format any we wish, for example click on Fill and change the Color

	A	B	C	D	E	F	G
1							
2							
3	Month	Region 1	Region 2	Region 3	Region 4	Region 5	
4	Jan/2016	539	1245	952	1256	1194	
5	Feb/2016	1298	810	1085	704	1248	
6	Mar/2016	543	1338	945	1247	1099	
7	Apr/2016	1053	1330	880	1023	1056	
8	May/2016	872	453	916	649	393	
9	May/2016	1205	547	1341	1126	487	
10	Jun/2016	1040	1004	1000	997	750	
11	Jul/2016	358	1151	691	662	1193	
12	Aug/2016	958	1268	1026	957	1410	
13	Sep/2016	1118	1493	1031	670	918	
14	Sep/2016	1122	1493	1029	670	918	
15	Oct/2016	1306	1497	1168	1109	1348	
16	Nov/2016	700	294	909	1251	1447	
17	Dec/2016	908	203	326	392	416	
18	Jan/2017	549	1038	478	482	255	
19	Mar/2017	703	667	384	1200	3448	
20	Apr/2017	292	472	926	383	498	
21	May/2017	304	741	947	515	897	
22	Jun/2017	395	1074	211	359	800	
23	Jul/2017	503	339	715	215	834	
24	Aug/2017	555	1340	1119	986	448	
25	Sep/2017	1058	529	1312	406	304	
26	Oct/2017	720	677	1469	482	795	
27	Sep/2017	1089	529	1312	406	304	

Problem in Formatting in the Quick Analysis, we can add new formatting or clear format, but we want modify the formatting then we have to move HOME → Conditional Formatting

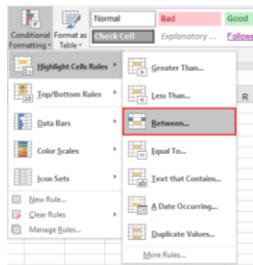


1. Click on Conditional Formatting, on the HOME tab
2. A dialog box appears



3. Let us add another rule for example between 500 to 1000, want to add another color

4. Select the cell range, then Goto Home→Conditional Formatting→Highlights Cells Rule→



5. Where we can change the values and format, for example I have 500 and 1000 and changed the color as Yellow Fill with Dark Yellow Text

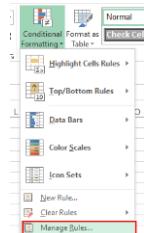


Like wise you can add any number of conditional format, as its unlimited

#### Change Conditional Format

Now if you want to change the existing format

1. Home →Conditional Formatting →Manage Rules

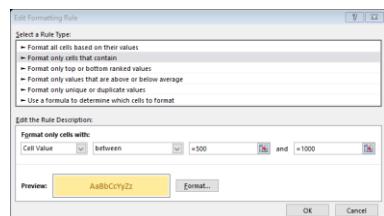


2. A new dialog box appears



3. Select the rules which you want to change and click on Edit Rule

4. Another dialog box appears, where you can change the condition as well the Format



#### Delete Conditional Format

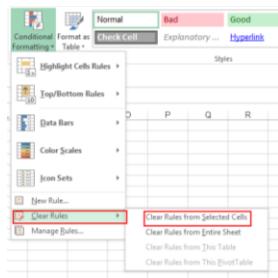
If you want to delete conditional format, various method

### Method 1



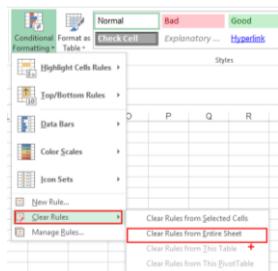
Select the range of cell, click on quick analysis or Ctrl Q, select Clear Format Under FORMATTING

### Method 2



Select the range of cell, Home → Conditional Format → Clear Rules → Clear Rules from Selected Cells (which delete the format from the selected cells)

or



Home → Conditional Format → Clear Rules → Clear Rules from Entire Sheet (which will delete all the format in the sheet)

### Method 3

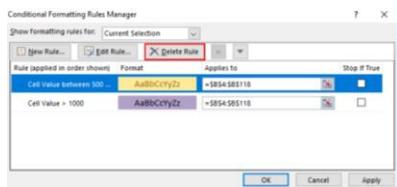
Unfortunately, both the Methods will delete all the conditional but if I want to delete only one conditional format from range then,

1. Home → Conditional Formatting → Manage Rules



2. A new dialog box appears

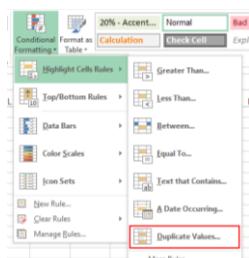
**3. Select the rule which you want to delete**



**4. Click on Delete Rule**

### Finding Duplicates and Removing

**1. Select the cell range**



**2. Home → Conditional Formatting → Highlight Cell Rules → Duplicate Values**

Date	Region 1	Region 2	Region 3	Region 4	Region 5
21-Nov-17	1408	148	1734	1697	874
21-Nov-17	737	1780	734	870	1704
22-Nov-17	1281	664	1025	1043	1043
23-Nov-17	1566	1612	446	1790	1000
8	1597	616	1523	566	1107
9	465	785	974	1539	607
10	1508	391	1737	1049	1484
11	1508	437	1547	1261	1261
12	1552	1575	738	1350	1617
13	897	460	219	1542	149
14	1070	129	756	1014	148
15	1070	409	72	1462	1462
16	722	1750	1007	1593	952
17	165	1656	499	1306	501
18	1700	1107	1697	290	1439
19	1224	949	1557	1078	1101
20	910	1830	247	439	1095
21	910	1830	247	439	1095
<b>Duplicate Values</b>					
22	14-Dec-17				
23	15-Dec-17				
24	16-Dec-17				
25	18-Dec-17				
26	19-Dec-17				
27	20-Dec-17				
28	21-Dec-17				
29	22-Dec-17				
30	25-Dec-17				
31	26-Dec-17				
32	27-Dec-17				
33	28-Dec-17				
34	29-Dec-17				
35	01-Jan-18				
36	02-Jan-18				
37	03-Jan-18				
38	04-Jan-18				
39	05-Jan-18				
40	06-Jan-18				
41	08-Jan-18				
42	09-Jan-18				
43	10-Jan-18				
44	11-Jan-18				
45	12-Jan-18				

- 3. A dialog box appears, parallelly on the background we can notice that all the duplicates value will be highlighted in a colour**
- 4. If we don't want duplicate values, even you can highlight the unique value, by selecting the Unique in the drop down**

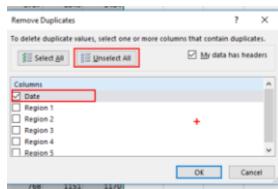


If we want to delete these duplicate values then

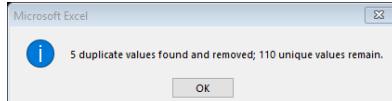
1. Place the cursor anywhere on the table
2. Data → Remove Duplicates



- 3. A new dialog box appears**



4. In the example I believe we have duplicates in the column of Date, so click on Unselect All and select only the Date
5. Click OK



6. A dialog appears and says how values was removed and how many values remain

Note: Entire row of duplicate values would have been deleted.

Highlight top / bottom values

1. Select the range of cells
2. Home → Conditional Formatting → Top / Bottom Rules → Top 10 Items



3. A new dialog appears



4. Where I have 3 instead of 10 and changed the formatting as Green Fill with Dark Green Text, and click on OK

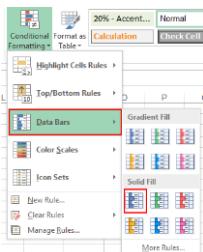
	A	B	C	D	E	F	G
1							
2							
3	Date	Region 1	Region 2	Region 3	Region 4	Region 5	
4	20-Nov-17	1408	148	1734	1697	874	
5	21-Nov-17	777	1700	734	870	1704	
6	22-Nov-17	857	1281	693	1024	1243	
7	23-Nov-17	1546	1612	698	440	1790	
8	24-Nov-17	1397	616	1523	586	1107	
9	27-Nov-17	445	785	974	1539	607	
10	28-Nov-17	1179	979	971	1604	1484	
11	29-Nov-17	1520	837	1788	1546	1262	
12	30-Nov-17	1552	1575	738	1350	1617	
13	01-Dec-17	397	460	219	1542	149	
14	04-Dec-17	1097	169	730	501	148	
15	05-Dec-17	711	404	282	765	1468	
16	06-Dec-17	732	1750	1007	158	952	
17	07-Dec-17	145	1656	499	136	501	
18	08-Dec-17	1297	1129	1697	949	1439	
19	11-Dec-17	1321	949	1557	1078	1101	
20	12-Dec-17	917	1630	247	439	1055	
21	13-Dec-17	851	630	1038	1397	625	
22	14-Dec-17	1097	1395	1007	1117		
23	15-Dec-17	1387	136	513	1140	595	
24	18-Dec-17	381	532	447	104	1417	
25	19-Dec-17	1523	490	942	126	1635	
26	20-Dec-17	1348	1007	768	1151	1170	
27	21-Dec-17	1279	1733	1049	549	728	
28	22-Dec-17	1615	1142	302	126	1042	
29	25-Dec-17	1456	1233	561	113	1113	
30	26-Dec-17	1281	1454	1140	1744	915	
31	27-Dec-17	1179	1179	1180	1074	910	
32	28-Dec-17	641	282	1800	400	1188	
33	29-Dec-17	1441	1070	647	519	460	
34	01-Jan-18	739	1285	1595	355	630	
35	02-Jan-18	1179	1285	1285	859		
36	03-Jan-18	1700	1138	930	1659	1389	
37	04-Jan-18	1654	1741	1685	745	1181	
38	05-Jan-18	1402	1759	1290	1400	813	
39	06-Jan-18	1281	1129	89	525		
40	09-Jan-18	861	1696	1859	1366	750	
41	10-Jan-18	511	842	984	28	374	

5. Top 3 values has been highlighted in a color

Data Bars

We have in cells bars using the Data Bars

- Select the range of cells



- Home → Conditional Formatting → Data Bars → Select any color as per your wish, if prefer to go with any color other than Red, here I have selected the Blue

Date	Region 1	Region 2	Region 3	Region 4	Region 5	
20-Nov-17	1406	1281	974	1025	974	
21-Nov-17	727	1780	734	870	1704	
22-Nov-17	556	1281	664	1025	1043	
23-Nov-17	1546	1612	698	440	1790	
24-Nov-17	1399	616	568	566	1107	
25-Nov-17	761	761	974	607	607	
26-Nov-17	1503	391	1734	1049	1484	
27-Nov-17	1510	837	3784	1546	1282	
28-Nov-17	1504	1574	734	1390	1617	
29-Nov-17	397	460	1249	1025	148	
01-Dec-17	1070	129	750	1014	148	
05-Dec-17	711	406	282	765	1468	
06-Dec-17	727	1780	734	1993	952	
07-Dec-17	163	1656	499	566	501	
08-Dec-17	1700	1107	1699	290	1439	
11-Dec-17	1221	946	357	1078	1101	
12-Dec-17	917	1650	247	439	1055	
13-Dec-17	847	459	1201	291	652	
14-Dec-17	427	1095	1160	1011	1117	
23	1197	159	513	1140	595	
28	1864	322	447	1064	1417	
29	1581	495	1242	1069	1459	
20	20-Dec-17	1248	1007	768	1151	1170
27	21-Dec-17	845	1725	1058	1694	728
28	22-Dec-17	1615	1142	302	1202	1042
29	1981	1231	1151	1149	1113	
30	26-Dec-17	1281	1454	1140	1744	915
31	27-Dec-17	1018	128	1586	1070	920
32	28-Dec-17	641	281	1201	400	1188
33	29-Dec-17	1241	1070	647	1159	460
34	01-Jan-18	728	1285	1198	355	630
35	02-Jan-18	515	175	306	1386	859
36	03-Jan-18	1700	1158	930	1599	1389
37	04-Jan-18	1841	2141	1151	1149	1181
38	05-Jan-18	1402	1759	1190	1400	815
39	08-Jan-18	510	131	889	1180	523
40	09-Jan-18	966	1699	1659	1166	750
41	10-Jan-18	847	946	291	294	574
42	11-Jan-18	1058	715	1734	178	1112
43	12-Jan-18	443	1735	2007	1188	104
44	15-Jan-18	461	1795	155	548	1614
45	16-Jan-18	578	1861	415	1286	619

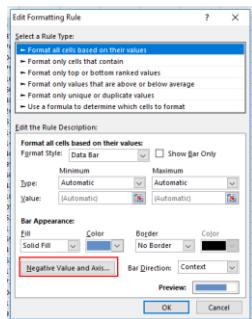
- Based on the cell value, we can notice the bars size may change, fortunately all are positive values, assume if we are changing one value into negative

Date	Region 1	Region 2	Region 3	Region 4	Region 5
20-Nov-17	1406	148	1334	1697	874
21-Nov-17	727	1780	734	870	1704
22-Nov-17	556	1281	664	1025	1043
23-Nov-17	1546	1612	698	440	1790
24-Nov-17	1399	616	568	566	1107
27-Nov-17	465	785	974	1539	607
28-Nov-17	1508	391	1734	1049	1484
29-Nov-17	1520	837	357	1546	1282
30-Nov-17	1581	1759	738	1550	1617
01-Dec-17	397	460	219	1542	149
04-Dec-17	1070	129	750	1014	148
05-Dec-17	711	406	282	765	1468
06-Dec-17	727	1780	734	1993	952
17-Dec-17	163	1656	499	1306	901
18-Dec-17	1700	1107	1699	290	1439
19-Dec-17	1221	946	357	1078	1101
20-Dec-17	917	1650	247	439	1055
21-Dec-17	892	636	1058	1397	635
22-Dec-17	427	1095	1160	1011	1117
23-Dec-17	1197	136	513	1140	595
24-Dec-17	1241	322	447	1064	1417
25-Dec-17	1523	490	942	1206	1655
26-Dec-17	1248	1007	768	1151	1170
27-Dec-17	843	1725	1058	1694	728
28-Dec-17	1401	2141	1151	1202	1042
29-Dec-17	1456	1238	581	1139	1113
30-Dec-17	1281	1454	1140	1744	915
31-Dec-17	1028	128	1586	1070	920
32-Dec-17	1241	281	1201	400	1188
33-Dec-17	1544	1020	647	519	460
34-Jan-18	729	1285	1198	355	630
35-Jan-18	515	175	304	1386	859
36-Jan-18	1700	1138	930	1659	1389
37-Jan-18	1508	2141	1151	1201	1041
38-Jan-18	1406	1746	1058	1694	819

- Now the negative bar appears

If we want to change the negative bar color or the bar direction

- Place the cursor anywhere on the range
- Home → Conditional Formatting → Manage Rules → Edit Rules
- On the new dialog box select the Negative Value and Axis



4. On the next dialog box, select the Fill Color and the color you wish



5. Here I have selected and click OK

6. It returns to the previous box, now I want to change the Bar Direction



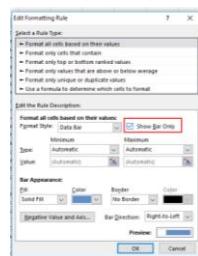
7. Where I have changed the Bar Direction as Right-to-Left and OK and OK

8. Now Bar Direction and Negative Bar Colors have changed

	A	B	C	D	E	F	G
1							
2							
3	Date	Region 1	Region 2	Region 3	Region 4	Region 5	
4	20-Nov-17	1408	148	1194	1697	874	
5	21-Nov-17	737	1780	1194	870	1704	
6	22-Nov-17	518	1281	1694	1025	1043	
7	23-Nov-17	1548	1632	169	446	1790	
8	24-Nov-17	1389	416	169	1069	1107	
9	27-Nov-17	465	785	197	1539	607	
10	28-Nov-17	1503	991	1797	1049	1484	
11	29-Nov-17	1520	837	1797	1546	1262	
12	30-Nov-17	1593	1179	1797	1590	1151	
13	01-Dec-17	397	460	197	1542	149	
14	04-Dec-17	1070	129	1797	1014	148	
15	05-Dec-17	711	406	197	765	1468	
16	06-Dec-17	217	1197	1797	1599	952	
17	07-Dec-17	183	1656	197	1306	501	
18	08-Dec-17	1700	1107	1697	290	1439	
19	11-Dec-17	1231	949	1797	1797	1101	
20	12-Dec-17	1609	169	1797	439	1056	
21	13-Dec-17	892	630	1798	1397	925	
22	14-Dec-17	427	1095	1797	1011	1117	
23	15-Dec-17	1197	136	1797	1140	595	
24	17-Dec-17	217	324	1797	1797	1417	
25	19-Dec-17	1523	490	197	1206	1835	
26	20-Dec-17	1248	1007	1798	1151	1170	

Note : Some prefers to displays only the icon

Home → Conditional Formatting → Edit Rules → Show Icon Only → OK → OK



It shows only the Icon, hides the values

	A	B	C	D	E	F	G
3	Date	Region 1	Region 2	Region 3	Region 4	Region 5	
4	20-Nov-17	1408	148	1697	874		
5	21-Nov-17	727	1780	870	1704		
6	22-Nov-17	558	1281	1025	1043		
7	23-Nov-17	1540	1611	566	1107		
8	24-Nov-17	1389	616	159	607		
9	27-Nov-17	465	785	1539			
10	28-Nov-17	1503	391	1049	1484		
11	29-Nov-17	1520	857	1546	1262		
12	30-Nov-17	1559	1575	1550	1517		
13	01-Dec-17	397	460	1542	149		
14	04-Dec-17	1070	129	1014	148		
15	05-Dec-17	711	406	765	1468		
16	06-Dec-17	1291	1299	1549	952		
17	07-Dec-17	163	1656	1306	501		
18	08-Dec-17	1700	1107	290	1439		
19	11-Dec-17	1221	949	1548	1101		
20	12-Dec-17	1559	1640	439	1055		
21	13-Dec-17	892	630	1397	925		
22	14-Dec-17	427	1095	1011	1117		
23	15-Dec-17	1197	136	1146	595		
24	16-Dec-17	1520	322	1064	1417		
25	19-Dec-17	1523	490	1206	1855		
26	20-Dec-17	1248	1007	1151	1170		

## Color Scales

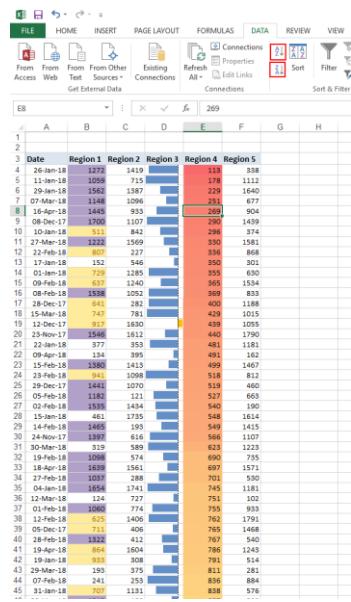
1. Select the range of cells
2. Home → Conditional Formatting → Color Scales → Select any Color Scales (here I have selected the First, Green-Yellow-Red Color Scale)



3. Now Color Scales have been applied

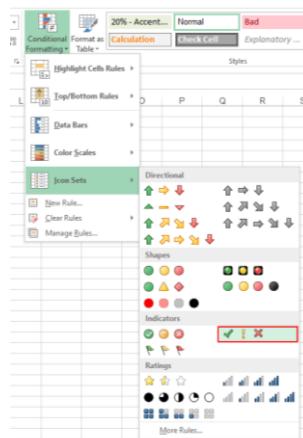
3	Date	Region 1	Region 2	Region 3	Region 4	Region 5	
4	20-Nov-17	1408	148	1697	874		
5	21-Nov-17	727	1780	870	1704		
6	22-Nov-17	558	1281	1025	1043		
7	23-Nov-17	1540	1611	566	1107		
8	24-Nov-17	1389	616	159	607		
9	27-Nov-17	465	785	1539			
10	28-Nov-17	1503	391	1049	1484		
11	29-Nov-17	1520	857	1546	1262		
12	30-Nov-17	1559	1575	1550	1517		
13	01-Dec-17	397	460	1542	149		
14	04-Dec-17	1070	129	1014	148		
15	05-Dec-17	711	406	765	1468		
16	06-Dec-17	1291	1299	1549	952		
17	07-Dec-17	163	1656	1306	501		
18	08-Dec-17	1700	1107	290	1439		
19	11-Dec-17	1221	949	1548	1101		
20	12-Dec-17	1559	1640	439	1055		
21	13-Dec-17	892	630	1397	925		
22	14-Dec-17	427	1095	1011	1117		
23	15-Dec-17	1197	136	1146	595		
24	16-Dec-17	1520	322	1064	1417		
25	19-Dec-17	1523	490	1206	1855		
26	20-Dec-17	1248	1007	1151	1170		

4. Fine, but I prefers to Sort the table and check
5. Place the cursor anywhere on the table
6. Data → Either select A-Z or Z-A on the Sort & Filter

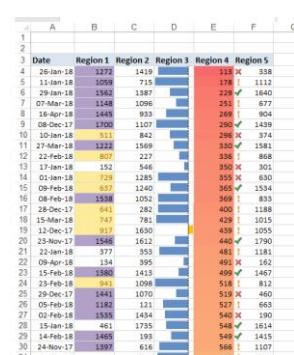


### Icon Sets

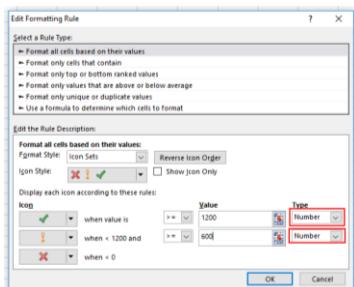
1. Select the range of cells
2. Home → Conditional Formatting → Icon Sets → Select any one as you prefer, I have selected 3 Symbols (Uncircled) under Indicators



3. Now the Icon Sets were applied, but I want to change the condition for example more than 1200 we want ✓, 600 to 1200 we want !, less than 600 we want ✗



4. Place the cursor anywhere on the cell range
5. Home → Conditional Formatting → Manage Rules → Edit Rules

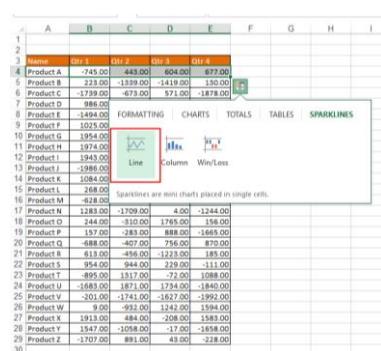


- Change the Percentage to Number under Type and Change the Value. Click on OK

Note: First 2 condition is sufficient, 3<sup>rd</sup> condition will be applied default.

## In cell trend using Sparklines

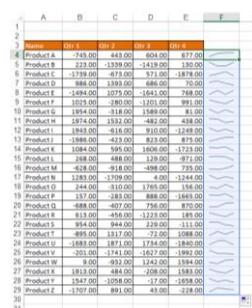
- Select the range cells
- For example, I have selected Qtr 1, Qtr 2, Qtr 3 & Qtr 4 for Product A



- Click on the Quick Analysis or Ctrl Q
- Sparklines → Line

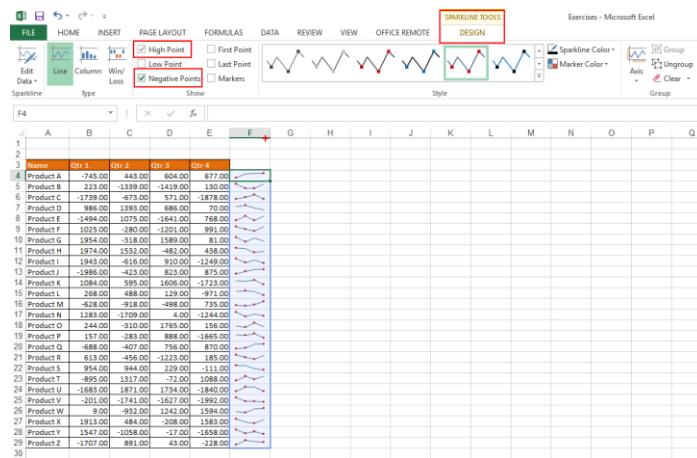


- Can check that Sparklines is inserted in the next cell after the data
- You can copy this to the other ranges, by Drag & Drop in the Fill Handle



### We can Highlight the High, Low, Negative

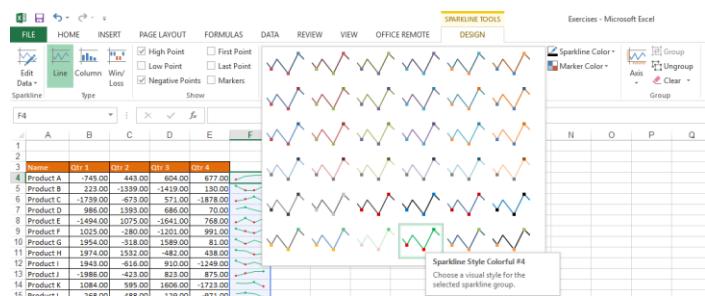
1. Place the cursor on the Sparkline
2. On the ribbon, you can notice new tab appears in called Design



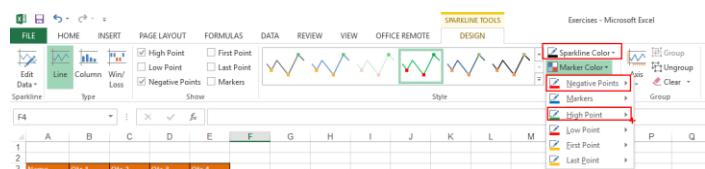
3. Click on Design, under Sparkline Tools
4. Select High Point, Negative Points, where point will be displayed in the Sparkline, but both are in Red, if you want to change the Color



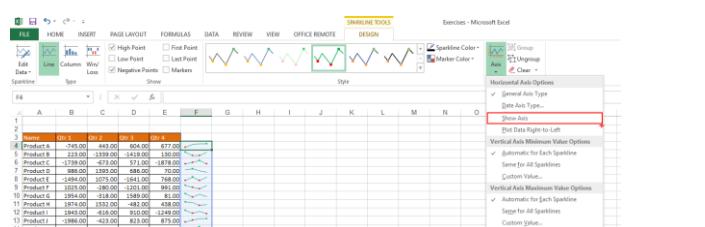
5. Click on the More button, under the Design Style
6. Select any color as per your wish



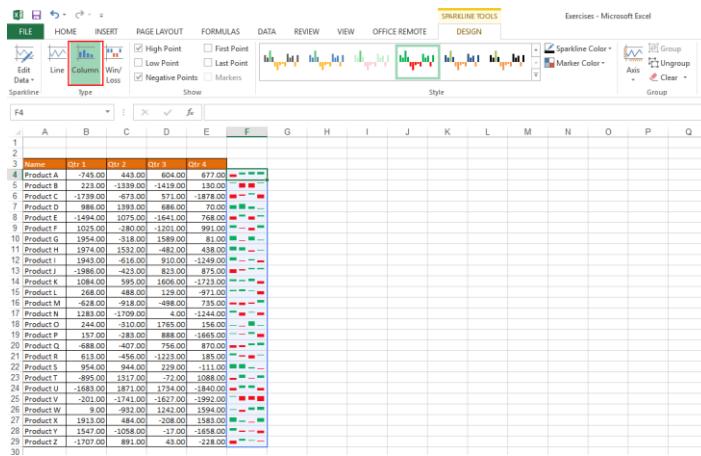
7. You can change the Color by Sparkline Color & Marker Color manually also



8. If you want to display the Axis at the Zero position
9. Design → Axis → Show Axis



## 10. If you want change Line to Column, click on Column under Design



## Filling the Data in Empty Cells

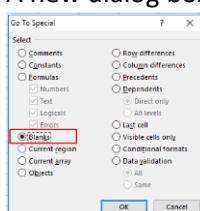
For example, in the below data, want to fill all the empty cell with the previous cell value

A	B	C	D	E	F	G
Region	Location	Date	Q1	Q2	Q3	Q4
North	L1	08/01/17	2133	5854	4987	2479
		09/01/17	4096	5050	4987	2134
		10/01/17	9513	9973	7604	2466
		14/01/17	4097	3771	3709	2550
		14/02/17	1087	3212	3599	2552
		22/02/17	1563	1572	3611	847
		01/03/17	1279	1789	3448	599
		18/03/17	4911	3312	187	922
		19/04/17	2525	3944	2048	894
		21/04/17	1691	4851	848	611
		22/04/17	2875	4859	3022	635
		23/04/17	1971	2161	4382	1489
		28/04/17	4909	2833	4435	1603
		11/05/17	4333	5328	2001	2585
		12/05/17	1352	5602	2043	1686
		18/05/17	4919	5620	2424	2424
		26/05/17	2911	5884	173	966
		31/05/17	3493	5115	1056	2955
		14/06/17	9213	5959	1808	572
		30/06/17	19	5851	3442	2840
		01/07/17	2367	2852	3045	176
		05/07/17	2904	3982	4310	1338
		08/07/17	1299	5143	4453	509
		09/07/17	4873	5705	4687	2735
		18/07/17	3006	4753	1404	378
		21/07/17	2211	5489	4358	2405
		28/07/17	3027	4651	3031	2016
		29/07/17	3118	2282	334	2423
		08/08/17	3469	2801	3973	2938
		20/08/17	2316	5154	3863	2637
		23/08/17	2914	2176	1440	1817
		23/08/17	2286	2307	1525	2005
		24/08/17	1911	4912	2432	1950
		06/09/17	1649	2085	4914	884
		18/09/17	228	5244	2318	1914
		02/10/17	4342	1901	1946	844
		09/10/17	1971	1457	974	597
		11/10/17	2147	5289	1874	2379
		15/10/17	2709	5657	1373	2819
		16/10/17	4452	4464	484	2568
		18/10/17	2179	2811	4207	3195
		29/10/17	3028	3096	4538	515
		10/11/17	4487	3493	457	1698

- Select the entire column, by clicking on the Column Heading or Ctrl Space Bar
- Press Ctrl G or FG, for using Goto dialog box



- Click on the Special button
- A new dialog box appears, where you can select Blanks



- Now all the Blanks cells in the column will be selected
- Cursor is on the first blank cell

**7. Now press = and select the previous cell (i:e: =A2)**

A	B	C	D	E	F	G
Region	Location	Date	Q1	Q2	Q3	Q4
1 North	L1	05/01/17	2123	5854	2026	408
2 North	L1	05/01/17	4996	5000	4367	2479
3 North	L1	05/01/17	2376	5048	287	1251
4 North	L1	10/01/17	3513	5973	2504	2464
5 North	L1	14/01/17	4071	5775	3707	1310
6 North	L1	14/02/17	1087	3212	3559	2552
7 North	L1	22/02/17	1963	1572	3611	847

**8. Press Ctrl Enter, all the blank cells fill with the previous cell value**

A	B	C	D	E	F	G	H
Region	Location	Date	Q1	Q2	Q3	Q4	
1 North	L1	05/01/17	2123	5854	2026	408	
2 North	L1	05/01/17	4996	5000	4367	2479	
3 North	L1	05/01/17	2376	5048	287	1251	
4 North	L1	10/01/17	3513	5973	2504	2464	
5 North	L1	14/01/17	4071	5775	3707	1310	
7 North	L1	14/02/17	1087	3212	3559	2552	
9 North	L1	22/02/17	1963	1572	3611	847	
10 North	L1	01/03/17	1279	3798	3448	599	
11 North	L1	10/03/17	4995	3212	165	922	
12 North	L1	19/04/17	2525	3944	2048	894	
13 North	L1	23/04/17	1699	4891	848	611	
14 North	L1	27/04/17	2379	4891	3024	429	
15 North	L1	23/05/17	3618	3168	4366	1489	
16 North	L1	28/06/17	4009	2833	4435	1603	
17 North	L1	13/07/17	4533	5018	2007	2585	
18 North	L1	17/07/17	3501	3043	1986	1886	
19 North	L1	16/08/17	4468	5698	3430	2424	
20 North	L1	26/09/17	2911	5884	173	966	
21 North	L1	31/09/17	3492	5115	1056	2955	
22 North	L1	12/10/17	3291	5591	1807	972	
23 North	L1	30/09/17	1905	5656	3548	2360	
24 North	L1	01/07/17	2567	2892	3045	175	

Note: You can do it for multiple column, select all the column and follow the same steps

### Convert the data into proper format

When we download the data from the external source or getting the data from the different source, sometimes Date may not be in the same format

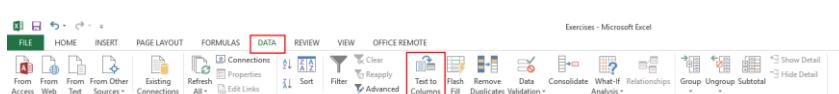
A	B	C	D	E
1 Prod Name	Date	Price	No.	Total
2 XYZ 01	06.23.2017	209	38.00*	7942
3 DFG 02	29-04-2017	169	92.00*	15456
4 DFG 02	06-24-2017	122	17.00*	2074
5 XYZ 01	08/May/2017	110	75.00*	2750
6 XYZ 01	08/05/2017	177	53.00*	9361
7 XYZ 01	22/May/2017	209	12.00*	2499
8 DFG 02	07/Aug/2017	249	68.00*	16992
9 XYZ 01	06-26-2017	261	82.00*	13846
10 XYZ 01	29-06-2017	178	42.00*	7416
11 DFG 02	06.02.2017	128	100.00*	12800
12 XYZ 01	08.01.2017	169	79.00*	13272
13 XYZ 01	09/08/2017	159	76.00*	12084
14 XYZ 01	09-08-2017	178	42.00*	7416
15 XYZ 01	08.08.2017	189	35.00*	4865
16 XYZ 01	11/Apr/2017	129	49.00*	6321
17 XYZ 01	29/Mar/2017	141	41.00*	5863
18 XYZ 01	24/03/2017	169	42.00*	7146
19 XYZ 01	12/04/2017	261	15.00*	3919
20 DFG 02	13/Febr/2017	102	70.00*	7140
21 XYZ 01	12/03/2017	219	82.00*	17958
22 XYZ 01	05-20-2017	169	79.00*	13272
23 DFG 02	04-08-2017	230	38.00*	8640
24 XYZ 01	04-16-2017	233	38.00*	8854
25 DFG 02	04-07-2017	271	87.00*	23577
26 XYZ 01	03/01/2017	141	46.00*	6321
27 XYZ 01	28/02/2017	169	42.00*	7146
28 DFG 02	04/04/2017	298	68.00*	19668
29 XYZ 01	08/04/2017	260	36.00*	9360
30 XYZ 01	05-10-2017	260	36.00*	9360
31 DFG 02	20-03-2017	177	53.00*	9361
32 XYZ 01	02-24-2017	104	52.00*	5408
33 XYZ 01	01-30-2017	194	82.00*	15580
34 DFG 02	08/05/2017	108	92.00*	9792
35 XYZ 01	08-05-2017	125	42.00*	5250
36 XYZ 01	03-09-2017	278	69.00*	19182
37 XYZ 01	19-02-2017	218	50.00*	10900
38 XYZ 01	02-14-2017	203	93.00*	19068
39 XYZ 01	03-14-2017	203	93.00*	19068
40 XYZ 01	15/Apr/2017	104	95.00*	9880
41 DFG 02	13/Mar/2017	259	67.00*	17930
42 XYZ 01	15/Apr/2017	252	64.00*	16128
43 DFG 02	03/Apr/2017	261	36.00*	9360
44 DFG 02	28/Mar/2017	260	11.00*	2360

In the above example, we can see that, some date are in the format of DMY(Date Month Year), MDY (Month Day Year), in between separator is also different, some has – (hyphen) or / (back slash).

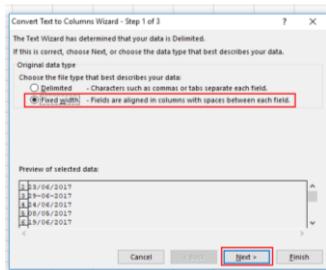
But we have to convert everything into one proper format, manually if we try to do it I may say it's very tough or even some times impossible.

Fortunately, there is powerful tool available in Excel

- Select the range of cells (can use Ctrl Shift Down Arrow)
- Click on Data → Text to Columns

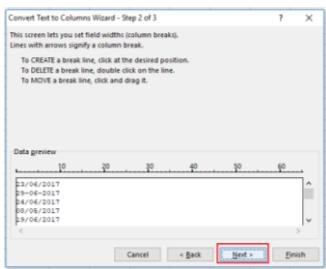


- Text to Columns wizard dialog box appears

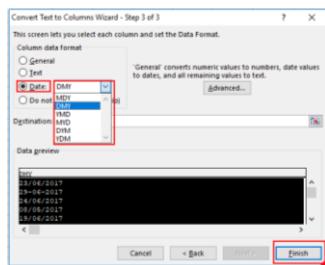


4. Step 1 of 3, we have two options, Delimited or Fixed width

Delimited can be used if you have common separator, but here as we don't have common separator, so we select Fixed width



5. Step 2 of 3, if you want to create a break, click on the top, double click to remove the break, as we don't want a break, just click on the Next



6. Step 3 of 3, select the data format which we want to change, as we require Date, click on Date and also select desired format, i.e: DMY

7. Click on Finish

A	B	C	D	E
1	Prod Name	Date	Price	Nos
2	IJK 03	06-01-2017	209	38.00
3	DFG 02	06-02-2017	180	92.00
4	DFG 02	06-03-2017	121	92.00
5	XYZ 01	08/May/2017	110	59.00
6	DFG 02	19-Jun-17	175	52.00
7	XYZ 01	22/Mar/2017	208	12.00
8	DFG 02	07-Mar-2017	100	56.00
9	XYZ 01	06-01-2017	282	51.00
10	XYZ 01	06-02-2017	278	42.00
11	DFG 02	06-03-2017	128	100.00
12	XYZ 01	08-04-2017	110	59.00
13	IJK 03	08-04-2017	159	76.00
14	XYZ 01	06-07-2017	270	85.00
15	IJK 03	08-06-2017	130	35.00
16	XYZ 01	11-May-2017	140	41.00
17	IJK 03	25/Mar/2017	145	41.00
18	XYZ 01	26/Mar/2017	301	25.00
19	XYZ 01	12/Apr/2017	261	35.00
20	DFG 02	12-May-2017	100	74.00
21	XYZ 01	12/Mar/2017	219	82.00
22	IJK 03	05-01-2017	197	32.00
23	DFG 02	04-06-2017	220	28.00
24	IJK 03	05-01-2017	180	48.00
25	DFG 02	04-07-2017	271	87.00
26	IJK 03	03-01-2017	148	46.00
27	IJK 03	03-02-2017	169	78.00
28	DFG 02	03-03-2017	140	56.00
29	XYZ 01	04-06-2017	280	56.00
30	IJK 03	05-01-2017	290	30.00
31	DFG 02	02-20-2017	274	11.00
32	IJK 03	05-01-2017	190	50.00
33	XYZ 01	01-Mar-2017	190	82.00
34	DFG 02	03-08-2017	106	92.00
35	IJK 03	03-12-2017	233	50.00
36	IJK 03	05-09-2017	278	69.00

8. Now there is change in the format, but it's not a unique format, Ctrl Shift 3 or Ctrl 1 and change the format you wish

Magic. All dates changes into the same format

Similarly, we can do same for number format

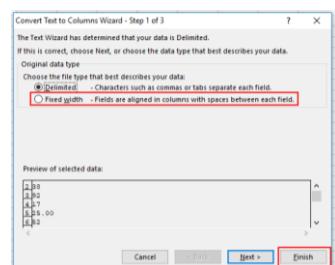
### 1. Select the data in column D

A	B	C	D	E
1	Prod Name	Date	Price	Nos
2	LK1 03	23-Jun-17	109	38.00
3	OPG 02	29-Jun-17	168	92.00
4	OPG 02	24-Jun-17	177	100.00
5	YK2 01	08-May-17	110	53.00
6	OPG 02	19-Jun-17	175	52.00
7	YK2 01	22-May-17	108	12.00
8	OPG 02	07-Aug-17	192	100.00
9	YK2 01	28-Jun-17	161	51.00
10	YK2 01	29-Jun-17	278	42.00
11	OPG 02	02-Jun-17	128	100.00
12	YK2 01	12-Aug-17	143	100.00
13	LK1 03	09-Jun-17	159	76.00
14	YK2 01	07-Jun-17	270	85.00
15	LK1 03	06-Aug-17	139	35.00
16	YK2 01	11-Apr-17	129	69.00
17	LK1 03	25-Jun-17	143	40.00
18	YK2 01	26-Mar-17	101	25.00
19	YK2 01	12-Apr-17	161	15.00
20	OPG 02	19-Feb-17	102	70.00
21	YK2 01	12-Apr-17	159	10.00
22	LK1 03	01-May-17	197	32.00
23	OPG 02	08-Apr-17	220	28.00
24	LK1 03	16-Apr-17	233	38.00
25	OPG 02	07-Jun-17	141	100.00
26	LK1 03	01-Mar-17	148	46.00
27	LK1 03	28-Mar-17	169	78.00
28	OPG 02	04-Apr-17	198	66.00
29	YK2 01	06-Jun-17	143	40.00
30	LK1 03	01-May-17	290	30.00
31	OPG 02	20-Feb-17	274	11.00
32	LK1 03	24-Feb-17	104	52.00
33	YK2 01	30-Jan-17	151	10.00
34	OPG 02	08-Mar-17	106	92.00
35	LK1 03	22-Mar-17	233	50.00
36	LK1 03	09-Mar-17	278	69.00
37	LK1 03	19-Feb-17	218	50.00
38	YK2 01	14-Apr-17	147	100.00
39	YK2 01	02-May-17	261	89.00
40	LK1 03	15-Apr-17	104	95.00
41	OPG 02	19-Mar-17	159	67.00
42	YK2 01	15-Apr-17	237	100.00
43	OPG 02	30-Apr-17	280	80.00
44	OPG 02	28-Jan-17	200	11.00
45	YK2 01	20-Mar-17	175	15.00
46	OPG 02	18-Apr-17	258	14.00

### 2. Goto Data → Text to Columns



### 3. Step 1 of 3, select Fixed Width



### 4. And we can select Finish, as the step 2, 3 are defaults

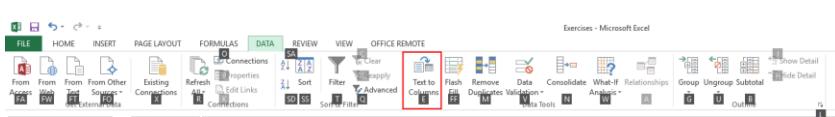
## Navigate the Ribbon by Keys

As I prefer to use keyboard instead of mouse, lets do it for next column

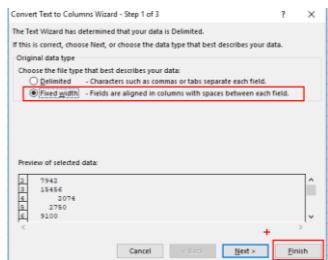
- Let's select the Data from column E
- Press Alt or F10



- We can notice Badges or Key Tips will appear, watch what is the Key tips for Data, as it is A, just press the letter A



- Key tips under Data will appear, press E for Text to Columns



5. Now press W as that the underlined letter for Fixed width and F for Finish, that it now as you know just use Alt A E W & F where everything is done

## Innovating Paste Special

Let's explore some additional features in Paste Special

1. In the below example, we want add Increment with the Salary

A	B	C	D	E
	Name	Empno	Salary	Increment
1	Jayachandran John	D 763420	25200	2750
2	Jayanthi Nagarajan	S 05568	26500	3750
3	Jyothirmayee Gangadhar	K 34568	26800	2250
4	Md Yunus	T 12345	25400	2250
5	R V Krishnan	D 765890	26400	2250
6	Ram Gopal Verma	S 09867	26400	3750
7	Deepak	Q 01253	25000	3000
8	Pooja	K 65340	26500	3250
9	Shiva Kumar	T 23458	25300	2000
10	Sridaran	R 58946	25900	2250

2. Select the cells where we have increment, and press Ctrl C to copy  
 3. Now select the cell of Salary  
 4. Right Click → Paste Special or Press Ctrl Alt V  
 5. Paste Special dialog box appears

A	B	C	D	E	F	G	H	I	J	K	L	M
1	Name	Empno	Salary	Increment				Part No	Rate	Part No	New Rate	
2	Jayachandran John	D 763420	25200	2750				5211A	118	5211A		
3	Jayanthi Nagarajan	S 05568	26500	3750				2744A	85	2744A		
4	Jyothirmayee Gangadhar	K 34568	26800	2250				2881Y	96	2881Y		
5	Md Yunus	T 12345	25400	2250				5393D	77	5393D		
6	R V Krishnan	D 765890	26400	2250								
7	Ram Gopal Verma	S 09867	26400	3750								
8	Deepak	Q 01253	25000	3000								
9	Pooja	K 65340	26500	3250								
10	Shiva Kumar	T 23458	25300	2000								
11	Sridaran	R 58946	25900	2250								

6. Select Add under Operation

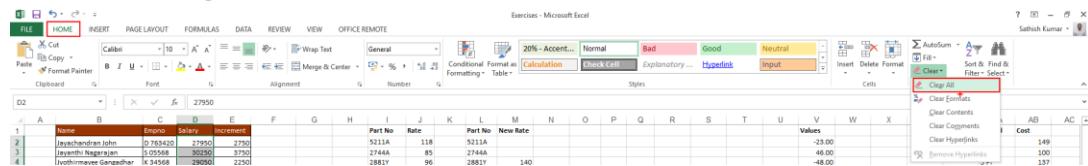
A	B	C	D	E
1	Name	Empno	Salary	Increment
2	Jayachandran John	D 763420	27950	2750
3	Jayanthi Nagarajan	S 05568	30250	3750
4	Jyothirmayee Gangadhar	K 34568	29050	2250
5	Md Yunus	T 12345	27200	2250
6	R V Krishnan	D 765890	28850	2250
7	Ram Gopal Verma	S 09867	30150	3750
8	Deepak	Q 01253	28000	3000
9	Pooja	K 65340	27950	3250
10	Shiva Kumar	T 23458	27800	2000
11	Sridaran	R 58946	28150	2250

7. Now notice that Increment is added to the Salary

Clearing all the data

After adding the Increment to the Salary, now I want to delete the Increment, if we press Del key only the data will be deleted, but I want to delete everything.

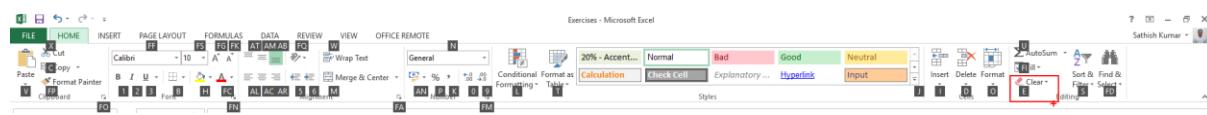
## Customizing QAT



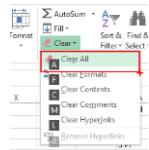
As I prefer to use keyboard Press Alt



H for Home



E for Clear



Which I believe it's a longer method, so prefers to create own shortcut key for clear all

1. Right click on Clear All

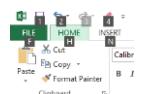


2. A menu appears, select Add to Quick Access Toolbar

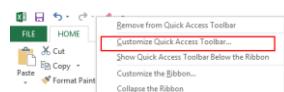
3. Now Clear All will be added to the QAT



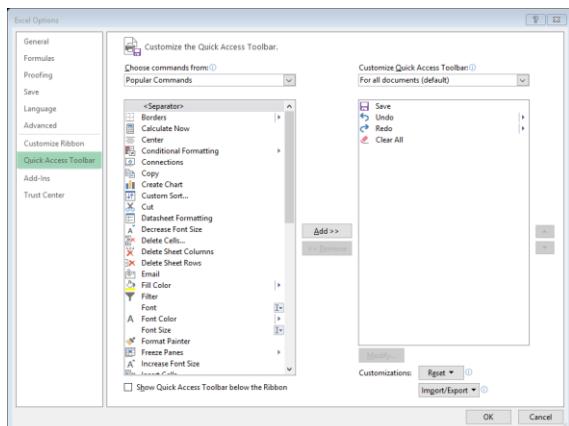
4. Can press Alt 4 for Clear All



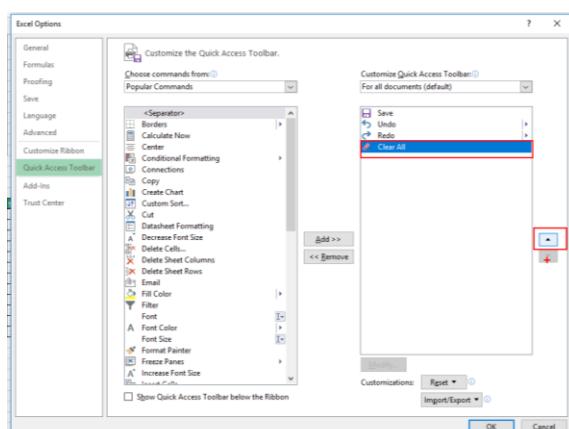
5. But I prefer to make Clear All on the first position, Right click on the QAT, a menu appears



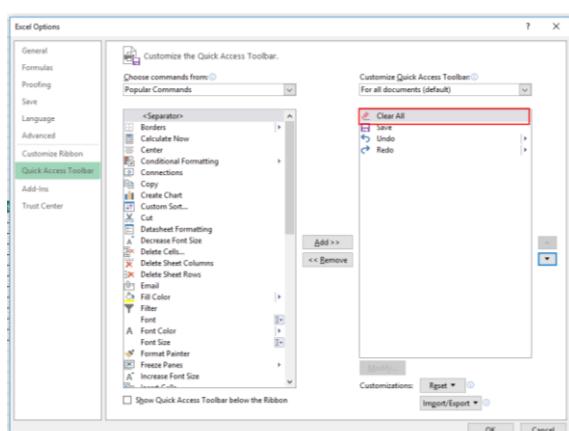
6. Select Customize Quick Access Toolbar



A new dialog box appears



7. Click on Clear All using Arrow move it to the top



8. So now we can use Alt 1 for Clear All



Next in the below table

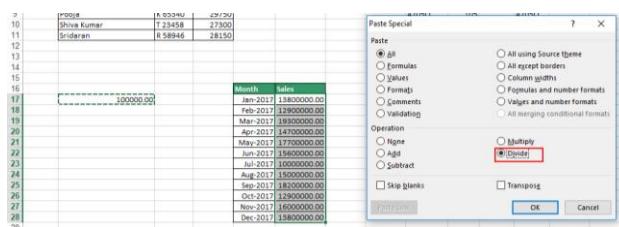
Month	Sales
Jan-2017	13800000.00
Feb-2017	12900000.00
Mar-2017	19300000.00
Apr-2017	14700000.00
May-2017	17700000.00
Jun-2017	15600000.00
Jul-2017	10000000.00
Aug-2017	15000000.00
Sep-2017	18200000.00
Oct-2017	12900000.00
Nov-2017	16000000.00
Dec-2017	13800000.00

If we want sales displayed as the lakhs, not as displayed on the table, for example 13800000.00 as 138.00

1. Type 100000 in another cell, press Ctrl Enter
2. Copy the cell, where we have entered 100000



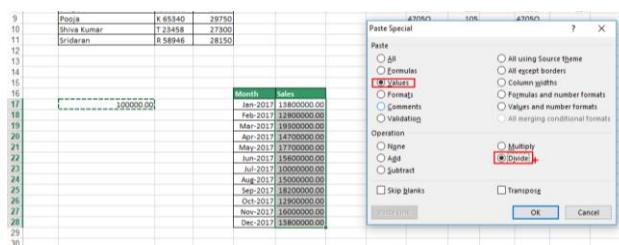
3. Select the Sales area and Ctrl Alt V (Paste Special)



4. Now the sales value has changed,

Month	Sales
Jan-2017	138.00
Feb-2017	129.00
Mar-2017	193.00
Apr-2017	147.00
May-2017	177.00
Jun-2017	156.00
Jul-2017	100.00
Aug-2017	150.00
Sep-2017	182.00
Oct-2017	129.00
Nov-2017	160.00
Dec-2017	138.00

5. But the border has been removed



6. So, in the Paste Special Select Values and Divide

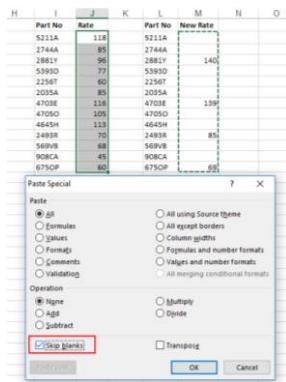
Month	Sales
Jan-2017	138.00
Feb-2017	129.00
Mar-2017	193.00
Apr-2017	147.00
May-2017	177.00
Jun-2017	156.00
Jul-2017	100.00
Aug-2017	150.00
Sep-2017	182.00
Oct-2017	129.00
Nov-2017	160.00
Dec-2017	138.00

That it

Next in the below table

Part No	Rate	Part No	New Rate
5211A	118	5211A	
2744A	85	2744A	
2881Y	96	2881Y	140
5393D	77	5393D	
2256T	60	2256T	
2035A	85	2035A	
4703E	116	4703E	139
4705O	105	4705O	
4645H	113	4645H	
2493R	70	2493R	85
569VB	68	569VB	
908CA	45	908CA	
675OP	60	675OP	69

1. We want to add the New Rate with the Rate
2. Select New Rate and Copy it



3. Paste Special and select Skip blanks
4. That all, New Rate is added to Rate without removing the old data

Part No	Rate	Part No	New Rate
5211A	118	5211A	
2744A	85	2744A	
2881Y	96	2881Y	140
5393D	77	5393D	
2256T	60	2256T	
2035A	85	2035A	
4703E	116	4703E	139
4705O	105	4705O	
4645H	113	4645H	
2493R	70	2493R	85
569VB	68	569VB	
908CA	45	908CA	
675OP	60	675OP	69

In the below table

Month	January	January	January	January	January	January	January	February	February	February	February	February	March	March	March	March	March	March	March	March	
SalesRep	Albert	Albert	Brooks	Cook	Cook	Brooks	Cook	Brooks	Albert	Brooks	Cook	Cook	Brooks	Albert	Brooks	Cook	Cook	Brooks	Albert	Cook	
Type	New	New	New	New	Existing	New	New	New	Existing	New	New	New	New	New	Existing	New	Existing	New	Existing	New	
Amount	85	675	130	1350	685	1350	475	1205	450	495	900	95	780	900	875	50	875	225	175	400	840

1. Let select the whole table
2. Ctrl A can be used, but unknowingly press Ctrl A twice, will select the entire table, prefer to use Ctrl \*
3. Now table is selected, copy the table
4. Select some other cell
5. Use Paste Special, select Transpose



6. Now the Row wise data converted into Column wise

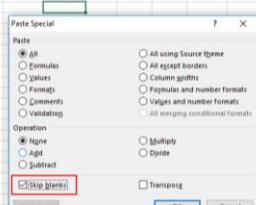
Month	January	January	January	January	January	January	January	January	February	February	February	February	February	February	March	March	March	March	March	March	March	
SalesRep	Albert	Albert	Brooks	Cook	Cook	Brooks	Cook	Brooks	Albert	Brooks	Cook	New	Existing	Albert	Brooks	Cook	New	Existing	Albert	Brooks	Cook	New
Type	New	New	New	New	Existing	New	New	New	New	New	New	New	New	New	New	New	New	New	New	New	New	New
Amount	85	675	130	1350	685	1350	475	1205	450	495	900	95	780	900	875	50	875	225	175	400	840	
Month	SalesRep	Type	Amount																			
January	Albert	New	85																			
January	Albert	New	675																			
January	Brooks	New	130																			
January	Cook	New	1350																			
January	Cook	Existing	685																			
January	Brooks	New	1350																			
January	Cook	New	475																			
January	Brooks	New	1205																			
February	Brooks	Existing	450																			
February	Albert	New	495																			
February	Brook	New	900																			
February	Cook	New	95																			
February	Cook	New	780																			
March	Brooks	New	900																			
March	Albert	Existing	875																			
March	Brooks	New	50																			
March	Cook	Existing	875																			
March	Cook	New	175																			
March	Brooks	Existing	400																			
March	Albert	New	840																			
March	Cook	New	132																			

1. Let's select the below table and Copy

Name	Empno	Salary
Jayachandran John	D 763420	27950
Jayanthi Nagarajan	S 05568	30250
Jyothirmayee Gangadhar	K 34568	29050
Md Yunus	T 12345	27650
R V Krishnan	D 765890	28650
Ram Gopal Verma	S 09867	30150
Deepak	Q 01253	28000
Pooja	K 65340	29750
Shiva Kumar	T 23458	27300
Sridaran	R 58946	28150

2. Select some the location the same sheet, Paste Special → Select Paste Link

A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Name	Empno	Salary					Part No	Rate				
2	Jayachandran John	D 763420	27950					52144A	118				
3	Jayanthi Nagarajan	S 05568	30250					27444A	85				
4	Jyothirmayee Gangadhar	K 34568	29050					2881Y	96				
5	Md Yunus	T 12345	27650					5993D	77				
6	R V Krishnan	D 765890	28650					2256T	60				
7	Ram Gopal Verma	S 09867	30150					2093A	85				
8	Deepak	Q 01253	28000					4703E	116				
9	Pooja	K 65340	29750					4705O	105				
10	Shiva Kumar	T 23458	27300					4645H	113				
11	Sridaran	R 58946	28150					2493P	70				
12								569V	68				
13								908CA	45				
14								675OP	60				
15									69				
16													
17	Month	Sales											
18			Jan-2017	138.00									
19			Feb-2017	129.00									
20			Mar-2017	193.00									
21			Apr-2017	147.00									
22			May-2017	177.00									
23			Jun-2017	156.00									
24			Jul-2017	100.00									
25			Aug-2017	153.00									
26			Sep-2017	182.00									
27			Oct-2017	129.00									
28			Nov-2017	160.00									
29			Dec-2017	138.00									



3. Now the data is pasted with link, ie: if we change data in source it will change in the destination also

A	B	C	D	E	F	G	H	I	J	K	P
1	Name	Empno	Salary					Part No	Rate		
2	Jayachandran John	D 763420	28000					52144A	118		
3	Jayanthi Nagarajan	S 05568	30250					27444A	85		
4	Jyothirmayee Gangadhar	K 34568	29050					2881Y	96		
5	Md Yunus	T 12345	27650					5993D	77		
6	R V Krishnan	D 765890	28650					2256T	60		
7	Ram Gopal Verma	S 09867	30150					2093A	85		
8	Deepak	Q 01253	28000					4703E	116		
9	Pooja	K 65340	29750					4705O	105		
10	Shiva Kumar	T 23458	27300					4645H	113		
11	Sridaran	R 58946	28150					2493P	70		
12								569V	68		
13								908CA	45		
14								675OP	60		
15								69			
16											
17	Month	Sales									
18			Jan-2017	138.00							
19			Feb-2017	129.00							
20			Mar-2017	193.00							
21			Apr-2017	147.00							
22			May-2017	177.00							
23			Jun-2017	156.00							
24			Jul-2017	100.00							
25			Aug-2017	153.00							
26			Sep-2017	182.00							
27			Oct-2017	129.00							
28			Nov-2017	160.00							
29			Dec-2017	138.00							

4. But later if I forget where data is Linked we can go with 2 methods,

- Use Ctrl [ , move cursor from liked to source, Ctrl ], move cursor from source to link
- Place the cursor anywhere on the linked cell and on the tab Formulas → Trace Precedents, can notice an arrow appears shows where the data is linked

The screenshot shows a Microsoft Excel spreadsheet with two sheets: 'Exercises' and 'Sheet1'. The 'Exercises' sheet contains a table of employees with columns for Name, Empno, Salary, Part No, Rate, and New Rate. A formula in cell C6 (which is highlighted) refers to cell D16. The 'Sheet1' tab shows a table of monthly sales data. A blue arrow points from the formula in C6 to the cell D16 in the 'Sheet1' table, illustrating the 'Trace Dependents' feature.

Note: You can do for Trace Dependents for tracking from Source to Destination

Arrow is displays is temporary, you can remove it by click on Remove Arrows under Formulas

The screenshot shows the Microsoft Excel ribbon with the 'Formulas' tab selected. In the 'Trace Dependents' dropdown, the 'Remove Arrows' option is highlighted with a red box. This indicates that the temporary arrows used for tracing dependencies will be removed when this option is clicked.

But these things are fine if the Data in the same sheet if the Data is in another sheet.

First let us copy and Paste Special → Paste Link another sheet

### 1. Place the Cursor the Source Data, and Click on Formulas → Trace Dependents

This screenshot is similar to the one above, but it shows a linked sheet named 'Sheet1'. The formula in cell C6 on the 'Exercises' sheet still traces back to cell D16 on the 'Sheet1' sheet, demonstrating that the 'Trace Dependents' feature works across different sheets.

### 2. As the data is linked another sheet, now 2 arrow appears, Blue arrow pointing to the same sheet and another Black dotted arrow

### 3. Just Double click on the Black arrow

This screenshot shows the 'General' dialog box for the formula in cell C6. The 'Trace Dependents' button is highlighted with a red box. This is where the user would click to see the arrows from the formula to its source cells.

4. A new dialog box appears, where it shows linked location, select the Linked Location and click on Ok
5. Now it will move to the Linked Location

## Cell Reference

In this section we are going to see about Cell Referencing,

- a. How to write a formula
- b. Copy the formula
- c. Audit the formula
- d. If there is an error, how to handle it

Take the below example

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
													Tax	10%				
3	Part	q1qty	q2qty	q3qty	q4qty	yrqty	Rate	q1Sales	q2Sales	q3Sales	q4Sales	Yr Sales	q1Tax	q2Tax	q3Tax	q4Tax	YrTax	
4	46720	500	351	344	154	1,349	73											
5	1007	102	205	729	259	1,295	132											
6	1007A	390	735	548	455	2,128	160											
7	43040	671	168	666	387	1,892	280											
8	33038	110	134	557	154	955	428											
9	33106	721	245	281	220	1,467	461											
10	33608	434	721	548	367	2,070	103											
11	33640	686	732	342	697	2,257	108											
12	40450	644	569	737	607	2,557	271											
13	39250	583	375	718	258	1,934	78											
14	37570	477	472	285	527	1,761	76											
15	33642	309	145	644	102	1,200	64											
16	33048	319	581	682	566	2,148	62											
17	27858	692	241	442	370	1,444	58											
18	33782	395	668	377	249	2,055	50											
19	33712	361	391	270	453	1,475	110											
20	1025	455	501	126	359	1,451	75											
21	33394	338	373	715	734	2,160	110											
22	33042	636	429	298	474	1,837	46											
23	33183	586	667	433	377	2,063	50											
24	33054	139	681	400	330	1,550	80											
25	33584	206	456	382	457	1,501	55											
26	33352	538	343	345	147	1,362	81											
27	33053	708	723	249	249	2,944	144											
28	33098	943	278	341	625	1,587	160											
29	29865	263	155	241	502	1,161	105											
30	4003	369	460	424	594	1,847	68											
31	1007	660	113	392	314	1,479	132											
32	1007A	593	517	369	160	1,639	132											
33	33990	694	247	103	700	1,750	132											
34	37270	721	489	397	291	1,898	71											
35	38295	160	509	528	435	1,635	55											
36	33054	366	400	330	157	1,362	81											
37	43040	455	674	560	444	2,353	280											
38	43236	123	429	397	742	1,691	61											
39	33324	194	235	667	324	1,420	111											
40	33642	425	270	677	623	1,995	64											

We want to find the q1sales, q2sales, q3sales, q4sale and Yr Sales by writing 1 formula

1. Let us the write formula for the q1sales at H4, = select the cell of q1qty, that is B4 & type \*, select Rate that is G4 and Ctrl Enter to accept

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
3	Part	q1qty	q2qty	q3qty	q4qty	yrqty	Rate	q1Sales	q2Sales	q3Sales	q4Sales	Yr Sales	q1Tax	q2Tax	q3Tax	q4Tax	YrTax
4	46720	500	351	344	154	1,349	73	36,500	#####	#####	#####	#####					
5	1007	102	205	729	259	1,295	132										
6	1007A	390	735	548	455	2,128	160										
7	43040	671	168	666	387	1,892	280										
8	33038	110	134	557	154	955	428										
9	33106	721	245	281	220	1,467	461										
10	33608	434	721	548	367	2,070	103										

2. Copy the formula to the other sales range, various method is available I prefer to select all the sales range along with the formula on the Left to Right, press Ctrl R
3. Now the formulas are copied to all the sales ranges

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
3	Part	q1qty	q2qty	q3qty	q4qty	yrqty	Rate	q1Sales	q2Sales	q3Sales	q4Sales	Yr Sales	q1Tax	q2Tax	q3Tax	q4Tax	YrTax
4	46720	500	351	344	154	1,349	73	36,500	#####	#####	#####	#####	#####	#####	#####	#####	#####
5	1007	102	205	729	259	1,295	132										
6	1007A	390	735	548	455	2,128	160										
7	43040	671	168	666	387	1,892	280										
8	33038	110	134	557	154	955	428										
9	33106	721	245	281	220	1,467	461										
10	33608	434	721	548	367	2,070	103										

4. To copy the formula in the cell range on downwards

Exercises - Microsoft Excel														
FILE		HOME		INSERT		PAGE LAYOUT		FORMULAS		DATA		REVIEW		VIEW
<b>f</b> x														
Insert Function	Average	Sum	Recently Used	Logical	Date & Time	Lookup & Reference	Math & Trig	More Functions		Define Name	Show Formulas	Trace Precedents	Show Dependencies	Error Checking
										Name Manager	Create from Selection	Watch Window	Calculation Options	Calculate Sheet
														Calculation

H4 : =B4\*G4

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1																				
2																				
3	Part	q1qty	q2qty	q3qty	q4qty	yrqty	Rate	q1Sales	q2Sales	q3Sales	q4Sales	Yr Sales								
4	46720	500	351	344	154	1,349	73	=B4*G4	=C4*H4	=D4*I4	=E4*J4	=F4*K4								
5	1007	102	205	729	259	1,295	132	=B5*G5	=C5*H5	=D5*I5	=E5*J5	=F5*K5								
6	1007A	390	735	548	455	2,128	160	=B6*G6	=C6*H6	=D6*I6	=E6*J6	=F6*K6								
7	43040	671	168	666	387	1,892	280	=B7*G7	=C7*H7	=D7*I7	=E7*J7	=F7*K7								
8	33038	110	134	557	154	955	428	=B8*G8	=C8*H8	=D8*I8	=E8*J8	=F8*K8								
9	33106	721	245	281	220	1,467	461	=B9*G9	=C9*H9	=D9*I9	=E9*J9	=F9*K9								
10	33608	434	721	548	367	2,070	103	=B10*G10	=C10*H10	=D10*I10	=E10*J10	=F10*K10								
11	36430	686	732	142	697	2,257	108	=B11*G11	=C11*H11	=D11*I11	=E11*J11	=F11*K11								
12	40450	644	569	737	607	2,557	271.4	=B12*G12	=C12*H12	=D12*I12	=E12*J12	=F12*K12								
13	39250	583	375	718	258	1,934	78	=B13*G13	=C13*H13	=D13*I13	=E13*J13	=F13*K13								
14	37570	477	472	285	527	1,761	76	=B14*G14	=C14*H14	=D14*I14	=E14*J14	=F14*K14								
15	33642	309	145	644	102	1,200	64	=B15*G15	=C15*H15	=D15*I15	=E15*J15	=F15*K15								
16	33048	319	581	682	566	2,148	62	=B16*G16	=C16*H16	=D16*I16	=E16*J16	=F16*K16								
17	2788	692	241	142	370	1,445	58	=B17*G17	=C17*H17	=D17*I17	=E17*J17	=F17*K17								
18	33782	585	663	740	377	2,365	70	=B18*G18	=C18*H18	=D18*I18	=E18*J18	=F18*K18								
19	33712	361	391	270	453	1,475	110	=B19*G19	=C19*H19	=D19*I19	=E19*J19	=F19*K19								
20	1025	485	501	126	339	1,451	73	=B20*G20	=C20*H20	=D20*I20	=E20*J20	=F20*K20								
21	33394	338	373	715	734	2,160	110	=B21*G21	=C21*H21	=D21*I21	=E21*J21	=F21*K21								

5. Now the formulas are copied on the downwards
6. But there are some errors in the formula, lets understand the simple concepts, when we copy the row wise, row number will change and copy the formulas on column wise column number will change  
For example: =B4\*G4, on the Row wise changes into B5\*G5, B6\*G6 ..., on the Column wise changes as C5\*H5, D5\*I5
7. Understood if we want to see the formulas press Ctrl ~, which will show only the formulas on the sheet

Exercises - Microsoft Excel															
FILE		HOME		INSERT		PAGE LAYOUT		FORMULAS		DATA		REVIEW		VIEW	
<b>f</b> x															
H4 : =B4*G4															
	A	B	C	D	E	F	G	H	I	J	K	L			
1															
2															
3	Part	q1qty	q2qty	q3qty	q4qty	yrqty	Rate	q1Sales	q2Sales	q3Sales	q4Sales	Yr Sales			
4	46720	500	351	344	154	1,349	73	=B4*G4	=C4*H4	=D4*I4	=E4*J4	=F4*K4			
5	1007	102	205	729	259	1,295	132	=B5*G5	=C5*H5	=D5*I5	=E5*J5	=F5*K5			
6	1007A	390	735	548	455	2,128	160	=B6*G6	=C6*H6	=D6*I6	=E6*J6	=F6*K6			
7	43040	671	168	666	387	1,892	280	=B7*G7	=C7*H7	=D7*I7	=E7*J7	=F7*K7			
8	33038	110	134	557	154	955	428	=B8*G8	=C8*H8	=D8*I8	=E8*J8	=F8*K8			
9	33106	721	245	281	220	1,467	461	=B9*G9	=C9*H9	=D9*I9	=E9*J9	=F9*K9			
10	33608	434	721	548	367	2,070	103	=B10*G10	=C10*H10	=D10*I10	=E10*J10	=F10*K10			
11	36430	686	732	142	697	2,257	108	=B11*G11	=C11*H11	=D11*I11	=E11*J11	=F11*K11			
12	40450	644	569	737	607	2,557	271.4	=B12*G12	=C12*H12	=D12*I12	=E12*J12	=F12*K12			
13	39250	583	375	718	258	1,934	78	=B13*G13	=C13*H13	=D13*I13	=E13*J13	=F13*K13			
14	37570	477	472	285	527	1,761	76	=B14*G14	=C14*H14	=D14*I14	=E14*J14	=F14*K14			
15	33642	309	145	644	102	1,200	64	=B15*G15	=C15*H15	=D15*I15	=E15*J15	=F15*K15			
16	33048	319	581	682	566	2,148	62	=B16*G16	=C16*H16	=D16*I16	=E16*J16	=F16*K16			
17	2788	692	241	142	370	1,445	58	=B17*G17	=C17*H17	=D17*I17	=E17*J17	=F17*K17			
18	33782	585	663	740	377	2,365	70	=B18*G18	=C18*H18	=D18*I18	=E18*J18	=F18*K18			
19	33712	361	391	270	453	1,475	110	=B19*G19	=C19*H19	=D19*I19	=E19*J19	=F19*K19			

11. Press Ctrl ~, to get back to the values instead of formulas

	H4	:	X	✓	f <sub>x</sub>	=B4*\$G4														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Tax	10%	
1																				
2																				
3	Part	q1qty	q2qty	q3qty	q4qty	yrqty	Rate	q1Sales	q2Sales	q3Sales	q4Sales	Yr Sales	q1Tax	q2Tax	q3Tax	q4Tax				
4	46720	500	351	344	154	1,349	73	36,500	25,623	25,112	11,242	98,477								
5	1007	102	205	729	259	1,295	132	13,464	27,060	96,228	34,188	1,70,940								
6	1007A	390	735	548	455	2,128	160	62,400	11,7,600	87,680	72,800	3,40,480								
7	43040	671	168	666	387	1,892	280	1,87,880	47,040	1,86,480	1,08,360	5,29,760								
8	33038	110	134	557	154	955	428	47,080	57,352	2,38,396	65,912	4,08,740								
9	33106	721	245	281	220	1,467	461	3,32,381	1,12,945	1,29,541	1,01,420	6,76,287								
10	33608	434	721	548	367	2,070	103	44,702	74,263	56,444	37,801	2,13,210								
11	36430	686	732	142	697	2,257	108	74,088	79,056	15,336	75,276	2,43,756								
12	40450	644	569	737	607	2,557	271	1,74,782	1,54,427	2,00,022	1,64,740	6,93,970								
13	39250	583	375	718	258	1,934	78	45,474	29,250	56,004	20,124	1,50,852								
14	37570	477	472	285	527	1,761	76	36,252	35,872	21,660	40,052	1,33,836								
15	33642	309	145	644	102	1,200	64	19,776	9,280	41,216	6,528	76,800								
16	33048	319	581	682	566	2,148	62	19,778	36,022	42,284	35,092	1,33,176								
17	2788	692	241	142	370	1,445	58	40,136	13,978	8,236	21,460	83,810								
18	33782	585	663	740	377	2,365	70	40,950	46,410	51,800	26,390	1,65,550								

12. Now copy the formula on Row wise and Column wise, it will give the Right solution

Note: We can do the same thing for finding the Tax Rate

See the below example which was applied for the Tax Rate

	M4	:	X	✓	f <sub>x</sub>	=H4*\$N\$1														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Tax	10%	
1																				
2																				
3	Part	q1qty	q2qty	q3qty	q4qty	yrqty	Rate	q1Sales	q2Sales	q3Sales	q4Sales	Yr Sales	q1Tax	q2Tax	q3Tax	q4Tax				
4	46720	500	351	344	154	1,349	73	36,500	25,623	25,112	11,242	98,477	3,650	2,562	2,511	1,124	9,848			
5	1007	102	205	729	259	1,295	132	13,464	27,060	96,228	34,188	1,70,940	1,346	2,706	9,623	3,419	17,094			
6	1007A	390	735	548	455	2,128	160	62,400	11,7,600	87,680	72,800	3,40,480	6,240	11,760	8,768	7,280	34,048			
7	43040	671	168	666	387	1,892	280	1,87,880	47,040	1,86,480	1,08,360	5,29,760	18,788	4,704	18,648	10,836	52,976			
8	33038	110	134	557	154	955	428	47,080	57,352	2,38,396	65,912	4,08,740	4,708	5,735	23,840	6,591	40,874			
9	33106	721	245	281	220	1,467	461	3,32,381	1,12,945	1,29,541	1,01,420	6,76,287	33,238	11,295	12,954	10,142	67,629			
10	33608	434	721	548	367	2,070	103	44,702	74,263	56,444	37,801	2,13,210	4,470	7,426	5,644	3,780	21,321			
11	36430	686	732	142	697	2,257	108	74,088	79,056	15,336	75,276	2,43,756	7,409	7,906	1,534	7,528	24,376			
12	40450	644	569	737	607	2,557	271	1,74,782	1,54,427	2,00,022	1,64,740	6,93,970	17,478	15,443	20,002	16,474	69,397			
13	39250	583	375	718	258	1,934	78	45,474	29,250	56,004	20,124	1,50,852	4,547	2,925	5,600	2,012	15,085			

	M4	:	X	✓	f <sub>x</sub>	=H4*\$N\$1														
	H	I	J	K	L	M	Tax	0.1												
1																				
2																				
3	q1Sales	q2Sales	q3Sales	q4Sales		Yr Sales	q1Tax	q2Tax	q3Tax	q4Tax										
4	=B4*\$G4	=C4*\$G4	=D4*\$G4	=E4*\$G4	=F4*\$G4	=H4*\$N\$1	=I4*\$N\$1	=J4*\$N\$1	=K4*\$N\$1	=L4*\$N\$1										
5	=B5*\$G5	=C5*\$G5	=D5*\$G5	=E5*\$G5	=F5*\$G5	=H5*\$N\$1	=I5*\$N\$1	=J5*\$N\$1	=K5*\$N\$1	=L5*\$N\$1										
6	=B6*\$G6	=C6*\$G6	=D6*\$G6	=E6*\$G6	=F6*\$G6	=H6*\$N\$1	=I6*\$N\$1	=J6*\$N\$1	=K6*\$N\$1	=L6*\$N\$1										
7	=B7*\$G7	=C7*\$G7	=D7*\$G7	=E7*\$G7	=F7*\$G7	=H7*\$N\$1	=I7*\$N\$1	=J7*\$N\$1	=K7*\$N\$1	=L7*\$N\$1										
8	=B8*\$G8	=C8*\$G8	=D8*\$G8	=E8*\$G8	=F8*\$G8	=H8*\$N\$1	=I8*\$N\$1	=J8*\$N\$1	=K8*\$N\$1	=L8*\$N\$1										
9	=B9*\$G9	=C9*\$G9	=D9*\$G9	=E9*\$G9	=F9*\$G9	=H9*\$N\$1	=I9*\$N\$1	=J9*\$N\$1	=K9*\$N\$1	=L9*\$N\$1										
10	=B10*\$G10	=C10*\$G10	=D10*\$G10	=E10*\$G10	=F10*\$G10	=H10*\$N\$1	=I10*\$N\$1	=J10*\$N\$1	=K10*\$N\$1	=L10*\$N\$1										
11	=B11*\$G11	=C11*\$G11	=D11*\$G11	=E11*\$G11	=F11*\$G11	=H11*\$N\$1	=I11*\$N\$1	=J11*\$N\$1	=K11*\$N\$1	=L11*\$N\$1										
12	=B12*\$G12	=C12*\$G12	=D12*\$G12	=E12*\$G12	=F12*\$G12	=H12*\$N\$1	=I12*\$N\$1	=J12*\$N\$1	=K12*\$N\$1	=L12*\$N\$1										
13	=B13*\$G13	=C13*\$G13	=D13*\$G13	=E13*\$G13	=F13*\$G13	=H13*\$N\$1	=I13*\$N\$1	=J13*\$N\$1	=K13*\$N\$1	=L13*\$N\$1										
14	=B14*\$G14	=C14*\$G14	=D14*\$G14	=E14*\$G14	=F14*\$G14	=H14*\$N\$1	=I14*\$N\$1	=J14*\$N\$1	=K14*\$N\$1	=L14*\$N\$1										

## Sorting

Everyone knows sorting means Arranging in Order. Either as Ascending, Descending or Custom Order

If it is a text, Ascending means A-Z, Descending means Z-A

If it is a number, Ascending means Smallest to Largest, Descending means Largest to Smallest

If it is a date, Ascending means Oldest to Newest, Descending means Newest to Oldest

Custom list is our own ordering

Before sorting verify the below condition

1. No merged cells in between
2. Table should have a heading
3. Heading should be unique

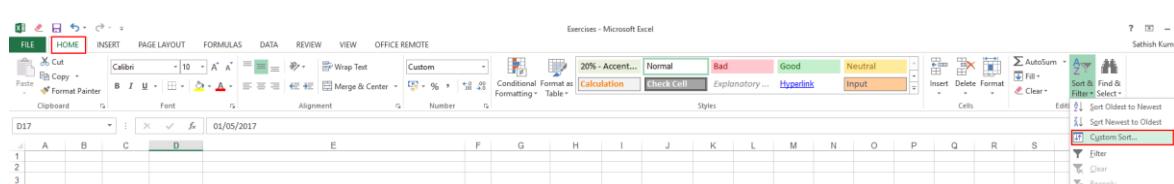
Let us verify the below table

Fin Cd	Itm Cd	Date	Description	Qty	Tot Value
1002	Other Items	9-Feb-2018	1000VA Compact UPS	1.00	11,178.00
1001	Other Items	29-Oct-2017	2 nos Tata phones and 1 no 24" ceiling fan	2.00	3,060.00
1002	Other Items	23-Feb-2018	4/8 gb Dat drive & 64 mb ram with SCSI card for server	1.00	38,200.00
1002	P & M	25-Oct-2017	75 kva solid state power conditioner for EMA induction hardening m/c	1.00	2,46,968.00
1001	P & M	16-May-2017	Amtrex dlx 2 ton split floor mounted Acs	3.00	1,35,780.00
1002	Other Items	9-Feb-2018	Brass plaque R & D Mission	8.00	57,600.00
1002	Other Items	18-Sep-2017	Canon bubble jet printer	1.00	9,800.00
1002	Other Items	4-Sep-2017	Colour ink jet printer for MKtg dept	1.00	10,375.00
1002	Other Items	20-Nov-2017	Colour ink jet printer, 500 va & 1000 va UPS	3.00	27,110.00
1001	P & M	25-Jun-2017	Compact ultrasonic flaw detector "0002el USN-52 krautkramer make	1.00	6,98,781.00
1001	Other Items	12-May-2017	Computer 200mhz, 32mb, 2.1 gb, 1.44mb, color, ethernet card	1.00	42,500.00
1003	P & M	1-May-2017	Computer Accessories	1.00	8,500.00
1002	P & M	16-Nov-2017	Dell star make dust collectors for Lapping & End touch m/cs	5.00	2,50,000.00
1002	Other Items	18-Sep-2017	Canon bubble jet printer	1.00	9,800.00
1001	P & M	23-May-2017	Elec.HT furnace for ageing & Tempering with Recorder	1.00	4,27,369.00
1001	P & M	15-May-2017	ETA tappet end grinding m/c with auto loading arrangement	1.00	7,15,120.00
1003	Furniture	3-Oct-2017	Four drawer filing cabinet with v-line bracket	1.00	7,919.00
1002	P & M	13-Jun-2017	FRP cooling tower 40 tr	1.00	54,183.00
1001	P & M	13-Oct-2017	Gee Dee Weiler slant bed lathe cnc250, Fanuc control systems	1.00	15,50,142.00
1003	P & M	17-Jul-2017	Hiross Refrigerated comp air dryer NGB 004	2.00	83,000.00
1002	Other Items	17-Aug-2017	IBM Netfinity Server3500	1.00	2,500.00
1001	P & M	5-Sep-2017	Incinerator plant	1.00	1,65,750.00
1001	P & M	5-Sep-2017	Incinerator plant	1.00	1,65,750.00
1002	P & M	20-Jun-2017	Infra red light curtain safety system for forging presses	3.00	66,870.00
1002	Other Items	13-Aug-2017	Lan bit 33.6 '0002em	1.00	3,900.00
1003	Other Items	24-Apr-2017	Mitotoyo 0.001lc dial indicator with back lug	8.00	16,317.00
1002	Other Items	6-Jun-2017	Net work cabling and connecting accessories.	3.00	72,150.00
1002	Other Items	13-Jun-2017	On line SPC facility consisting of 1 server , periferels & Software.	2.00	4,03,413.00
1003	P & M	2-Feb-2018	Panasonic Fax Machine at Pune For Mr Prabhakar	1.00	15,570.00
1002	Other Items	24-Mar-2018	Paper shredders	2.00	43,567.50
1003	Vehicles	14-Sep-2017	Peugeot 309GL car	1.00	4,89,000.00
1002	Other Items	12-Feb-2018	Philips multimedia computer projector, Proscreen 4100/40	1.00	2,22,320.00
1001	Furniture	16-Oct-2017	Work table and chairs	5.00	26,830.00
1001	P & M	17-May-2017	Pit type furnace (SR furnace) KSM laboratory glass works,Chennai	1.00	2,31,270.00
1002	P & M	26-May-2017	Semiautomatic polishing m/c/Grind master m/c	1.00	5,85,848.00
1002	Other Items	24-Mar-2018	Paper shredders	2.00	43,567.50
1002	P & M	28-Oct-2017	SEMS make maximum demand controller of 0.5 accuracy	1.00	58,195.00
1002	Other Items	10-Sep-2017	Server upgradation, MS Back office windows NT server,MS office 97	1.00	62,500.00

I believe all the conditions are satisfied

The column Fin Cd was not in an order, let's sort it now

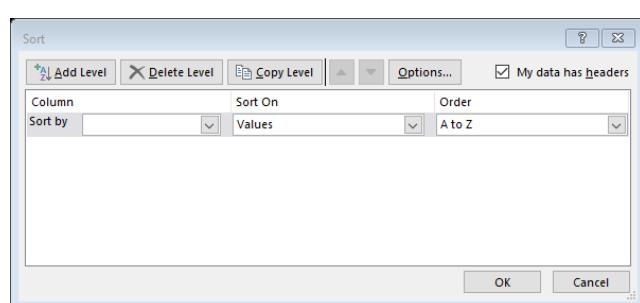
1. Just place the cursor on the table, no need for selecting the ranges
2. Two methods
  - a. Home → Sort & Filter → Custom Sort



- b. Data → Sort



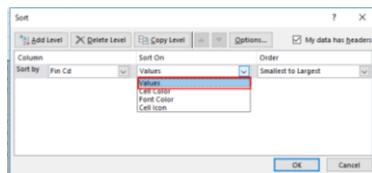
3. It opens a new dialog box



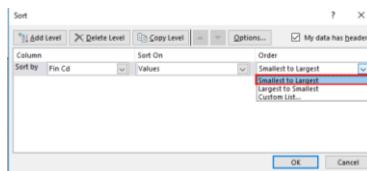
4. Sort by, select the column which you want to Sort



5. Here we want to Sort it by Fin cd, so we have selected it



6. We can Sort the table by Values, Cell Color, Font Color or by Cell Icon, as we want to sort by Values, we have selected the same



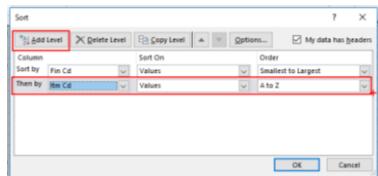
7. As we want it in Ascending, have selected Smallest to Largest

8. Click on OK

Fin Cd	Itm Cd	Date	Description	Qty	Tot Value
1001	Other Items	29-Oct-2017	2 nos Tata phones and 1 no 24" ceiling fan	2.00	3,060.00
1001	P & M	16-May-2017	Amtrex dlx 2 ton split floor mounted Acs	3.00	1,35,780.00
1001	P & M	25-Jun-2017	Compact ultrasonic flaw detector '0002el USN-52 krautkramer make	1.00	6,98,781.00
1001	Other Items	12-May-2017	Computer 200mhz, 32mb, 2.1 gb, 1.44mb, color, ethernet card	1.00	42,500.00
1001	P & M	23-May-2017	Elec.HT furnace for ageing & Tempering with Recorder	1.00	4,27,369.00
1001	P & M	15-May-2017	ETA tappet end grinding m/c with auto loading arrangement	1.00	7,15,120.00
1001	P & M	13-Oct-2017	Gee Dee Weiler slant bed lathe cnc250, Fanuc control systems	1.00	15,50,142.00
1001	P & M	5-Sep-2017	Incinerator plant	1.00	1,65,750.00
1001	P & M	5-Sep-2017	Incinerator plant	1.00	1,65,750.00
1001	Furniture	16-Oct-2017	Work table and chairs	5.00	26,830.00
1001	P & M	17-May-2017	Pit type furnace (SR furnace) KSM laboratory glass works,Chennai	1.00	2,31,270.00
1001	P & M	26-May-2017	Ventilation system , 2 axial fans, ducting, 3 roof extractors	2.00	2,76,000.00
1001	Other Items	13-Nov-2017	Wipro 136 col printers	5.00	62,875.00
1001	Other Items	16-Oct-2017	Zenith one up PC, 2.1gb hard disks, colour monitor, ethernet cards	3.00	71,310.00
1001	Other Items	1-Apr-2017	Wipro 136 col printers	2.00	31,250.00
1002	Other Items	9-Feb-2018	1000VA Compact UPS	1.00	11,178.00
1002	Other Items	23-Feb-2018	4/8 gb Dat drive & 64 mb ram with SCSI card for server	1.00	38,200.00
1002	P & M	25-Oct-2017	75 kva solid state power conditioner for EMA Induction hardening m/c	1.00	2,46,968.00
1002	Other Items	9-Feb-2018	Brass plaque R & D Mission	8.00	57,600.00
1002	Other Items	18-Sep-2017	Canon bubble jet printer	1.00	9,800.00
1002	Other Items	4-Sep-2017	Colour ink jet printer for MKtg dept	1.00	10,375.00
1002	Other Items	20-Nov-2017	Colour ink jet printer, 500 va & 1000 va UPS	3.00	27,110.00
1002	P & M	16-Nov-2017	Dell star make dust collectors for Lapping & End touch m/cs	5.00	2,50,000.00
1002	Other Items	18-Sep-2017	Canon bubble jet printer	1.00	9,800.00
1002	P & M	13-Jun-2017	FRP cooling tower 40 tr	1.00	54,183.00
1002	Other Items	17-Aug-2017	IBM Netfinity Server3500	1.00	2,500.00
1002	P & M	20-Jun-2017	Infra red light curtain safety system for forging presses	3.00	66,870.00
1002	Other Items	13-Aug-2017	Lan bit 33.6 '0002em	1.00	3,900.00
1002	Other Items	6-Jun-2017	Net work cabling and connecting accessories.	3.00	72,150.00
1002	Other Items	13-Jun-2017	On line SPC facility consisting of 1 server , periferals & Software.	2.00	4,03,413.00
1002	Other Items	24-Mar-2018	Paper shredders	2.00	43,567.50
1002	Other Items	12-Feb-2018	Philips multimedia computer projector, Proscreen 4100/40	1.00	2,22,320.00
1002	P & M	26-May-2017	Semiautomatic polishing m/c/Grind master m/c	1.00	5,85,848.00
1002	Other Items	24-Mar-2018	Paper shredders	2.00	43,567.50
1002	P & M	28-Oct-2017	SEMS make maximum demand controller of 0.5 accuracy	1.00	58,195.00
1002	Other Items	10-Sep-2017	Server upgradation, MS Back office windows NT server,MS office 97	1.00	62,500.00
1002	Other Items	10-Sep-2017	Soft ware Oracle Work group server-5 users, Developer 2000	1.00	62,500.00
1002	P & M	21-Oct-2017	Zaniboni electrolytic marking m/c with 360 deg marking.	1.00	8,38,000.00
1003	P & M	1-May-2017	Computer Accessories	1.00	8,500.00
1003	Furniture	3-Oct-2017	Four drawer filing cabinet with v-line bracket	1.00	7,919.00
1003	P & M	17-Jul-2017	Hiross Refrigerated comp air dryer NGB 004	2.00	83,000.00
1003	Other Items	24-Apr-2017	Mitotoyo 0.001c dial indicator with back lug	8.00	16,317.00
1003	P & M	2-Feb-2018	Panasonic Fax Machine at Pune For Mr Prabhaker	1.00	15,570.00
1003	Vehicles	14-Sep-2017	Daewoo 300C LCV	1.00	4,00,000.00

9. Now notice the Fin Cd is Sorted in an Order  
 But under the Fin Cd, the next column Itm Cd was not in an Order

10. Once again place cursor on the table, Sort → Filter



11. Click on Add Level, where a new Level has been added, under Then by – Select Itm Cd, Sort On-Values, Order – A to Z & click on OK

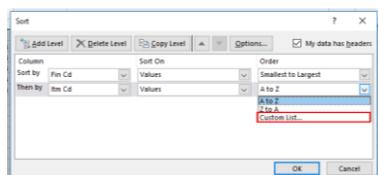
Fin Cd	Itm Cd	Date	Description	Qty	Tot Value
1001	Furniture	16-Oct-2017	Work table and chairs	5.00	26,830.00
1001	Other Items	29-Oct-2017	2 nos Tata phones and 1 no 24" ceiling fan	2.00	3,060.00
1001	Other Items	12-May-2017	Computer 200mhz, 32mb, 2.1 gb, 1.44mb, color, ethernet card	1.00	42,500.00
1001	Other Items	13-Nov-2017	Wipro 136 col printers	5.00	62,875.00
1001	Other Items	16-Oct-2017	Zenith one up PC, 2.1gb hard disks, colour monitor, ethernet cards	3.00	71,310.00
1001	Other Items	1-Apr-2017	Wipro 136 col printers	2.00	31,250.00
1001	P & M	16-May-2017	Amtrex dlx 2 ton split floor mounted Acs	3.00	135,780.00
1001	P & M	25-Jun-2017	Compact ultrasonic flaw detector '0002el USN-52 krautkramer make	1.00	6,98,781.00
1001	P & M	23-May-2017	Elec.HT furnace for ageing & Tempering with Recorder	1.00	4,27,369.00
1001	P & M	15-May-2017	ETA tappet end grinding m/c with auto loading arrangement	1.00	7,15,120.00
1001	P & M	13-Oct-2017	Gee Dee Weiler slant bed lathe cnc250, Fanuc control systems	1.00	15,50,142.00
1001	P & M	5-Sep-2017	Incinerator plant	1.00	1,65,750.00
1001	P & M	5-Sep-2017	Incinerator plant	1.00	1,65,750.00
1001	P & M	17-May-2017	Pit type furnace (SR furnace) KSM laboratory glass works,Chennai	1.00	2,31,270.00
1001	P & M	26-May-2017	Ventilation system , 2 axial fans, ducting, 3 roof extractors	2.00	2,76,000.00
1002	Other Items	9-Feb-2018	1000VA Compact UPS	1.00	11,178.00
1002	Other Items	23-Feb-2018	4/8 gb Dat drive & 64 mb ram with SCSI card for server	1.00	38,200.00
1002	Other Items	9-Feb-2018	Brass plaque R & D Mission	8.00	57,600.00
1002	Other Items	18-Sep-2017	Canon bubble jet printer	1.00	9,800.00
1002	Other Items	4-Sep-2017	Colour ink jet printer for MKtg dept	1.00	10,375.00
1002	Other Items	20-Nov-2017	Colour ink jet printer, 500 va & 1000 va UPS	3.00	27,110.00
1002	Other Items	18-Sep-2017	Canon bubble jet printer	1.00	9,800.00
1002	Other Items	17-Aug-2017	IBM Netfinity Server3500	1.00	2,500.00
1002	Other Items	13-Aug-2017	Lan bit 33.6 '0002em	1.00	3,900.00
1002	Other Items	6-Jun-2017	Net work cabling and connecting accessories.	3.00	72,150.00
1002	Other Items	13-Jun-2017	On line SPC facility consisting of 1 server , periferals & Software.	2.00	4,03,413.00
1002	Other Items	24-Mar-2018	Paper shredders	2.00	43,567.50
1002	Other Items	12-Aug-2018	Philips multimedia computer projector, Proscreen 4100/40	1.00	2,22,320.00
1002	Other Items	24-Mar-2018	Paper shredders	2.00	43,567.50
1002	Other Items	10-Sep-2017	Server upgradation, MS Back office windows NT server,MS office 97	1.00	62,500.00
1002	Other Items	10-Sep-2017	Soft ware Oracle Work group server-5 users, Developer 2000	1.00	62,500.00
1002	P & M	25-Oct-2017	75 kva solid state power conditioner for EMA induction hardening m/c	1.00	2,46,968.00
1002	P & M	16-Nov-2017	Dell star make dust collectors for Lapping & End touch m/cs	5.00	2,50,000.00
1002	P & M	13-Jun-2017	FRP cooling tower 40 tr	1.00	54,183.00

12. Table is Sorted by Fin Cd, Under Fin Cd sorted by Itm Cd

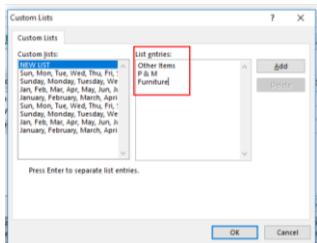
#### Custom List – Sorting

In the same above table Itm Cd is sorted by Ascending Order, but we want to sort it by our own order

1. Place the cursor once again on the table
2. Data → Sort



3. Select Custom List ... from the Second level of Order



4. A new dialog box appears, where Under the List entries, type your preferred order, for example Other Items,P & M, Furniture - Can use ,(Comma) or Press Enter in the between the entries
5. Click on Add
6. Click on OK

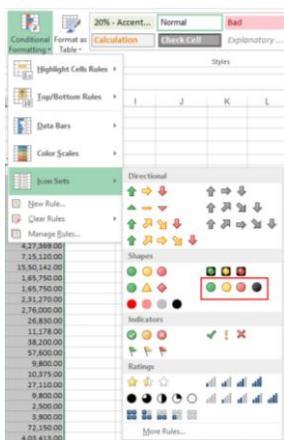
Fin Cd	Itm Cd	Date	Description	Qty	Tot Value
1001	Other Items	29-Oct-2017	2 nos Tata phones and 1 no 24" ceiling fan	2.00	3,060.00
1001	Other Items	12-May-2017	Computer 200mhz, 32mb, 2.1 gb, 1.44mb, color, ethernet card	1.00	42,500.00
1001	Other Items	13-Nov-2017	Wipro 136 col printers	5.00	62,875.00
1001	Other Items	16-Oct-2017	Zenith one up PC, 2.1gb hard disks, colour moniter, ethernet cards	3.00	71,310.00
1001	Other Items	1-Apr-2017	Wipro 136 col printers	2.00	31,250.00
1001	P & M	16-May-2017	Amtrex dlx 2 ton split floor mounted Acs	3.00	135,780.00
1001	P & M	25-Jun-2017	Compact ultrasonic flaw detector '0002el USN-52 krautkramer make	1.00	6,98,781.00
1001	P & M	23-May-2017	Elec.HT furnace for ageing & Tempering with Recorder	1.00	4,27,369.00
1001	P & M	15-May-2017	ETA tappet end grinding m/c with auto loading arrangement	1.00	7,15,120.00
1001	P & M	13-Oct-2017	Gee Dee Weiler slant bed lathe cnc250, Fanuc control systems	1.00	15,50,142.00
1001	P & M	5-Sep-2017	Incinerator plant	1.00	1,65,750.00
1001	P & M	5-Sep-2017	Incinerator plant	1.00	1,65,750.00
1001	P & M	17-May-2017	Pit type furnace (SR furnace) KSM laboratory glass works,Chennai	1.00	2,31,270.00
1001	P & M	26-May-2017	Ventilation system , 2 axial fans, ducting, 3 roof extractors	2.00	2,76,000.00
1001	Furniture	16-Oct-2017	Work table and chairs	5.00	26,830.00

7. Now the table is sorted by our preferred order.

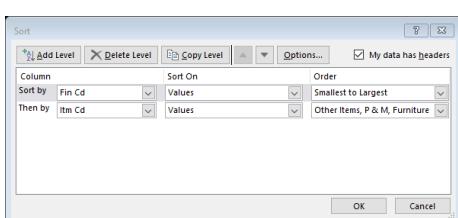
### Sort by Color

If we want to sort the same table by Color, First let's apply some color for Tot Value

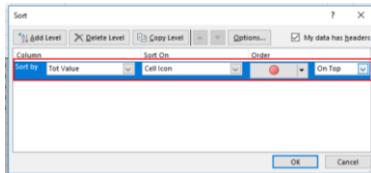
1. Select the Tot Value column
2. Home → Conditional Formatting → Icon Set → 4 Traffic Lights



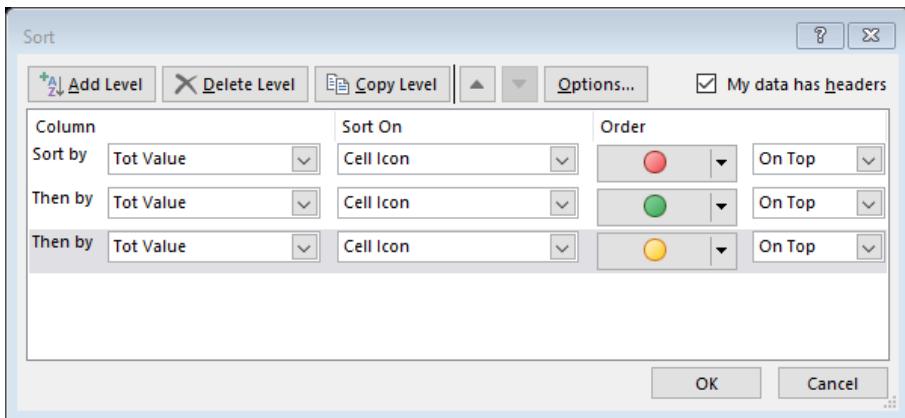
3. Want to sort the table by this Icon Sets
4. Data → Sort



5. Delete the old level by clicking on Delete Level
6. Add Level, change the condition as below



7. Instead of adding new level we can copy the level and change the Color as below



8. Now the table is sorted by Color Wise

Fin Cd	Item Cd	Date	Description	Qty	Tot Value
1001	P & M	25-Jun-2017	Compact ultrasonic flaw detector '0002el USN-52 krautkramer make	1.00	6,98,781.00
1001	P & M	23-May-2017	Elec.HT furnace for ageing & Tempering with Recorder	1.00	4,27,369.00
1001	P & M	15-May-2017	ETA tappet end grinding m/c with auto loading arrangement	1.00	7,15,120.00
1002	Other Items	13-Jun-2017	On line SPC facility consisting of 1 server , periferels & Software.	2.00	4,03,413.00
1002	P & M	26-May-2017	Semiautomatic polishing m/c/Grind master m/c	1.00	5,85,848.00
1003	Vehicles	14-Sep-2017	Peugeot 309GL car	1.00	4,89,000.00
1001	P & M	13-Oct-2017	Gee Dee Weiler slant bed lathe cnc250, Fanuc control systems	1.00	15,50,142.00
1002	P & M	21-Oct-2017	Zaniboni electrolytic marking m/c with 360 deg marking.	1.00	8,38,000.00
1001	Other Items	29-Oct-2017	2 nos Tata phones and 1 no 24" ceiling fan	2.00	3,060.00
1001	Other Items	12-May-2017	Computer 200mhz, 32mb, 2.1 gb, 1.44mb, color, ethernet card	1.00	42,500.00
1001	Other Items	13-Nov-2017	Wipro 136 col printers	5.00	62,875.00

## Filter

Filter means see only the wanted details, hide the unwanted

1. Place cursor anywhere on the table
2. Data → Filter or Press Ctrl Shift L



3. Filter is applied to the table

Fin Cd	Item Cd	Date	Description	Qty	Tot Value
1001	P & M	25-Jun-2017	Compact ultrasonic flaw detector '0002el USN-52 krautkramer make	1.00	6,98,781.00
1001	P & M	23-May-2017	Elec.HT furnace for ageing & Tempering with Recorder	1.00	4,27,369.00
1001	P & M	15-May-2017	ETA tappet end grinding m/c with auto loading arrangement	1.00	7,15,120.00
1002	Other Items	13-Jun-2017	On line SPC facility consisting of 1 server , periferels & Software.	2.00	4,03,413.00
1002	P & M	26-May-2017	Semiautomatic polishing m/c/Grind master m/c	1.00	5,85,848.00

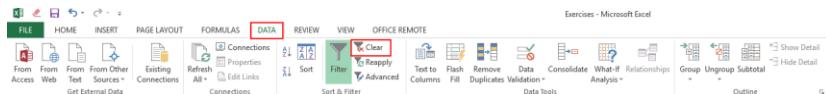
4. Filter Fin Cd by 1002

	Fin Cd	Itm Cd	Date	Description	Qty	Tot Value	
1	Sort Smallest to Largest			n-2017 Compact ultrasonic flaw detector '0002el USN-52 kraudramer make	1.00	6,987.00	
2	Sort Largest to Smallest			y-2017 Elec HT furnace marking & Tempering with Recorder	1.00	4,270.00	
3	Sort by Color			y-2017 On line SPC facility consisting of 1 server , periferels & Software	2.00	12,120.00	
4	Clear Filter From 'Fin Cd'			y-2017 Semiautomatic polishing m/c/Grind master m/c	1.00	5,85,848.00	
5	Filter by Color			p-2017 Peugeot 309G car	1.00	4,86,000.00	
6	Number Filters			p-2017 Dens Volumetric load lifter m/c350, Fanus control systems	1.00	10,00,100.00	
7	Search			p-2017 Zebra electrostatic marking m/c with 360 deg marking	1.00	3,88,000.00	
8	<input checked="" type="checkbox"/> (Select All)			h-2017 2 nos Tata phones and 1 nos 24" ceiling fan	2.00	3,06,000.00	
9	<input checked="" type="checkbox"/> 1002			y-2017 Computer 200MHz, 32mb, 2.1 gb, 1.44mb, color, ethernet card	1.00	42,500.00	
10				y-2017 Wipro 136 cel printer	3.00	62,150.00	
11				r-2017 Wipro 136 cel printers	2.00	31,250.00	
12				y-2017 Amatrix dx 2 ton split floor mounted Ac	3.00	1,35,780.00	
13				p-2017 Incinerator plant	1.00	1,65,500.00	
14				p-2017 Water Treatment plant	1.00	1,25,750.00	
15				y-2017 Pit type furnace (SR furnace) KSM laboratory glass works.Chennai	1.00	2,51,270.00	
16				y-2017 Ventilation system, 2 axial fans, ducting, 3 roof extractors	2.00	2,76,000.00	
17				b-2017 Work station and chairs	5.00	28,850.00	
18				b-2018 Work station	1.00	1,00,000.00	
19				b-2018 4/8 gb Dat drive & 64 mb ram with SCSI card for server	1.00	38,200.00	
20				b-2018 Brass plaque R & D Mission	8.00	57,600.00	
21				p-2017 Canon bubble jet printer	1.00	9,800.00	
22				w-2017 Canon ink jet printer for MKtg dept	1.00	10,375.00	
23				1002 Other Items	20-Nov-2017 Colour ink jet printer, 500 va & 1000 va UPS	3.00	27,110.00
24				1002 Other Items	18-Sep-2017 Canon bubble jet printer	1.00	9,800.00
25				1002 Other Items	17-Aug-2017 IBM Netfinity Server3500	1.00	2,500.00
26				1002 Other Items	13-Aug-2017 Lan bit 33.6 0002em	1.00	3,900.00
27				1002 Other Items	6-Jun-2017 Net work cabling and connecting accessories.	3.00	72,150.00
28				1002 Other Items	24-Mar-2018 Paper shredders	2.00	43,567.50
29				1002 Other Items	12-Feb-2018 Philips multimedia computer projector, Proscreen 4100/40	1.00	2,22,320.00
30				1002 Other Items	24-Mar-2018 Paper shredders	2.00	43,567.50
31				1002 Other Items	10-Sep-2017 Server upgradation, MS Back office windows NT server,MS office 97	1.00	62,500.00
32				1002 Other Items	10-Sep-2017 Soft ware Oracle Work group server-5 users, Developer 2000	1.00	62,500.00
33				1002 P & M	25-Oct-2017 75 kva solid state power conditioner for EMA induction hardening m/c	1.00	2,46,968.00
34				1002 P & M	16-Nov-2017 Dell star make dust collectors for Lapping & End touch m/cs	5.00	2,50,000.00
35				1002 P & M	13-Jun-2017 FRP cooling tower 40 tr	1.00	54,183.00
36				1002 P & M	20-Jun-2017 Infra red light curtain safety system for forging presses	3.00	66,870.00
37				1002 P & M	28-Oct-2017 SEMS make maximum demand controller of 0.5 accuracy	1.00	58,195.00

5. Click on Filter Icon on Fin Cd, uncheck the Select All and check 1002 and OK

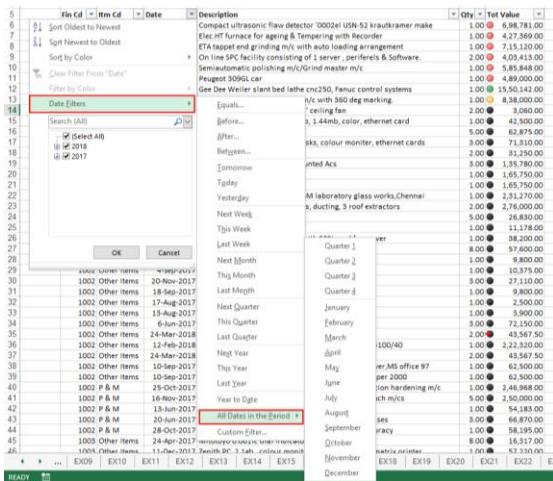
	Fin Cd	Itm Cd	Date	Description	Qty	Tot Value
1	1002 Other Items	13-Jun-2017	On line SPC facility consisting of 1 server , periferels & Software.	2.00	4,03,413.00	
2	1002 P & M	26-May-2017	Semiautomatic polishing m/c/Grind master m/c	1.00	5,85,848.00	
3	1002 P & M	21-Oct-2017	Zaniboni electrolytic marking m/c with 360 deg marking.	1.00	8,38,000.00	
4	1002 Other Items	9-Feb-2018	1000VA Compact UPS	1.00	11,178.00	
5	1002 Other Items	23-Feb-2018	4/8 gb Dat drive & 64 mb ram with SCSI card for server	1.00	38,200.00	
6	1002 Other Items	9-Feb-2018	Brass plaque R & D Mission	8.00	57,600.00	
7	1002 Other Items	18-Sep-2017	Canon bubble jet printer	1.00	9,800.00	
8	1002 Other Items	4-Sep-2017	Colour ink jet printer for MKtg dept	1.00	10,375.00	
9	1002 Other Items	20-Nov-2017	Colour ink jet printer, 500 va & 1000 va UPS	3.00	27,110.00	
10	1002 Other Items	18-Sep-2017	Canon bubble jet printer	1.00	9,800.00	
11	1002 Other Items	17-Aug-2017	IBM Netfinity Server3500	1.00	2,500.00	
12	1002 Other Items	13-Aug-2017	Lan bit 33.6 0002em	1.00	3,900.00	
13	1002 Other Items	6-Jun-2017	Net work cabling and connecting accessories.	3.00	72,150.00	
14	1002 Other Items	24-Mar-2018	Paper shredders	2.00	43,567.50	
15	1002 Other Items	12-Feb-2018	Philips multimedia computer projector, Proscreen 4100/40	1.00	2,22,320.00	
16	1002 Other Items	24-Mar-2018	Paper shredders	2.00	43,567.50	
17	1002 Other Items	10-Sep-2017	Server upgradation, MS Back office windows NT server,MS office 97	1.00	62,500.00	
18	1002 Other Items	10-Sep-2017	Soft ware Oracle Work group server-5 users, Developer 2000	1.00	62,500.00	
19	1002 P & M	25-Oct-2017	75 kva solid state power conditioner for EMA induction hardening m/c	1.00	2,46,968.00	
20	1002 P & M	16-Nov-2017	Dell star make dust collectors for Lapping & End touch m/cs	5.00	2,50,000.00	
21	1002 P & M	13-Jun-2017	FRP cooling tower 40 tr	1.00	54,183.00	
22	1002 P & M	20-Jun-2017	Infra red light curtain safety system for forging presses	3.00	66,870.00	
23	1002 P & M	28-Oct-2017	SEMS make maximum demand controller of 0.5 accuracy	1.00	58,195.00	

6. To get the data back, click on Clear or Press Alt A



### Filter by Date wise

	Fin Cd	Itm Cd	Date	Di
1	Sort Oldest to Newest		El	C
2	Sort Newest to Oldest		Et	C
3	Sort by Color		O	C
4	Clear Filter From "Date"		S4	C
5	Filter by Color		Pt	C
6	Date Editors		Q4	C
7	Search (All)		Z4	C
8	<input checked="" type="checkbox"/> 2017		V4	C
9	<input checked="" type="checkbox"/> January		Ar	C
10	<input checked="" type="checkbox"/> February		In	C
11	<input checked="" type="checkbox"/> March		In	C
12	<input checked="" type="checkbox"/> April		Pt	C
13	<input checked="" type="checkbox"/> May		Vt	C
14	<input checked="" type="checkbox"/> June		Wt	C
15	<input checked="" type="checkbox"/> July		I	C
16	<input checked="" type="checkbox"/> August		I	C
17	<input checked="" type="checkbox"/> September		A	C
18	<input checked="" type="checkbox"/> October		R	C
19	<input checked="" type="checkbox"/> November		U	C
20	<input checked="" type="checkbox"/> December		Y	C
21			Y	C
22			Y	C
23			Y	C
24			Y	C
25			Y	C
26			Y	C
27			Y	C
28			Y	C
29			Y	C
30			Y	C
31			Y	C
32			Y	C
33			Y	C
34			Y	C
35			Y	C
36			Y	C
37			Y	C
38			Y	C
39			Y	C
40			Y	C
41			Y	C
42			Y	C
43			Y	C
44			Y	C
45			Y	C
46			Y	C
47			Y	C
48			Y	C
49			Y	C
50			Y	C
51			Y	C
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103			Y	C
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141			Y	C
142			Y	C
143			Y	C
144			Y	C
145			Y	C
146			Y	C
147			Y	C
148			Y	C
149			Y	C
150			Y	C
151			Y	C
152			Y	C
153			Y	C
154			Y	C
155			Y	C
156			Y	C
157			Y	C
158			Y	C
159			Y	C
160			Y	C
161			Y	C
162			Y	C
163			Y	C
164			Y	C
165			Y	C
166			Y	C
167			Y	C
168			Y	C
169			Y	C
170			Y	C
171			Y	C
172			Y	C
173			Y	C
174			Y	C
175		</		

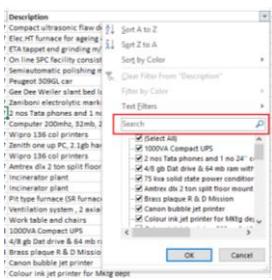


3. Under Date filter- Equals, Before, After
4. Date Filters→All Dates in the Period→ Quarter 1, Quarter 2...

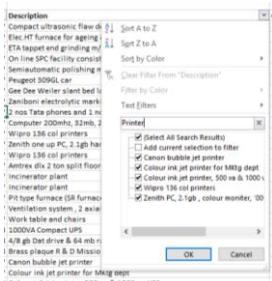
### Text Filter

Multiple filter is possible in text filter, for example we have filter the Description by where we have “Printer” as well as “card”

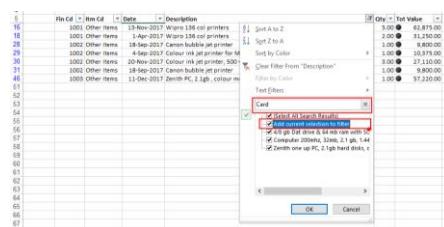
1. Click on the filter icon under Description



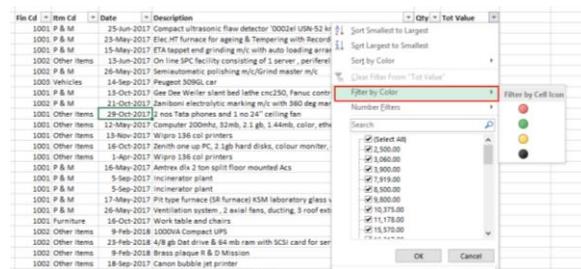
2. Click on the search and Type Printer and click OK



3. It displays only the Description where the text, Printer is available
4. Once again click on Search Box, type card, if you click on OK it will display only the description where card is available, so click on the check box of Add current selection to the filter and click OK

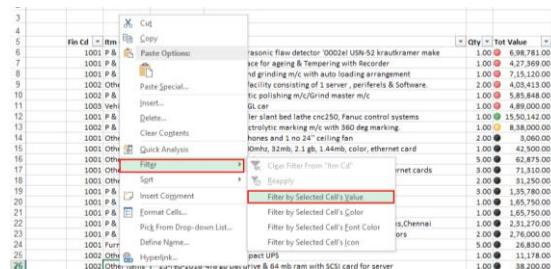


## Filter by Color



No need for going to the top for applying filter, we can do it by just Right Click

For example, we want filter record of Other Items, just Right Click on it



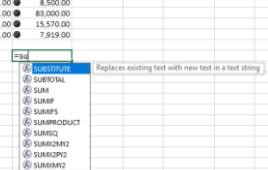
## Subtotal

If we want to find the Total of Tot Value column

1. Can use the function =sum()
2. Click on  $\Sigma$  on the Home tab
3. Press Alt =

But the disadvantage in this is it will give only the grand total, if you filter it will not give you the sum of the filtered record, so we can use the function called Subtotal

1001 P & M	1-May-2017	Computer Accessories	1.00 ● 8,500.00
1001 P & M	17-Apr-2017	Hirenas Refrigerated comp air dryer NGB 004	2.00 ● 88,000.00
1003 P & M	2-Feb-2018	Panasonic Fax Machine at Pune For Mr Prabhaker	1.00 ● 15,570.00
1003 Furniture	3-Oct-2017	Four drawer filing cabinet with v-line bracket	1.00 ● 7,919.00



It displays all the function starting with su, to select the Subtotal, then Double click on Subtotal or press Down arrow and Tab key

43	1003 P & M	20-Jun-2017 Infra red light curtain safety system for forging presses	3.00	66,870.00
44	1003 P & M	28-Oct-2017 SEMs make maximum demand controller of 0.5 accuracy	1.00	58,185.00
45	1003 Other Items	11-Dec-2017 Zenith PC, 2.1gb, colour monitor, '0002em, and dot matrix printer	8.00	16,317.00
46	1003 Other Items	11-Dec-2017 Mitsubishi 0.5m dia indicator with back lug	1.00	57,220.00
47	1003 P & M	1-May-2017 Computer Accessories	1.00	8,500.00
48	1003 P & M	1-Jun-2017 Hirsch Refrigerated comp air dryer NGB 004	2.00	8,800.00
49	1003 P & M	2-Feb-2018 Panasonic Fax Machine at Pune For Mr Prabaker	1.00	15,570.00
50	1003 Furniture	3-Oct-2017 Four drawer filing cabinet with v-line bracket	1.00	7,919.00
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67				

It displays list of function, as we want sum type 9, and select the range of cells

=SUBTOTAL(9,G5:G50)				
A	B	C	D	E
27	1003 Other Items	9-Feb-2018 Braxx cleaner R & D Mission	8.00	57,600.00
28	1003 Other Items	18-Jun-2017 Canon bubble jet printer	1.00	9,800.00
29	1003 Other Items	18-Sep-2017 Colour ink jet printer for MRAG dept	3.00	32,375.00
30	1002 Other Items	20-Nov-2017 Colour ink jet printer, 500 va & 1000 va UPS	3.00	27,110.00
31	1002 Other Items	18-Sep-2017 Canon bubble jet printer	1.00	9,800.00
32	1002 Other Items	17-Aug-2017 IBM Netfinity Server5000	1.00	2,500.00
33	1002 Other Items	17-Aug-2017 IBM Netfinity Server5000	1.00	3,000.00
34	1002 Other Items	6-Jun-2017 Net work cabling and connecting accessories	3.00	72,150.00
35	1002 Other Items	24-Mar-2018 Paper shredder	2.00	43,587.50
36	1002 Other Items	12-Feb-2018 Multimedia computer projector, Proscreen 4100/40	1.00	2,200.00
37	1002 Other Items	10-Jun-2018 Paper shredder	1.00	43,587.50
38	1002 Other Items	10-Sep-2017 Server upgradeation, MS Back office windows NT server/Ms office 97	1.00	62,500.00
39	1002 Other Items	10-Sep-2017 Soft ware Oracle Work group server-5 users, Developer 2000	1.00	62,500.00
40	1002 P & M	25-Oct-2017 75 kg solid state power conditioner for EMA induction hardening m/c	1.00	24,968.00
41	1002 P & M	14-Jun-2017 75kg solid state power conditioner for EMA induction hardening m/c	1.00	24,968.00
42	1002 P & M	15-Jun-2017 FRP cooling tower 40 tr	1.00	54,183.00
43	1002 P & M	20-Jun-2017 Infra red light curtain safety system for forging presses	3.00	66,870.00
44	1002 P & M	28-Oct-2017 SEMs make maximum demand controller of 0.5 accuracy	1.00	58,185.00
45	1003 Other Items	11-Dec-2017 Zenith PC, 2.1gb, colour monitor, '0002em, and dot matrix printer	8.00	16,317.00
46	1003 Other Items	11-Dec-2017 Mitsubishi 0.5m dia indicator with back lug	1.00	57,220.00
47	1003 P & M	1-May-2017 Computer Accessories	1.00	4,890.00
48	1003 P & M	17-Jul-2017 Hirsch Refrigerated comp air dryer NGB 004	2.00	83,000.00
49	1003 P & M	2-Feb-2018 Panasonic Fax Machine at Pune For Mr Prabaker	1.00	15,570.00
50	1003 Furniture	3-Oct-2017 Four drawer filing cabinet with v-line bracket	1.00	7,919.00
51				
52				
53				
54				

Press Ctrl + Enter, now display sum of the filtered record

=SUBTOTAL(9,0\$G\$50)				
A	B	C	D	E
5	Fin Cd	Item Cd	Date	Description
11	1003 Vehicles	14-Sep-2017 Peugeot small car	1.00	4,890.00
45	1003 Other Items	24-Oct-2017 Mitsubishi 0.5m dia indicator with back lug	8.00	16,317.00
46	1003 Other Items	11-Dec-2017 Zenith PC, 2.1gb, colour monitor, '0002em, and dot matrix printer	1.00	57,220.00
47	1003 P & M	1-May-2017 Computer Accessories	1.00	8,500.00
48	1003 P & M	17-Jul-2017 Hirsch Refrigerated comp air dryer NGB 004	2.00	83,000.00
49	1003 P & M	2-Feb-2018 Panasonic Fax Machine at Pune For Mr Prabaker	1.00	15,570.00
50	1003 Furniture	3-Oct-2017 Four drawer filing cabinet with v-line bracket	1.00	7,919.00
51				
52				
53				
54				

## Multiple Sub Total

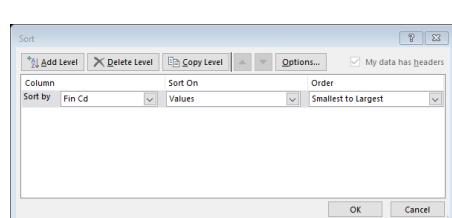
Rather filter and find the total, we can use multiple sub total

Important: Before applying the multiple subtotal, table has to be sorted based on the column for which we want the sub total

For example here we want Find Cd wise sum of Tot Value

Before that remove the filter by Ctrl Shift L and Delete the Subtotal if any available

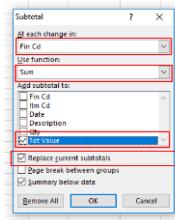
### 1. Data → Sort



### 2. Data → Subtotal



### 3. A new dialog box appears



4. Select Fin Cd as we want Fin Cd wise
5. Select the function which we want, here we have selected Sum
6. Which column has to be totalled, check Tot Value
7. Replace current subtotals has to be selected if we want first level of Subtotal, above the second level it can be unchecked
8. Page break between groups for print out, here it's unchecked
9. As we want total below the data, Summary below data is checked
10. Click on Ok

	A	B	C	D	E	F	G
	1	2	3				
4							
5							
6							
7							
8							
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50							
51							
52							
53							
54							
55							

11. After each Fin Cd is completed, you can find total of it

	A	B	C	D	E	F	G
	1	2	3				
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
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50							
51							
52							
53							
54							
55							

12. On the right side, 3 tab appears

	A	B	C	D	E	F	G
	1	2	3				
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
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51							
52							
53							
54							
55							

13. Click on 1, shows only the Grand Total

	A	B	C	D	E	F	G
	1	2	3				
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
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50							
51							
52							
53							
54							
55							

14. Click on 2, shows Fin Cd wise Total and Grand Total

15. Click on 3, will show the entire data back

## Copy only the Subtotal or Filtered record

In the early example, assume we have to copy only the Subtotal and paste in other area

Fin Cd	Itm Cd	Date	Description	Qty	Tot Value
1001 Total					46,03,787.00
1002 Total					31,80,545.00
1003 Total					6,77,526.00
Grand Total					84,61,858.00

After clicking on 2, if you select the table, copy & paste in some other location, we can notice the entire table will be pasted

Fin Cd	Itm Cd	Date	Description	Qty	Tot Value
1001 Total					46,03,787.00
1002 Total					31,80,545.00
1003 Total					6,77,526.00
Grand Total					84,61,858.00

So, After selecting the table, Press Alt ; (for selecting only the visible) & now copy and paste, which will paste only the Subtotal

Fin Cd	Itm Cd	Date	Description	Qty	Tot Value
1001 Total					46,03,787.00
1002 Total					31,80,545.00
1003 Total					6,77,526.00
Grand Total					84,61,858.00

Note: Same process can be used for the filtered record also

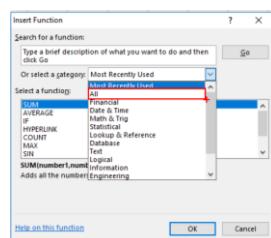
## Functions

A function is a type of formula that allows the user to perform mathematical, statistical and logical operations more easily. While it is possible to create a unique formula, Excel offers users a variety of pre-set formulas that they term functions.

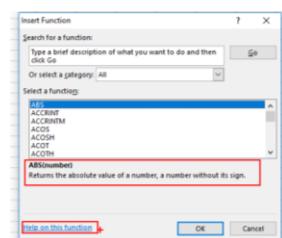
There are 341 functions available in excel, just place the cursor on the empty cell, Press Shift F3 or click on in the formula bar



Where new dialog box appears

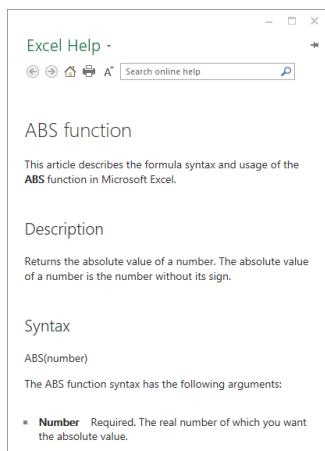


Category wise all the function will be displayed, select All from the combo,

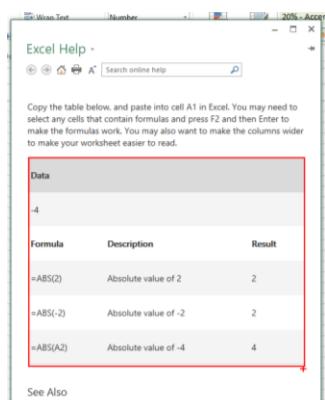


All the function displays in alphabetically, if you want to know about a function, just click on the function, on the bottom it displays what is the usage of the function.

Still if we are not able to understand, just click on Help on this function



It opens a new dialog box, shows the description about the function, just scroll down, can see the example



Just copy the example, paste it at cell A1 on any sheet

A1	B	C	D	E
1	Data			
2	-4.00			
3	Formula	Description	Result	
4	=ABS(2)	Absolute value of 2	2	
5	=ABS(-2)	Absolute value of -2	2	
6	=ABS(A2)	Absolute value of -4	4	

It will help us a lot, to know about the usage of the function

Let us explore a function which is not available on the list

## Date Function

See the below example

	A	B	C
1			
2			
3			
4			
5			
6			
7			
8	name	dbirth	Age in Years
9	Abhishek Upadhyay	14-Jul-66	
10	Adhikesavan H	20-Mar-71	
11	Anandan C	01-Oct-66	
12	Ashish Chakraborty	05-Dec-72	
13	Ashish Dey	17-Sep-53	
14	Babu.S	03-Oct-70	
15	Bhaskaran V	29-Mar-72	

Where we want to find the age of all the employee in terms of year, if we want to find the difference 2 date, we need 2 date, one Date of Birth already available, another in current date.

Enter =Today() in any cell and Press Ctrl Enter, change it to Date format by Ctrl Shift 3

	A	B	C	D	E	F	G
1							
2							
3							
4							
5							
6							
7						11-Jun-18	
8	name	dbirth	Age in Years				
9	Abhishek Upadhyay	14-Jul-66					
10	Adhikesavan H	20-Mar-71					

Now we can write the function =Datedif(Start\_Date,Finish\_Date,Interval)

Start\_Date = Date of Birth, here B9

Finish\_Date = Current Date, here F7, press F4 to make it as constant for all the employee

Interval = we want in years so type y within double quotes "y"

=DATEDIF(B9,\$F\$7,"y")

	A	B	C	D	E	F	G	H
1								
2								
3								
4								
5								
6								
7						11-Jun-18		
8	name	dbirth	Age in Years					
9	Abhishek Upadhyay	14-Jul-66	=datedif(B9,\$F\$7,"y")					
10	Adhikesavan H	20-Mar-71						
11	Anandan C	01-Oct-66						
12	Ashish Chakraborty	05-Dec-72						

Ctrl Enter and copy to other ranges

	A	B	C
1			
2			
3			
4			
5			
6			
7			
8	name	dbirth	Age in Years
9	Abhishek Upadhyay	14-Jul-66	51.00
10	Adhikesavan H	20-Mar-71	47.00
11	Anandan C	01-Oct-66	51.00
12	Ashish Chakraborty	05-Dec-72	45.00
13	Ashish Dey	17-Sep-53	64.00
14	Babu.S	03-Oct-70	47.00
15	Bhaskaran V	29-Mar-72	46.00
16	Chohan R K	12-Jul-65	52.00
17	Dhanasekaran T	13-Mar-75	43.00
18	Gowrishankar.B	20-Aug-75	42.00
19	Jothi S	15-Jun-66	51.00
20	K.Ravi	03-Feb-67	51.00
21	Kalyanakumar C	11-May-67	51.00
22	Kamalakkannan.S	08-Jul-75	42.00
23	Kanniappan V	15-May-74	44.00
24	Karthikeyan N	14-Jun-68	49.00

Will get the age of all the employees

If want it months, don't use "m" as it will give no. of months, but we want no. of months after the years, so use the below function

=DATEDIF(B9,\$F\$7,"ym")

	A	B	C	D	E	F	G
7					11-Jun-18		
8	name	dbrth	Age in Years	Months	Days		
9	Abhishek Upadhyay	14-Jul-66	51.00	10.00			
10	Adhikesavan H	20-Mar-71	47.00	2.00			
11	Anandan C	01-Oct-66	51.00	8.00			

For days after the month is completed, use the below function

=DATEDIF(B9,\$F\$7,"md")

	A	B	C	D	E	F
7					11-Jun-18	
8	name	dbrth	Age in Years	Months	Days	
9	Abhishek Upadhyay	14-Jul-66	51.00	10.00	28.00	
10	Adhikesavan H	20-Mar-71	47.00	2.00	22.00	
11	Anandan C	01-Oct-66	51.00	8.00	10.00	
12	Ashish Chakraborty	05-Dec-72	45.00	6.00	6.00	

## Logical Function

In the below example, we have to find the Discount based on the Sales Value, the criteria is

Sales ID	Region	Sales Date	Payment Type	Sales Amt	Discount
1001	West	July 3, 2015	Visa	2900	
1002	North	July 3, 2015	Visa	4000	
1003	South	July 4, 2015	Cheque	6300	
1004	Central	July 5, 2015	Master	5000	
1005	West	July 6, 2015	Master	1000	
1006	West	July 6, 2015	Master	1100	
1007	North	July 8, 2015	Visa	800	
1008	East	July 10, 2015	Master	6200	
1009	Central	July 11, 2015	Master	6200	
1010	North	July 11, 2015	Cash	1500	
1011	West	July 12, 2015	Cash	4900	
1012	South	July 13, 2015	Master	2400	
1013	East	July 14, 2015	Cash	2900	
1014	South	July 15, 2015	Cash	900	
1015	South	July 15, 2015	Cash	4400	
1016	East	July 16, 2015	Master	1300	
1017	East	July 18, 2015	Cash	5700	
1018	South	July 20, 2015	Visa	3500	
1019	East	July 22, 2015	Cash	5200	
1020	South	July 22, 2015	Cash	2600	
1021	East	July 25, 2015	Cheque	3100	
1022	North	July 25, 2015	Cheque	5200	
1023	East	July 27, 2015	Cheque	2000	
1024	North	July 27, 2015	Master	1900	
1025	West	July 29, 2015	Cash	900	
1026	West	July 29, 2015	Cash	1100	
1027	East	August 1, 2015	Master	4200	
1028	South	August 2, 2015	Master	900	

Find the Discount where Sales Amt more than 4000 its 7% otherwise 5%

### IF function

The IF function is one of the most popular functions in Excel, and it allows you to make logical comparisons between a value and what you expect. In its simplest form, the IF function says:

IF(Something is True, then do something, otherwise do something else)

So an IF statement can have two results. The first result is if your comparison is True, the second if your comparison is False.

For example in our data let's use the same function as below

=IF(E11>4000,7%,0%)

Sales ID	Region	Sales Date	Payment Type	Sales Amt	Discount
1001	West	July 3, 2015	Visa	2900	=IF(E11>4000,7%,0%)
1002	North	July 3, 2015	Visa	4000	0.00
1003	South	July 4, 2015	Cheque	6300	0.07
1004	Central	July 5, 2015	Master	5000	0.07
1005	West	July 6, 2015	Master	1000	0.00
1006	West	July 6, 2015	Master	1100	0.00
1007	North	July 8, 2015	Visa	800	0.00

As it displays the value in number format can change it to percentage, by Ctrl Shift 5

F11					
A	B	C	D	E	F
10	Sales ID	Region	Sales Date	Payment Type	Sales Amt
11	1001	West	July 3, 2015	Visa	2900
12	1002	North	July 3, 2015	Visa	4000
13	1003	South	July 4, 2015	Cheque	6300
14	1004	Central	July 5, 2015	Master	5000
15	1005	West	July 6, 2015	Master	1000
16	1006	West	July 6, 2015	Master	1100
17	1007	North	July 8, 2015	Visa	800
18	1008	East	July 10, 2015	Master	6200

But assume instead of %, we want discount value, so we can edit the formula as below

=IF(E11>4000,7%,0%)\*E11

SUM					
A	B	C	D	E	F
10	Sales ID	Region	Sales Date	Payment Type	Sales Amt
11	1001	West	July 3, 2015	Visa	2900
12	1002	North	July 3, 2015	Visa	4000
13	1003	South	July 4, 2015	Cheque	6300

Press Ctrl Enter, it display in %, change it number by Ctrl Shift 1 or Ctrl Shift ~

F11					
A	B	C	D	E	F
10	Sales ID	Region	Sales Date	Payment Type	Sales Amt
11	1001	West	July 3, 2015	Visa	2900
12	1002	North	July 3, 2015	Visa	4000
13	1003	South	July 4, 2015	Cheque	6300
14	1004	Central	July 5, 2015	Master	5000
15	1005	West	July 6, 2015	Master	1000
16	1006	West	July 6, 2015	Master	1100

And

Checks whether all the conditions are satisfied, if yes displays TRUE else displays FALSE

Let's take same data, where we want to find the additional discount

Maximum condition checked within AND are 255

The criteria are

Find Additional Discount where Sales Amt more than 2000 and Payment Type is Cash its 3% otherwise 0%

Unfortunately, in IF, we can check only one condition at a time we are going to use AND

The Formula is =AND(E11>2000,D11="visa")

Note: visa is a text character, inserted within double quotes

SUM								
			X	✓	f <sub>x</sub>	=AND(E11>2000,D11="visa")		
A	B	C	D	E	F	G	H	I
Sales ID	Region	Sales Date	Payment Type	Sales Amt	Discount			
1001	West	July 3, 2015	Visa	2900	0			
1002	North	July 3, 2015	Visa	4000	0			
1003	South	July 4, 2015	Cheque	6300	441			

But if we press Ctrl Enter, it will show TRUE or FALSE

G11								
			X	✓	f <sub>x</sub>	=AND(E11>2000,D11="visa")		
A	Insert Func	B	C	D	E	F	G	
Sales ID	Region	Sales Date	Payment Type	Sales Amt	Discount	Addl Discount		
1001	West	July 3, 2015	Visa	2900	0	TRUE		
1002	North	July 3, 2015	Visa	4000	0	TRUE		
1003	South	July 4, 2015	Cheque	6300	441	FALSE		
1004	Central	July 5, 2015	Master	5000	350	FALSE		
1005	West	July 6, 2015	Master	1000	0	FALSE		
1006	West	July 6, 2015	Master	1100	0	FALSE		

Rather than displaying TRUE or FALSE, we want %, as AND will give only TRUE or FALSE as the output, we can add IF to the same function which we call as Nested Function (a function inside another)

=IF(AND(E11>2000,D11="visa"),3%,0%)

G11								
			X	✓	f <sub>x</sub>	=IF(AND(E11>2000,D11="visa"),3%,0%)		
A	B	C	D	E	F	G	H	
Sales ID	Region	Sales Date	Payment Type	Sales Amt	Discount	Addl Discount		
1001	West	July 3, 2015	Visa	2900	0	3%		
1002	North	July 3, 2015	Visa	4000	0	3%		
1003	South	July 4, 2015	Cheque	6300	441	0%		
1004	Central	July 5, 2015	Master	5000	350	0%		
1005	West	July 6, 2015	Master	1000	0	0%		
1006	West	July 6, 2015	Master	1100	0	0%		

OR

Display TRUE if any one of the condition is satisfied else displays FALSE

Within same data we are going to find the Card Charges, criteria is

Find the Card Charges Payment Type is Visa, Master its 10% otherwise 0%

The formula is =OR(D11="visa",D11="master")

							H11
							Name Box
							C
	Sales ID	Region	Sales Date	Payment Type	Sales Amt	Discount	G
10							Addl Discount
11	1001	West	July 3, 2015	Visa	2900	0	3% TRUE
12	1002	North	July 3, 2015	Visa	4000	0	3% TRUE
13	1003	South	July 4, 2015	Cheque	6300	441	0% FALSE
14	1004	Central	July 5, 2015	Master	5000	350	0% TRUE
15	1005	West	July 6, 2015	Master	1000	0	0% TRUE
16	1006	West	July 6, 2015	Master	1100	0	0% TRUE
17	1007	North	July 8, 2015	Visa	800	0	0% TRUE
18	1008	East	July 10, 2015	Master	6200	434	0% TRUE

Note: As the visa, master is a text character has been entered within double quotes ("")

Like AND, maximum number of condition in OR are 255

Once again it displays %, want to change it to number format, so let's add IF again with OR

=IF(OR(D11="visa",D11="master"),10%,0%)

							H11
							Name Box
							C
	Sales ID	Region	Sales Date	Payment Type	Sales Amt	Discount	G
10							Addl Discount
11	1001	West	July 3, 2015	Visa	2900	0	3% 10%
12	1002	North	July 3, 2015	Visa	4000	0	3% 10%
13	1003	South	July 4, 2015	Cheque	6300	441	0% 0%
14	1004	Central	July 5, 2015	Master	5000	350	0% 10%
15	1005	West	July 6, 2015	Master	1000	0	0% 10%
16	1006	West	July 6, 2015	Master	1100	0	0% 10%
17	1007	North	July 8, 2015	Visa	800	0	0% 10%
18	1008	East	July 10, 2015	Master	6200	434	0% 10%

Another example for nested function

### Nested Ifs

We will see about the next criteria

Find Other Charges, If Region - South then 150, Region - North then 175, Region - Central then 190, other region are 0

Here 1 condition at a time but for each condition different output, let's use the below formulas

=IF(B11="south",150,IF(B11="north",175,IF(B11="central",190,0)))

								SUM
								Name Box
								C
	Sales ID	Region	Sales Date	Payment Type	Sales Amt	Discount	Addl Discount	Card Charges
10								I
11	1001	West	July 3, 2015	Visa	2900	0	3%	=IF(B11="south",150,IF(B11="north",175,IF(B11="central",190,0)))
12	1002	North	July 3, 2015	Visa	4000	0	3%	175.00
13	1003	South	July 4, 2015	Cheque	6300	441	0%	150.00
14	1004	Central	July 5, 2015	Master	5000	350	0%	190.00
15	1005	West	July 6, 2015	Master	1000	0	10%	0.00
16	1006	West	July 6, 2015	Master	1100	0	10%	0.00

Note: All the brackets should be closed at the last

### Looking up information in a worksheet

In the below example we have Empno, Name based on this we want to find the Designation, which is available in some file, as you know we have going to use the popular function called as Lookup

A	B	C
empno	name	Designation
20910	Shiva N	
20917	Subramanian P	
20931	Saravanan V	
20934	Venkatesan G	
20912	Sundaraj.K	
20927	Jothi S	
20928	Ravinder A	
20932	Anandan C	
20913	K.Ravi	
20935	Kalyanakumar C	
20943	Mathew Paul L	
20902	Karthikeyan N	
20905	Sathyaranayanan G	
20911	Ravi.L	
20901	Venkatesan P D	
20903	Vasudevan E	
20904	Sugumar S	
20942	Venkatesan S	
20918	Santhanam S	
20915	Babu.S	
20923	Muthukumar L	
20922	Adhikesavan H	
20920	Kumaresan D	
20919	Nagarajan S	
20933	Mohan V	

## Employee Master

A	B	C	D	E	F	G	H	I	J	K
1										
2										
3										
4										
5										
6										
7	Branch	Empno	Name	Gender	Qualification	DOB	DOJ	RtmntAge	Design	Dept
8	KOL	11	Chandran C	Male	SSC	01-Mar-56	13-Jun-77	58	Workman	Prodn
9	CHE	13	Sridharan S	Male	ME	28-Jan-43	09-Aug-74	60	VP	Qlty
10	KOL	18	Venugopal S	Male	SSC	13-May-57	01-Sep-80	58	Engr / Ofcr	Qlty
11	KOL	20	Ramanathan.M	Male	PLUS 2	03-May-58	14-Nov-80	58	Engr / Ofcr	Prodn
12	CHE	25	Mahalingam S	Male	MSC	12-Mar-43	17-Oct-67	60	Mgr	Mktg
13	KOL	26	Shanmugaiah S	Male	SSC	07-Mar-59	06-Nov-78	58	Workman	Prodn
14	DEL	30	Visweswaran AL	Male	BSC	21-Apr-47	15-Apr-85	60	DGM	Mktg
15	KOL	32	Lucas M.T.	Male	SSC	09-Oct-53	02-May-78	58	Workman	Prodn
16	HO	43	Swaminathan B	Male	BSC	03-Mar-63	14-Sep-89	60	DGM	Fin
17	CHE	44	Annathurai R	Male	BE	17-Sep-58	15-Dec-89	60	Mgr	Matl
18	KOL	45	Sekar C.S.	Male	SSC	02-Jan-61	21-Dec-81	58	Workman	Qlty
19	KOL	47	Sekar N.V.	Male	HSC	03-Jun-64	23-Apr-84	58	Workman	Prodn
20	HO	49	Balasubramanyan S	Male	BE	04-Jul-60	14-Jun-91	60	Mgr	Mktg
21	CHE	52	Raghunathan P A M	Male	AMIE	10-May-54	06-Jan-93	60	Amgr	Pengg
22	MUM	55	Shannuganathan S	Male	BE	08-Apr-56	25-Jul-94	58	AGM	Prodn
23	MUM	58	Subbiah B	Male	BE	12-Jun-46	11-Jan-95	60	VP	Prodn
24	BLR	61	Mitra S	Male	BE	21-Jan-52	24-May-95	60	GM	Prodn
25	MUM	65	Madhubalan N K A	Male	DEE	25-Dec-63	28-Oct-95	58	AGM	Qlty
26	CHE	69	Ramachandran H	Male	BSC	12-Jul-63	26-Jun-96	60	Dyngr	Fin
27	MUM	70	Ramakrishna Rao N	Male	BCOM	01-Sep-57	07-May-85	58	SE / SO	Mktg
28	BLR	73	Vaidya G H	Male	BCOM	16-Jan-58	09-Oct-87	58	Amgr	Matl
29	BLR	74	Sathiah J	Male	BCOM	05-Aug-56	03-Apr-84	58	SE / SO	Ppc

The VLOOKUP function finds a value in the leftmost column of a named range, such as a table, and then returns the value from the specified cell to the right of the cell that has the found value. A properly formed VLOOKUP function has four arguments (data that is passed to the function), as shown in the following definition: =VLOOKUP(lookup\_value, table\_array, col\_index\_num, range\_lookup).

The following table summarizes the values Excel expects for each of these arguments.

Argument	Expected value
lookup_value	The value to be found in the first column of the named range specified by the table_array argument. The lookup_value argument can be a value, a cell reference, or a text string.
table_array	The multicolumn range or name of the range or Excel table to be searched.
col_index_num	The number of the column in the named range that has the value to be returned.

Argument	Expected value
range_lookup	A TRUE or FALSE value, indicating whether the function should find an approximate match (TRUE) or an exact match (FALSE) for the lookup_value. If left blank, the default value for this argument is TRUE.

The VLOOKUP function works a bit differently depending on whether the range\_lookup argument is set to TRUE or FALSE. The following list summarizes how the function works based on the value of range\_lookup:

- If the range\_lookup argument is left blank or set to TRUE, and VLOOKUP doesn't find an exact match for lookup\_value, the function returns the largest value that is less than lookup\_value.
- If the range\_lookup argument is left blank or set to TRUE, and lookup\_value is smaller than the smallest value in the named range, an #N/A error is returned.
- If the range\_lookup argument is left blank or set to TRUE, and lookup\_value is larger than all values in the named range, the largest value in the named range is returned.
- If the range\_lookup argument is set to FALSE, and VLOOKUP doesn't find an exact match for lookup\_value, the function returns an #N/A error.

TIP : The related HLOOKUP function matches a value in a column of the first row of a table and returns the value in the specified row number of the same column. The letter "H" in the HLOOKUP function name refers to the horizontal layout of the data, just as the "V" in the VLOOKUP function name refers to the data's vertical layout.

Before use the formula, please considered the below condition

- i) Count the no of column starting from key field on the source or master table, here we are going to find the designation which is the 8<sup>th</sup> Column from the EmpNo which our key field.
- ii) If you are finding the exact match, the range\_lookup should be 0 or FALSE, if you are finding the approximate match, the range\_lookup should be 1 or TRUE, as here we have to find the exact employee record we can use 0 or FALSE
- iii) While using Lookup, key field should be the first column, as here key field is empno, we will select Table\_array starting from empno
- iv) If you are finding the approximate match then source table should be sorted, as here it's exact match no need for sorting the table.

Now let's use the formula

=Vlookup(What\_is\_Keyfield,Where\_are\_we\_going\_to\_find,What\_is\_ColumnNo\_to\_Find,Approx or Exact)

=Vlookup(here keyfield is empno,table array is master table starting from empno, column no is 8,exact match)

=Vlookup(select the empno, select the master table starting from empno,8,0)

=VLOOKUP(A9,[Master.xlsx]EmpMaster!\$B\$8:\$J\$1567,8,0)

SUM			X	✓	f <sub>x</sub>	=VLOOKUP(A9,[Master.xlsx]EmpMaster!\$B\$8:\$J\$1567,8,0)
7	A	B	C	D	E	F
8	empno_name	Designation				
9	20910 Shiva N	=VLOOKUP(A9,[Master.xlsx]EmpMaster!\$B\$8:\$J\$1567,8,0)				
10	20917 Subramanian P	Workman trainee				
11	20931 Saravanan V	Workman trainee				
12	20934 Venkatesan G	Workman trainee				
13	20912 Sundaraj.K	Workman trainee				
14	20927 Jothi S	Workman trainee				
15	20928 Ravinder A	Workman trainee				

Press Ctrl Enter and Copy to all the employee, it shows the designation for all the employees

Same you can do it for other column

### Array Lookup

On the below data we are going to find 3 column based on 1 lookup, source data is in the same file some other sheet

Part No	Name	Rate	UOM
46720			
1007			
1007A			
43040			
33038			
33106			
33608			
36430			
40450			
39250			
37570			
33642			
33048			
2788			
33782			
33712			
1025			

### Master

A	B	C	D	E	F	G	H	I	J
1	Sl #	Part No	Name	PO No	Date	UOM	Opening Balance	Current Balance	Rate
2	1	1001	Tata 1210	1097	27-Mar-13	Kgs	36.00	44.00	148.00
3	2	1007	Tata 1312A	2000	01-Mar-13	Nos	48.00	21.00	91.00
4	3	1014	H M T Tractor - 2511	1931	09-Mar-13	Kgs	28.00	10.00	146.00
5	4	1025	Bajaj Auto Kubota	1444	18-Mar-13	Kgs	18.00	15.00	135.00
6	5	1035	Cummins Decome Ex	1479	09-Mar-13	Nos	29.00	48.00	115.00
7	6	1041	Ford 3600 (O/S) A	1660	16-Mar-13	Kgs	35.00	54.00	61.00
8	7	1043	Ford 3600 (O/S) B	1498	17-Mar-13	Nos	0.00	3.00	99.00
9	8	1045	Ford 3600 (O/S) C	1667	13-Mar-13	Nos	35.00	48.00	119.00
0	9	1059	Gt - Hind Super	1761	25-Mar-13	Nos	44.00	13.00	76.00
1	10	1072	Bajaj Metador	1553	15-Mar-13	Kgs	47.00	51.00	119.00
2	11	1074	Escorts - 27W	1180	31-Mar-13	Nos	13.00	21.00	147.00
3	12	2788	M & M Willys Jeep	1449	02-Mar-13	Nos	48.00	33.00	97.00
4	13	2965	Cummins Nh	1905	21-Mar-13	Kgs	6.00	19.00	119.00
5	14	4003	Tata 1210 Super A	1433	19-Mar-13	Nos	41.00	25.00	91.00
6	15	33038	Leyland 680	1929	30-Mar-13	Kgs	45.00	13.00	129.00
7	16	33042	Lombardini 121	1988	15-Mar-13	Nos	24.00	6.00	77.00
8	17	33045	Leyland 370	1640	27-Mar-13	Kgs	21.00	64.00	118.00
9	18	33048	M & M Peugeot	1620	05-Mar-13	Kgs	30.00	41.00	92.00
10	19	33050	Escorts E2-228	1189	22-Mar-13	Kes	11.00	9.00	138.00
11	20	33054	Gt(G-453)/Hmt(5911)	1313	11-Mar-13	Nos	36.00	62.00	124.00

- Select all the 3 cells where we want the formulas

Part No	Name	Rate	UOM
46720			
1007			

- Let's write same formula, only difference is, if we want multiple column type the column nos., within {} – Flower Brackets

- As it was a array remember to press Ctrl Shift Enter to Accept

`=VLOOKUP(A10,PartMaster!C2:J59,{2,8,5},0)`

Note: Before or after VLOOKUP, excel has inserted { and } by default as it was a array

B10	:	X	✓	f <sub>x</sub>	{=VLOOKUP(A10,PartMaster!C2:J59,{2,8,5},0)}
A	B	C	D	E	
1					
2					
3					
4					
5					
6					
7					
8					
9	Part No	Name	Rate	UOM	
10	46720	Tata 1210 Super	120.00	Kgs	

- Select all the 3 cells and copy it on the bottom

	B10								
10	46720	Tata 1210 Super	120.00	Kgs					
11	1007	Tata 1312A	91.00	Nos					
12	1007A	Tata 1312	55.00	Nos					
13	43040	Leyland 411 Supe	132.00	Kgs					
14	33038	Leyland 680	129.00	Kgs					
15	33106	Leyland 690	68.00	Nos					
16	33608	Leyland Hino	107.00	Nos					
17	36430	Leyland Iveco	61.00	Kgs					
18	40450	Leyland PTL	61.00	Kgs					
19	39250	Maruti Esteem	143.00	Kgs					
20	37570	Maruti Zen	83.00	Nos					
21	33642	M & M AVL DI 10	146.00	Nos					
22	33048	M & M Peugeot	92.00	Kgs					
23	2788	#N/A	#N/A	#N/A					
24	33782	M & M Xd-3P	118.00	Nos					
25	33712	Bajaj Auto Kawas	87.00	Nos					
26	1025	#N/A	#N/A	#N/A					
27	33394	Eicher Canter	106.00	Nos					
28	33042	#N/A	#N/A	#N/A					
29	33183	Lombardini	55.00	Nos					
30	33054	#N/A	#N/A	#N/A					
31	33584	Hero Honda	118.00	Nos					

5. Notice some data is giving error, but the data is available in source still it gives error, the reason is the formula without \$

Note: When we use table array from other file excel will insert \$, by default, but same file means excel will not insert the \$

6. Select all the 3 cells
7. Select the Table\_array, here C2:J59, press F4 to Apply \$
8. Press Ctrl Shift Enter
9. And copy

	B10								
9	A	B	C	D	E	F	G	H	I
10	Part No	Name	Rate	UOM					J
11	46720	Tata 1210 Super	120.00	Kgs					
12	1007	Tata 1312A	91.00	Nos					
13	1007A	Tata 1312	55.00	Nos					
14	43040	Leyland 411 Supe	132.00	Kgs					
15	33038	Leyland 680	129.00	Kgs					
16	33106	Leyland 690	68.00	Nos					
17	33608	Leyland Hino	107.00	Nos					
18	36430	Leyland Iveco	61.00	Kgs					
19	40450	Leyland PTL	61.00	Kgs					
20	39250	Maruti Esteem	143.00	Kgs					
21	37570	Maruti Zen	83.00	Nos					
22	33642	M & M AVL DI 10	146.00	Nos					
23	33048	M & M Peugeot	92.00	Kgs					
	2788	M & M Willys Jee	97.00	Nos					

10. Now no error

### Handling Error

Fortunately, all the data available here it's available in the master, assume if some data is not available it will give an error

Let us change some value and check

	A12								
9	A	B	C	D					
10	Part No	Name	Rate	UOM					
11	46720	Tata 1210 Super	120.00	Kgs					
12	12345	#N/A	#N/A	#N/A					
13	1007A	Tata 1312	55.00	Nos					

Here Part No 12345 is not available so it displays #N/A, let us avoid the error and display some other, so we can use IFERROR function, just add the function with VLOOKUP, as shown below

```
=IFERROR(VLOOKUP(A10,PartMaster!$C$2:$J$59,{2,8,5},0),"No data")
```

Press Ctrl Shift Enter and Copy it

	B10	:	X	✓	f <sub>x</sub>	{=IFERROR(VLOOKUP(A10,PartMaster!\$C\$2:\$J\$59,{2,8,5},0),"No data")}					
A	B	C	D	E	F	G	H	I	J	K	L
9	Part No	Name	Rate	UOM							
10	46720	Tata 1210 Super	120.00	Kgs							
11	12345	No Data	No Data	No Data							
12	1007A	Tata 1312	55.00	Nos							
13	43040	Leyland 411 Supe	132.00	Kgs							
14	33038	Leyland 680	129.00	Kgs							
15	33106	Leyland 690	68.00	Nos							

## HLOOKUP

Take the below table where the data is horizontal, so we will use HLOOKUP, in VLOOKUP we will count column no and HLOOKUP we have to count the Row No

	A8	:	X	✓	f <sub>x</sub>	{=HLOOKUP(B23,B17:E19,3,1)}
A	B	C	D	E	F	
16	Income is Greater Than or Equal To...	0	200001	500001	1000001	
17	Income is less or Equal to	200000	500000	1000000		
18	Tax Rate	0%	10%	20%	30%	
20						
21						
22						
23	Income	900000.00				
24	Tax rate					
25						

We have to find the rate based on Income, so it's in Row No.3

And we don't want exact value, we want anything between 0 – 200000, 200001 – 400000..., so it's an approximate match

The formulas is =HLOOKUP(B23,B17:E19,3,1)

	B24	:	X	✓	f <sub>x</sub>	{=HLOOKUP(B23,B17:E19,3,1)}
A	B	C	D	E	F	
16	Income is Greater Than or Equal To...	0	200001	500001	1000001	
17	Income is less or Equal to	200000	500000	1000000		
18	Tax Rate	0%	10%	20%	30%	
20						
21						
22						
23	Income	900000.00				
24	Tax rate					
25						

Just change the value in Income and check the Tax Rate

Note: Can transpose the source table & write VLOOKUP also.

## Pivot Table

As of now we have seen how to handle the data, may be for the first timer we are going to see how to create some reports using the concept called as Pivot Table

On the below table

3	Region	seg	Part	application	q1qty	q2qty	q3qty	q4qty	yrqty
4	Central	4MH	1007	Tata 1312	1500	1600	1600	2400	7100
5	Central	4MH	1007A	Tata 1312	3300	900	4000	2200	10400
6	Central	4MH	46720	Tata 1210 Super	1200	3800	2100	1000	8100
7	Central	1PC	37570	Maruti Zen	500	2200	2100	500	5300
8	Central	1PC	39250	Maruti Esteem	3900	2900	1700	3900	12400
9	Central	2UV	33782	M & M Xd-3P	3900	3700	3600	3600	14800
10	Central	2UV	2788	M & M Willys Jeep	1000	3100	900	1900	6900
11	Central	2UV	33048	M & M Peugeot	3300	3100	2100	3500	12000
12	Central	5FT	33642	M & M AVL DI	3300	3600	3100	2400	12400
13	Central	6SE	33042	Lombardini	1700	3600	3800	1000	10100
14	Central	6SE	33183	Lombardini	2400	2900	1500	1300	8100
15	Central	4MH	40450	Leyland PTL	2100	2500	3400	2800	10800
16	Central	3LC	36430	Leyland Iveclo	1100	1400	2000	3000	7500
17	Central	4MH	33608	Leyland Hino	2300	4000	3500	600	10400
18	Central	4MH	33106	Leyland 690	2800	3400	1100	1600	8900
19	Central	4MH	33038	Leyland 680	3900	1600	1600	1000	8100
20	Central	4MH	43040	Leyland 411 Super	2200	1300	3400	3400	10300
21	Central	7TW	33584	Hero Honda	1300	1500	2200	3400	8400
22	Central	5FT	33054	Gt(G-453)/Hmt(5911)	2700	2200	2000	2600	9500
23	Central	3LC	33394	Eicher Canter	600	600	800	700	2700
24	Central	6SE	2965	Cummins Nh	2500	900	1500	1200	6100
25	Central	6SE	33086	Cummins K Series In	1100	1300	3000	1600	7000
26	Central	6SE	1035	Cummins Decomp Ex	2300	3100	3100	1400	9900
27	Central	6SE	33352	Cummins B series	2900	3300	3600	800	10600
28	Central	7TW	1025	Bajaj Auto Kubota	1500	2500	3700	1000	8700
29	Central	7TW	33712	Bajaj Auto Kawasaki	4000	900	1800	3400	10100
30	East	7TW	38290	Telco 4DI Turbo	2600	3200	1800	1500	9100
31	East	4MH	39590	Tata 697	700	3200	2200	2800	8900
32	East	6SE	1007	Tata 1312A	1400	3000	1400	3400	9200
33	East	4MH	1007A	Tata 1312	3900	3900	3300	3300	14400
34	East	7TW	4003	Tata 1210 Super A	2100	3900	2000	1400	9400
35	East	1PC	46720	Tata 1210 Super	1200	2200	3600	1700	8700
36	East	1PC	1001	Tata 1210	3900	2900	2300	900	10000

Based on this data we are going to create report, where we want Region wise, seg wise – sum of q1qty, q2qty, q3qty, q4qty & yrqty

Before creating 3 conditions

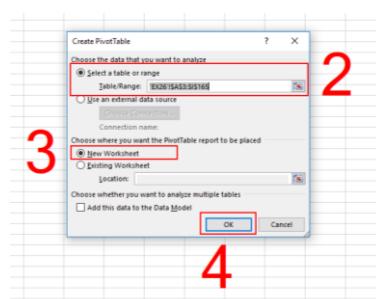
1. No merged cells
2. Table should have a heading
3. Heading should be unique

All the above condition are satisfied

Just place in the cursor on the table

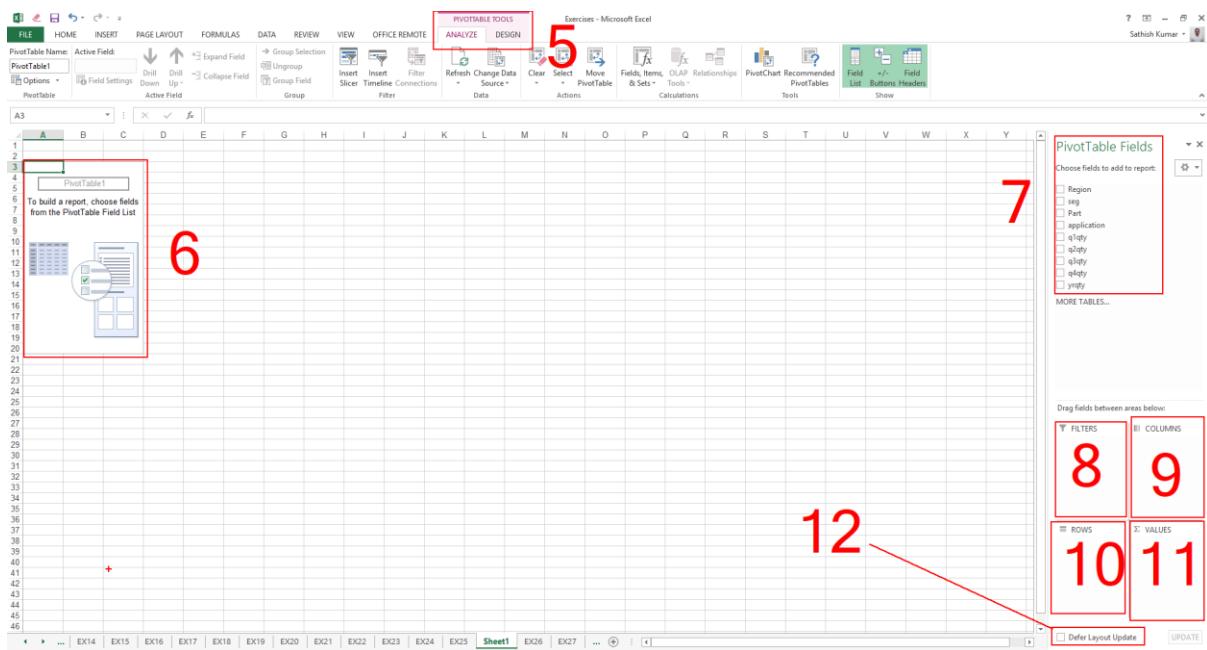


### 1. Insert → Pivot Table



A new dialog box appears

2. Click on **Select a table or range**, because we have the source data in excel
3. As we want the report in new sheet, click on **New Worksheet**
4. Click on **OK**



5. It open a new sheet, New tab appears in the name of ANALYSIS and DESIGN
6. Area where we are going to create the report
7. List of field list available in excel table
8. Filters, where multiple report can be created by click
9. Columns, used for comparing the data
10. Rows, for normal reporting
11.  $\Sigma$  Values, to summarize the data
12. Defer Layout Update, used for handling huge data

The screenshot shows the Microsoft Excel interface with the PivotTable Fields ribbon tab selected. The main area displays a PivotTable with data filtered by Region and seg. A red box labeled '8' highlights the FILTERS section of the PivotTable Fields pane, and a red box labeled '9' highlights the COLUMNS section. A red box labeled '10' highlights the ROWS section, and a red box labeled '11' highlights the VALUES section. The PivotTable Fields pane on the right shows checked filters for Region and seg.

13. Here we want Region wise, seg wise – sum of q1qty, q2qty, q3qty, q4qty & yrqty, what are listed under wise drag & drop it to Rows

14. All the to be summarized or to be totalled, drag & drop it to  $\Sigma$  Values
15. That's it report is ready, but next session we will try to make some changes

### Changes in Design, Formulas and Values

Even the report is fine, want to make some changes in Design & layout, and for example want to display Sub Total on the bottom, Region & Seg in separate column

1. Place in the cursor on the pivot, otherwise you cannot see the Analysis, Design & Pivot Table Fields

2. Design → Subtotals → Show all Subtotals at Bottom of Group
3. Subtotal will be on the bottom of each region, No need to make for Grand Totals

4. Design → Report Layout → Show in Tabular Form, where Region and seg in separate column
5. Design → Report Layout → Repeat All Item Labels, where region will be repeated in the empty cells
6. Explore the other option in design only for formatting the report

Now let's see how to change the Function for a column

- Right click on the column where you want to change the function

Region	seg	Sum of q1qty	Sum of q2qty	Sum of q3qty	Sum of q4qty	Count of yrqty
Central	1PC	4400.00	5100.00	3800.00	4400.00	2.00
Central	2UV	8200.00	9900.00	6600.00	9000.00	3.00
Central	3LC	1700.00	2000.00	2800.00	3700.00	10.00
Central	4MH	19300.00	17100.00	20700.00	15000.00	74100.00
East	6FT	6000.00	5800.00	5100.00	5700.00	2.00
Central	6SE	12900.00	15100.00	16500.00	7300.00	51900.00
Central	7TW	6800.00	4900.00	7700.00	7800.00	27200.00
Central Total		59300.00	51900.00	52200.00	52200.00	23660.00
East	1PC	17500.00	18900.00	21100.00	16600.00	9.00
East	2UV	11700.00	11800.00	10200.00	7500.00	4126.00
East	3LC	12600.00	7900.00	17600.00	9700.00	47800.00
East	4MH	27200.00	26300.00	16000.00	23700.00	9326.00
East	5FT	6200.00	7700.00	10600.00	8200.00	4.00
East	6SE	12100.00	10800.00	11200.00	16100.00	5926.00
East	7TW	23400.00	29000.00	24500.00	18300.00	9386.00
East Total		111300.00	120500.00	111200.00	100100.00	44316.00
North	1PC	6000.00	11900.00	8600.00	6500.00	3.00
North	2UV	10900.00	12100.00	5000.00	11000.00	4.00
North	3LC	12000.00	9400.00	5000.00	12500.00	4.00
North	4MH	18600.00	12800.00	16500.00	11000.00	5896.00
North	5FT	14900.00	18400.00	13400.00	16200.00	6296.00
North Total		42400.00	56400.00	48500.00	48500.00	251900.00
South	1PC	28000.00	23500.00	22500.00	25000.00	9900.00
South	2UV	7100.00	6900.00	6300.00	6200.00	2856.00
South	3LC	14300.00	10700.00	11200.00	11100.00	4736.00
South	4MH	13700.00	15900.00	14100.00	9500.00	5650.00
South	5FT	24500.00	21200.00	19100.00	24100.00	8896.00
South	6SE	25400.00	19000.00	25500.00	23400.00	9.00
South	7TW	8300.00	9200.00	11300.00	12400.00	5.00
South Total		121300.00	106400.00	107300.00	113700.00	49.00
West	1PC	1900.00	2700.00	1100.00	3200.00	1.00
West	4MH	6000.00	4400.00	6300.00	6100.00	22800.00
West	5FT	14600.00	18100.00	21500.00	19500.00	73700.00
West	7TW	5200.00	2950.00	2600.00	2600.00	11100.00
West Total		27700.00	27700.00	33500.00	31600.00	14.00
Grand Total		382000.00	381100.00	363700.00	354800.00	1481600.00

- A menu appears, select Summarize Value By → Count

Region	seg	Sum of q1qty	Sum of q2qty	Sum of q3qty	Sum of q4qty	Count of yrqty
Central	1PC	4400.00	5100.00	3800.00	4400.00	2.00
Central	2UV	8200.00	9900.00	6600.00	9000.00	3.00
Central	3LC	1700.00	2000.00	2800.00	3700.00	2.00
Central	4MH	19300.00	17100.00	20700.00	15000.00	74100.00
East	6FT	6000.00	5800.00	5100.00	5700.00	2.00
Central	6SE	12900.00	15100.00	16500.00	7300.00	51900.00
Central	7TW	6800.00	4900.00	7700.00	7800.00	27200.00
Central Total		59300.00	51900.00	52200.00	52200.00	23660.00
East	1PC	17500.00	18900.00	21100.00	16600.00	9.00
East	2UV	11700.00	11800.00	10200.00	7500.00	4.00
East	3LC	12600.00	7900.00	17600.00	9700.00	5.00
East	4MH	27200.00	26300.00	16000.00	23700.00	10.00
East	5FT	6200.00	7700.00	10600.00	8200.00	4.00
East	6SE	12700.00	18900.00	11200.00	16100.00	6.00
East	7TW	23400.00	29000.00	24500.00	18300.00	10.00
East Total		111300.00	120500.00	111200.00	100100.00	48.00
North	1PC	6000.00	11900.00	8600.00	6500.00	4.00
North	2UV	10900.00	12100.00	5000.00	11000.00	4.00
North	3LC	12000.00	9400.00	5000.00	12500.00	4.00
North	4MH	18600.00	12800.00	16500.00	11000.00	6.00
North	5FT	14900.00	18400.00	13400.00	16200.00	7.00
North Total		62400.00	64600.00	48500.00	57200.00	25.00
South	1PC	28000.00	23500.00	22500.00	25000.00	10.00
South	2UV	7100.00	6900.00	6300.00	8200.00	3.00
South	3LC	14300.00	10700.00	11200.00	11100.00	6.00
South	4MH	13700.00	15900.00	11400.00	9500.00	6.00
South	5FT	24500.00	21200.00	19100.00	24100.00	10.00
South	6SE	25400.00	19000.00	25500.00	23400.00	9.00
South	7TW	8300.00	9200.00	11300.00	12400.00	5.00
South Total		121300.00	106400.00	107300.00	113700.00	49.00
West	1PC	1900.00	2700.00	1100.00	3200.00	1.00
West	4MH	6000.00	4400.00	6300.00	6100.00	3.00
West	5FT	14600.00	18100.00	21500.00	19500.00	8.00
West	7TW	5200.00	2500.00	4600.00	2800.00	2.00
West Total		27700.00	27700.00	33500.00	31600.00	14.00
Grand Total		382000.00	381100.00	363700.00	354800.00	1481600.00

- If we want the sum also again, Drag & Drop the yrqty to the Σ Values

Region	seg	Sum of q1qty	Sum of q2qty	Sum of q3qty	Sum of q4qty	Count of yrqty	Sum of yrqty
Central	1PC	4400.00	5100.00	3800.00	4400.00	2.00	17100.00
Central	2UV	8200.00	9900.00	6600.00	9000.00	3.00	33700.00
Central	3LC	1700.00	2000.00	2800.00	3700.00	2.00	10200.00
Central	4MH	19300.00	17100.00	20700.00	15000.00	74100.00	1481600.00
East	6FT	6000.00	5800.00	5100.00	5700.00	2.00	21900.00
Central	6SE	12900.00	15100.00	16500.00	7300.00	51900.00	1481600.00
Central	7TW	6800.00	4900.00	7700.00	7800.00	27200.00	1481600.00
Central Total		59300.00	51900.00	52200.00	52200.00	23660.00	1481600.00
East	1PC	17500.00	18900.00	21100.00	16600.00	9.00	81000.00
East	2UV	11700.00	11800.00	10200.00	7500.00	4.00	41260.00
East	3LC	12600.00	7900.00	17600.00	9700.00	5.00	47800.00
East	4MH	27200.00	26300.00	16000.00	23700.00	10.00	93260.00
East	5FT	6200.00	7700.00	10600.00	8200.00	4.00	33500.00
East	6SE	12100.00	10800.00	11200.00	16100.00	6.00	59260.00
East	7TW	23400.00	29000.00	24500.00	18300.00	10.00	93860.00
East Total		111300.00	120500.00	111200.00	100100.00	44316.00	1481600.00
North	1PC	6000.00	11900.00	8600.00	6500.00	4.00	33000.00
North	2UV	10900.00	12100.00	5000.00	11000.00	4.00	40000.00
North	3LC	12000.00	9400.00	5000.00	12500.00	4.00	38000.00
North	4MH	18600.00	12800.00	16500.00	11000.00	5896.00	1481600.00
North	5FT	14900.00	18400.00	13400.00	16200.00	6.00	62960.00
North Total		62400.00	64600.00	48500.00	57200.00	25.00	1481600.00
South	1PC	28000.00	23500.00	22500.00	25000.00	10.00	70000.00
South	2UV	7100.00	6900.00	6300.00	8200.00	3.00	41200.00
South	3LC	14300.00	10700.00	11200.00	11100.00	6.00	56500.00
South	4MH	13700.00	15900.00	11400.00	9500.00	6.00	56500.00
South	5FT	24500.00	21200.00	19100.00	24100.00	10.00	93700.00
South	6SE	25400.00	19000.00	25500.00	23400.00	9.00	59000.00
South	7TW	8300.00	9200.00	11300.00	12400.00	5.00	59000.00
South Total		121300.00	106400.00	107300.00	113700.00	49.00	1481600.00
West	1PC	1900.00	2700.00	1100.00	3200.00	1.00	10400.00
West	4MH	6000.00	4400.00	6300.00	6200.00	3.00	26500.00
West	5FT	14600.00	18100.00	21500.00	19500.00	8.00	448700.00
West	7TW	5200.00	2500.00	4600.00	2800.00	2.00	11100.00
West Total		27700.00	27700.00	33500.00	31600.00	14.00	149500.00
Grand Total		382000.00	381100.00	363700.00	354800.00	162.00	1481600.00

- Likewise you can change and add new formulas

Same pivot we want to calculate the %

1. Place the cursor on the pivot
2. Right click on the column

A	B	C	D	E	F	G	H	I	J	K	L	M	N
3	Region	seg	Sum of quantity	Sum of quantity	Sum of quantity	Sum of quantity	Count of year	Sum of	Anal	-10	A	C	%
4	=Central	1PC	4400	5100	3800	4400	2	2.00					
5	Central	2UV	8200	9800	6600	9000	3	3.00	2.27%				
6	Central	3LC	1100	2000	2800	3700	4	4.00	0.91%				
7	Central	4MH	19300	19100	20700	15000	5	8.00	5.00%				
8	Central	5FT	6000	5800	5100	5000	2	2.00					
9	Central	6SE	12900	11500	16500	7300	6	6.00	3.50%				
10	Central	7TW	6500	4900	7100	7000	4	4.00	0.43%				
11	Central Total		59300	61900	63200	52200	26	26.00					
12	=East	1PC	17500	18900	21100	16600	9	9.00					
13	East	2UV	17100	18800	10200	7600	4	4.00					
14	East	3LC	12500	7900	16000	9700	5	5.00	1.92%				
15	East	4MH	27200	26300	16000	23700	10	10.00					
16	East	5FT	6200	7700	10600	8200	4	4.00					
17	East	6SE	12700	10900	11200	16100	6	6.00					
18	East	7TW	7400	10900	13000	13500	7	7.00	4.25%				
19	East Total		111300	120500	111200	100000	49	49.00					
20	=North	1PC	6000	11900	8600	6500	4	4.00					
21	North	2UV	19900	12100	5000	11000	4	4.00					
22	North	3LC	12000	9400	5800	12500	4	4.00					
23	North	4MH	18900	18000	16400	11900	6	6.00	3.00%				
24	North	5FT	14900	18400	13400	16200	7	7.00	4.25%				
25	North Total		62400	64600	48500	57200	25	25.00	15.1%				
26	=South	1PC	26000	25000	25000	26000	10	10.00	6.66%				
27	South	2UV	7100	6900	6300	8200	4	4.00	1.92%				
28	South	3LC	14300	10700	11200	11100	6	6.00	3.19%				
29	South	4MH	13700	15900	11400	9500	6	6.00	3.41%				
30	South	5FT	24500	21200	19100	24100	10	10.00	6.00%				
31	South	6SE	62400	19800	25000	23400	8	8.00	8.91%				
32	South	7TW	8300	9200	11300	12400	5	5.00	2.78%				
33	South Total		121300	106400	107300	111700	49	49.00	30.28%				
34	=West	1PC	1960	2700	1100	3200	1	1.00	0.66%				
35	West	4MH	6000	2400	3100	3100	3	3.00	1.5%				
36	West	5FT	14000	18100	21500	19500	8	8.00	4.97%				
37	West	7TW	5200	2500	4600	2800	2	2.00	1.02%				
38	West Total		27700	27700	33500	31600	14	14.00	8.13%				
39	Grand Total		382600	381100	363700	354800	162	162.00	100.00%				

3. A menu appears, select Show Values As → % of Grand Total, now the percentage will be displayed, but the heading will not change, just click on the heading type & change it

ty	Percentage
.01	1.19%
.00	2.27%
.00	0.69%
.00	5.00%
.00	1.48%
.00	3.50%
.00	1.84%
.00	15.97%
.00	5.00%

Changing the Function, Values & Heading is fine, let us change the data in source & check whether its updates on the Pivot

A	B	C	D	E	F	G	H	I	J	K	L	M	N
3	Region	seg	Part	application	q1Qty	q2Qty	q3Qty	q4Qty	yearly				
4	Central	4MH	1007	Tata 1312	1500	1600	1600	2400	7100				
5	Central	4MH	1007A	Tata 1312	3300	900	4000	2300	10400				
6	Central	4MH	46720	Tata 1210 Super	3400	3800	2100	1000	8100				
7	Central	1PC	37570	Maruti Zen	500	2200	2100	500	5300				
8	Central	1PC	39950	Maruti Esteem	3000	3700	3000	3600	14800				
9	Central	2UV	33720	244 M Xd-SP	3000	3700	3000	3600	12400				
10	Central	2UV	2788	M & M Willys Jeep	1000	3100	900	1900	6900				
11	Central	2UV	33048	M & M Peugeot	3500	3100	2100	3500	12000				

In the original data we will change data from 500 to 600

A	B	C	D	E	F	G	H	I	J	K	L	M	N
3	Region	seg	Part	application	q1Qty	q2Qty	q3Qty	q4Qty	yearly				
4	Central	4MH	1007	Tata 1312	1500	1600	1600	2400	7100				
5	Central	4MH	1007A	Tata 1312	3300	900	4000	2200	10400				
6	Central	4MH	46720	Tata 1210 Super	3200	3800	2100	1000	8100				
7	Central	1PC	37570	Maruti Zen	500	2200	2100	500	5300				
8	Central	1PC	39950	Maruti Esteem	3000	3700	3000	3600	14800				
9	Central	2UV	33720	244 M Xd-SP	3000	3700	3000	3600	12400				
10	Central	2UV	2788	M & M Willys Jeep	1000	3100	900	1900	6900				
11	Central	2UV	33048	M & M Peugeot	3500	3100	2100	3500	12000				

Go back to pivot & change check whether the data updates

A	B	C	D	E	F	G	H	I	J	K	L	M	N
3	Region	seg	Sum of quantity	Sum of quantity	Sum of quantity	Sum of quantity	Count of year	Sum of	Anal	-10	A	C	%
4	=Central	1PC	4400	5100	3800	4400	2	2.00					
5	Central	2UV	8200	9800	6600	9000	3	3.00	2.27%				
6	Central	3LC	1100	2000	2800	3700	4	4.00	0.91%				
7	Central	4MH	19300	19100	20700	15000	5	8.00	5.00%				
8	Central	5FT	6000	5800	5100	5000	2	2.00	1.48%				
9	Central	6SE	12900	11500	16500	7300	6	6.00	3.50%				
10	Central	7TW	6500	4900	7100	7000	4	4.00	0.43%				
11	Central Total		59300	61900	63200	52200	26	26.00	15.97%				
12	=East	1PC	17500	18900	21100	16600	9	9.00					
13	East	2UV	17100	18800	10200	7600	4	4.00					
14	East	3LC	12500	7900	16000	9700	5	5.00	1.92%				
15	East	4MH	27200	26300	16000	23700	10	10.00					
16	East	5FT	6200	7700	10600	8200	4	4.00					
17	East	6SE	12700	10900	11200	16100	6	6.00					
18	East	7TW	7400	10900	13000	13500	7	7.00	4.25%				
19	East Total		111300	120500	111200	100000	49	49.00	30.28%				
20	=North	1PC	6000	11900	8600	6500	4	4.00	2.23%				
21	North	2UV	19900	12100	5000	11000	4	4.00	2.63%				
22	North	3LC	12000	9400	5800	12500	4	4.00	2.23%				
23	North	4MH	18900	18000	16400	11900	6	6.00	3.98%				
24	North	5FT	14900	18400	13400	16200	7	7.00	4.25%				
25	North Total		362600	381100	363700	354800	162	162.00	100.00%				

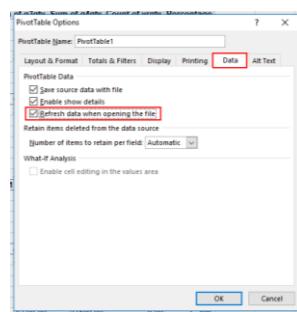
## Auto Update Pivot

Instead manual Refresh, Pivot table can be Automatically Refreshed

	Central	R&C	14000.00	10000.00	10000.00	10000.00	10000.00
11	Central Total	TTW	6000.00	4900.00	7700.00	7800.00	5200.00
12	=East	1PC	59400.00	61900.00	63200.00	52200.00	16600.00
13	East	2UV	17500.00	18900.00	21100.00	16200.00	9700.00
14	East	3LC	18500.00	7900.00	17600.00	9700.00	10000.00
15	East	4RH	27200.00	26300.00	16000.00	23700.00	8200.00
16	East	5FT	6200.00	7700.00	19500.00	8200.00	16100.00
17	East	6SE	12700.00	10900.00	11200.00	24500.00	13300.00
18	East	7TW	23400.00	29200.00	24500.00	13300.00	11100.00
19	East Total		111300.00	120500.00	111200.00	100100.00	52000.00
20	= North	1PC	6000.00	11900.00	8600.00	6500.00	11900.00
21	North	2UV	10900.00	12100.00	5000.00	11900.00	11900.00
22	North	3LC	12000.00	9400.00	5000.00	12500.00	11900.00
23	North	4RH	18600.00	12800.00	16500.00	11900.00	11900.00
24	North	5FT	14900.00	18400.00	13400.00	16200.00	11900.00
25	North Total		62400.00	64600.00	48500.00	57200.00	100100.00
26	= South	1PC	20000.00	23400.00	22500.00	25000.00	11100.00
27	South	2UV	7100.00	6900.00	6300.00	8200.00	11100.00
28	South Total		27100.00	29200.00	24500.00	13300.00	11100.00

1. Right Click → Pivot Table Options

2. A new menu appears



3. Data → Refresh data when opening the file

Update pivot if new record added to source data

If you change data in the source, if we Refresh Pivot table data will be updated.

But if you add a new record on the source, pivot table will not be updated, so covert your table into a Dynamic Table

Press Ctrl L or Ctrl T for converting the table into a dynamic table



It opens dialog box, click OK to convert.

Dynamic Table has so many advantages, which we can see visually

List of Advantages are

1. Auto update
2. Auto freeze
3. Auto format
4. Auto filter
5. Auto freeze of filter
6. Auto total
7. Auto subtotal
8. Auto change of functions
9. Auto copy of formulas
10. Auto creation of column

Like this so many

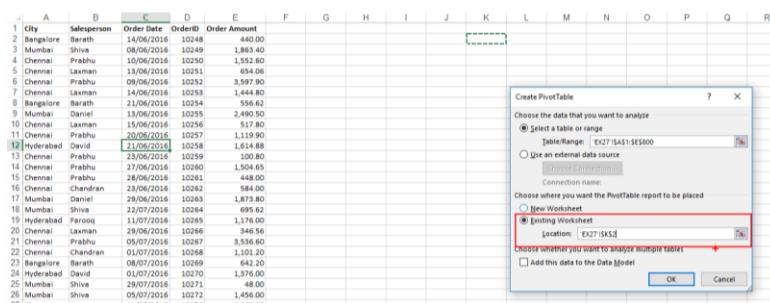
## Yearly, Monthly, Weekly Reports through Pivot

Coming back to pivot

From the below table, create a pivot for finding Date wise Sum of Order Amount

	A	B	C	D	E
1	City	Salesperson	Order Date	OrderID	Order Amount
2	Bangalore	Barath	14/06/2016	10248	440.00
3	Mumbai	Shiva	08/06/2016	10249	1,863.40
4	Chennai	Prabhu	10/06/2016	10250	1,552.60
5	Chennai	Laxman	13/06/2016	10251	654.06
6	Chennai	Prabhu	09/06/2016	10252	3,597.90
7	Chennai	Laxman	14/06/2016	10253	1,444.80
8	Bangalore	Barath	21/06/2016	10254	556.62
9	Mumbai	Daniel	13/06/2016	10255	2,490.50
10	Chennai	Laxman	15/06/2016	10256	517.80
11	Chennai	Prabhu	20/06/2016	10257	1,119.90
12	Hyderabad	David	21/06/2016	10258	1,614.88
13	Chennai	Prabhu	23/06/2016	10259	100.80
14	Chennai	Prabhu	27/06/2016	10260	1,504.65
15	Chennai	Prabhu	28/06/2016	10261	448.00
16	Chennai	Chandran	23/06/2016	10262	584.00
17	Mumbai	Daniel	29/06/2016	10263	1,873.80
18	Mumbai	Shiva	22/07/2016	10264	695.62
19	Hyderabad	Farooq	11/07/2016	10265	1,176.00
20	Chennai	Laxman	29/06/2016	10266	346.56
21	Chennai	Prabhu	05/07/2016	10267	3,536.60
22	Chennai	Chandran	01/07/2016	10268	1,101.20
23	Bangalore	Barath	08/07/2016	10269	642.20
24	Hyderabad	David	01/07/2016	10270	1,376.00
25	Mumbai	Shiva	29/07/2016	10271	48.00
26	Mumbai	Shiva	05/07/2016	10272	1,456.00
27	Chennai	Laxman	11/07/2016	10273	2,037.28
28	Mumbai	Shiva	15/07/2016	10274	538.60
29	Hyderabad	David	08/07/2016	10275	291.84
30	Chennai	Chandran	13/07/2016	10276	420.00
31	Hyderabad	Farooq	12/07/2016	10277	1,200.80
32	Chennai	Chandran	15/07/2016	10278	1,488.80
33	Chennai	Chandran	15/07/2016	10279	351.00
34	Hyderabad	Farooq	11/08/2016	10280	613.20
35	Chennai	Prabhu	20/07/2016	10281	86.50
36	Chennai	Prabhu	20/07/2016	10282	155.40
37	Chennai	Laxman	22/07/2016	10283	1,414.80
38	Chennai	Prabhu	26/07/2016	10284	1,170.37
39	Hyderabad	David	25/07/2016	10285	1,743.36

1. Place the cursor on the table
2. Insert → Pivot table



3. In the screen, we will select Existing Worksheet and on the Location where we want the Pivot

PivotTable Fields

Choose fields to add to report:

- City
- Description
- Order Date
- OrderID
- Order Amount

MORE TABLES...

Drag fields between areas below:

FILTERS      COLUMNS

ROWS      VALUES

Order Date      Sum of Order Amount

4. Drag the Order Date to Rows and Order Amount to  $\Sigma$  Values

5. On the created report, place the cursor on Date values and Right Click

Subtotal "Order Date"

Expand/Collapse

Group

Ungroup

Move

Remove "Order Date"

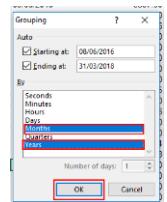
Field Settings

PivotTable Options

Hide Field List

OK Cancel

6. In the menu Select the Powerful feature, called as Group



7. On the new dialog box Select Months and Years, click on OK, that's magic Yearly, Monthly Report is ready

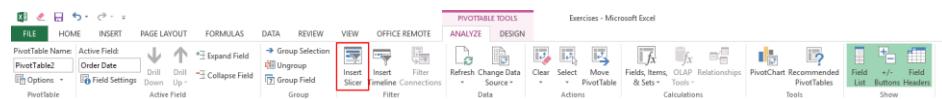
Row Labels ▾ Sum of Order Amount	
2016	
Jun	20710.27
Jul	25244.77
Aug	18030.12
Sep	43691.70
Oct	50945.96
Nov	36133.72
Dec	63650.45
2017	
Jan	41279.77
Feb	38063.21
Mar	36746.79
Apr	58438.80
May	51406.72
Jun	45285.40
Jul	51295.61
Aug	46853.96
Sep	73866.68
Oct	42433.11
Nov	60260.02
Dec	81477.82
2018	
Jan	124664.01
Feb	69422.35
Mar	148426.16
<b>Grand Total</b>	
<b>1228327.40</b>	

Note: Similarly we can create Quarterly and Weekly report also

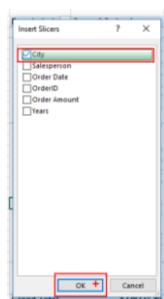
Important: Grouping can be used for Text and numbers also

### Filter by Slicer and Time Line

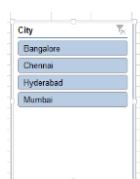
- Place the cursor on the Pivot



- Goto Analyze → Insert Slicer



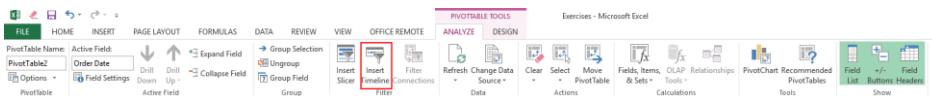
- Check City and OK



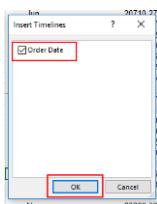
- On the displayed Slicer, just click on the city for filtering it

Similar to Slicer we have Timeline

- Place the cursor the pivot



## 2. Analyze → Insert Timeline



## 3. Check the Order Date, because that is the only date available in this table and click on OK



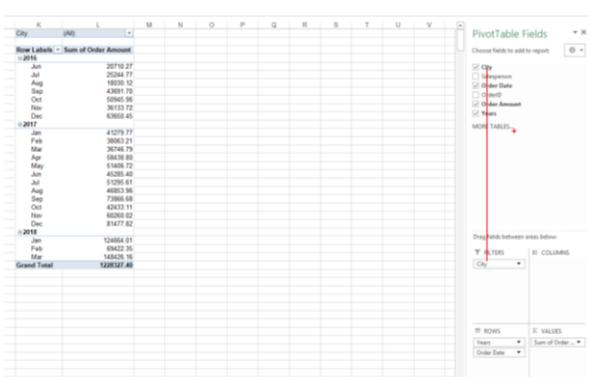
## 4. On the drop down, we can select Years, Quarters, Months & Days. Here we have selected Years, so year wise filter can be done

### Creating multiple page report

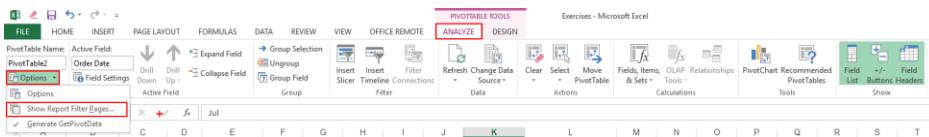
Below report if we want to send it all the city

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	Avg	City	Order Date	Order ID	Order Amount																
2	Bangalore	Barath	14/06/2016	10248	440.00																
3	Mumbai	Shiva	08/06/2016	10249	1,863.40																
4	Chennai	Prabhu	10/06/2016	10250	552.80																
5	Chennai	Laxman	13/06/2016	10251	65.00																
6	Chennai	Prabhu	08/06/2016	10252	5,507.80																
7	Chennai	Laxman	14/06/2016	10253	1,444.80																
8	Bangalore	Barath	21/06/2016	10254	556.62																
9	Mumbai	Daniel	13/06/2016	10255	2,495.80																
10	Chennai	Laxman	13/06/2016	10256	117.80																
11	Chennai	Prabhu	20/06/2016	10257	1,119.80																
12	Hyderabad	David	21/06/2016	10258	1,614.88																
13	Chennai	Prabhu	23/06/2016	10259	100.80																
14	Chennai	Prabhu	27/06/2016	10260	1,500.80																
15	Chennai	Prabhu	28/06/2016	10261	448.00																
16	Chennai	Chandran	23/06/2016	10262	584.00																
17	Mumbai	Daniel	29/06/2016	10263	1,873.80																
18	Mumbai	Barath	22/06/2016	10264	65.80																
19	Hyderabad	Faroos	11/07/2016	10265	1,176.00																
20	Chennai	Laxman	29/06/2016	10266	346.56																
21	Chennai	Prabhu	05/07/2016	10267	3,536.80																
22	Chennai	Chandran	01/07/2016	10268	1,100.80																
23	Bangalore	Barath	08/07/2016	10269	642.20																
24	Hyderabad	David	01/07/2016	10270	3,376.00																
25	Mumbai	Shiva	28/07/2016	10271	48.00																
26	Mumbai	Barath	05/07/2016	10272	1,450.80																
27	Chennai	Laxman	11/07/2016	10273	2,037.28																
28	Mumbai	Shiva	15/07/2016	10274	538.60																
29	Hyderabad	David	08/07/2016	10275	291.84																
30	Chennai	Chandran	13/07/2016	10276	42.80																
31	Hyderabad	Faroos	12/07/2016	10277	1,200.80																
32	Chennai	Chandran	15/07/2016	10278	1,488.80																
33	Chennai	Chandran	15/07/2016	10279	351.00																
34	Hyderabad	Faroos	11/08/2016	10280	613.20																
35	Chennai	Prabhu	20/06/2016	10281	80.80																
36	Chennai	Prabhu	20/07/2016	10282	155.40																
37	Chennai	Laxman	22/07/2016	10283	1,414.80																
38	Chennai	Prabhu	24/07/2016	10284	1,117.37																
39	Hyderabad	David	25/07/2016	10285	1,743.88																
40	Chennai	Chandran	29/07/2016	10286	3,018.00																
41	Chennai	Chandran	27/07/2016	10287	819.00																
42	Chennai	Prabhu	02/08/2016	10288	80.10																
43	Bangalore	Barath	21/06/2016	10289	42.80																
44	Chennai	Chandran	02/08/2016	10290	2,169.00																
45	Mumbai	Shiva	03/08/2016	10291	497.52																
46	Hyderabad	David	01/08/2016	10292	1,296.00																

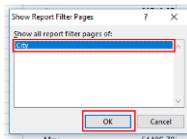
## 1. Drag the City and Drop it to Filters



## 2. City will be displayed on the Top of the Table



3. Click on Analyze → click on the Drop Down of Options → Show Report Filter Pages



4. On the opened dialog box, select City and Click OK

5. That the trick, you can notice City wise sheets is created pertaining to the city

	A	B	C	D	E	F	G	H	I	J	K	L
1	City	Channel										
2												
3	Row Labels	- Sum of Order Amount										
4	2015											
5	Jan	11871.07										
6	Jul	15596.95										
7	Aug	5577.20										
8	Sep	22980.31										
9	Oct	19583.84										
10	Nov	1770.60										
11	Dec	30674.84										
12	2017											
13	Jan	35000.83										
14	Feb	26690.14										
15	Mar	11208.80										
16	Apr	26973.59										
17	May	27354.81										
18	Jun	7954.56										
19	Jul	29005.49										
20	Aug	13914.89										
21	Sep	27526.66										
22	Oct	19005.25										
23	Nov	32509.10										
24	Dec	40718.40										
25	2018											
26	Jan	66863.78										
27	Feb	31451.49										
28	Mar	48310.53										
29	Grand Total	549992.62										
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												

The same if we want a comparison city wise then Drag & Drop City into Column

	A	B	C	D	E	F	G	H	I	J	K	L
1	Sum of Order Amount	Column Labels	-	Bangalore	Chennai	Hyderabad	Mumbai	Grand Total				
2	Row Labels											
3	2015											
4	Jan	996.62	11871.07	1614.88	6227.70	20710.27						
5	Jul	1121.60	15596.95	5788.00	2738.22	25244.77						
6	Aug	2626.60	5577.20	5633.20	4193.12	18030.12						
7	Sep	5011.00	22980.31	4307.78	4307.78	4307.78						
8	Oct	13822.76	18565.64	16571.16	15864.40	50945.96						
9	Nov	9314.10	12700.60	10072.48	4916.54	36133.72						
10	Dec	11742.00	30674.84	17799.83	3433.72	63650.45						
11	2017											
12	Jan	4083.00	35000.83	1991.70	2704.24	41279.77						
13	Feb	2520.40	26690.14	8088.67	756.00	38063.21						
14	Mar	8818.90	11208.80	4616.35	12102.68	36746.79						
15	Apr	9333.90	26973.59	5577.20	5633.20	54803.80						
16	May	4912.70	27384.61	12222.17	6947.31	51406.72						
17	Jun	10534.98	790145	25124.17	1324.80	45285.40						
18	Jul	9438.99	29005.49	10089.19	2761.94	51295.61						
19	Aug	12867.60	13917.49	13393.35	681.78	48853.86						
20	Sep	13479.62	20525.68	16571.16	27385.68	73855.68						
21	Oct	2174.75	19099.25	9456.40	11511.71	42433.11						
22	Nov	735.00	32509.10	19083.16	7932.76	60260.62						
23	Dec	16353.80	40718.40	15317.81	9887.81	81477.82						
24	2018											
25	Jan	14297.19	66863.78	30411.30	23101.74	124664.01						
26	Feb	8589.38	31451.49	18912.45	10470.03	69422.36						
27	Mar	22356.16	48310.53	64670.59	13088.88	148426.16						
28	Grand Total	185755.24	549992.62	345603.87	147575.67	1228327.49						
29												
30												
31												
32												
33												
34												
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Now the comparing is much easier

## Charts

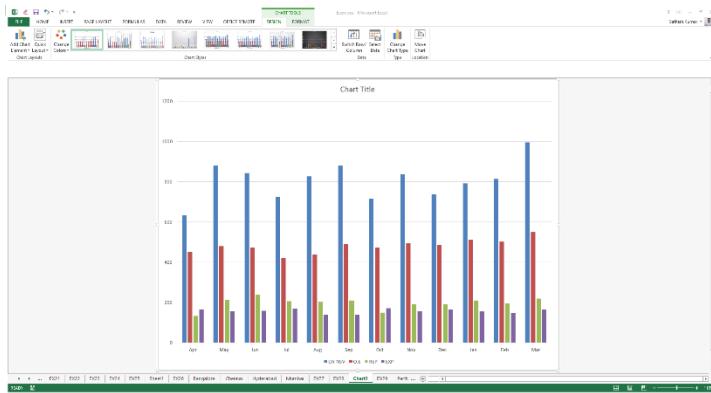
Creating charts in Excel is easy and simple

Based on the below data we have to create a chart,

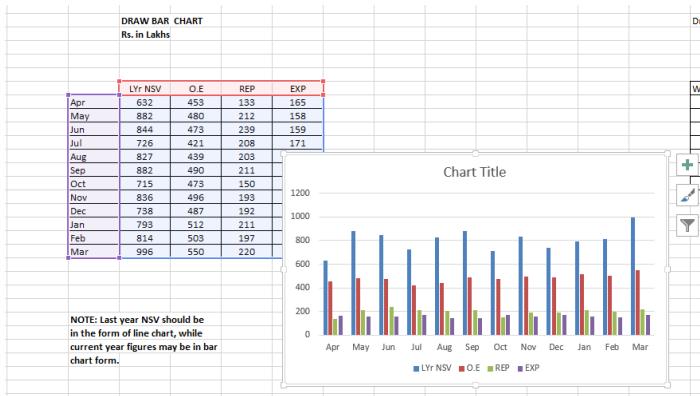
	LY NSV	O.E	REP	EXP
Apr	632	453	133	165
May	882	480	212	158
Jun	844	473	239	159
Jul	726	421	208	171
Aug	827	439	203	142
Sep	882	490	211	140
Oct	715	473	150	173
Nov	836	496	193	157
Dec	738	487	192	167
Jan	793	512	211	156
Feb	814	503	197	148
Mar	996	550	220	167

Just place the cursor on the table

Press F11 which will create a default column chart on a new sheet

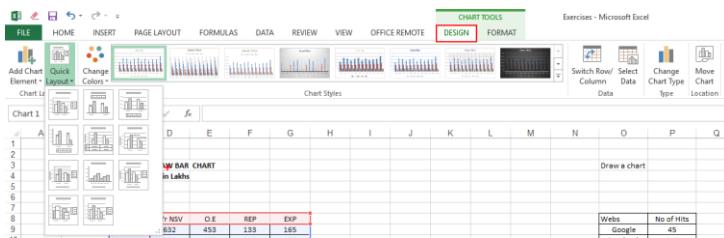


Alt F1 – will create default column chart on the existing sheet

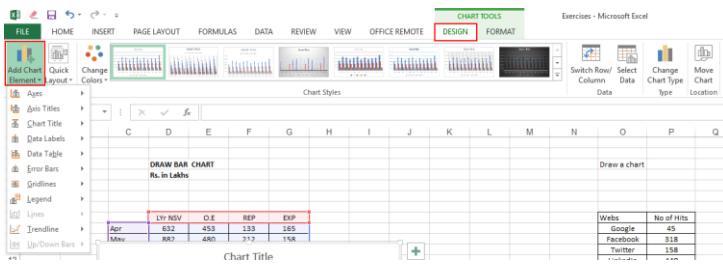


If we want to change the 3 methods

## 1. Design → Quick Layout



## 2. Design → Add Chart Element

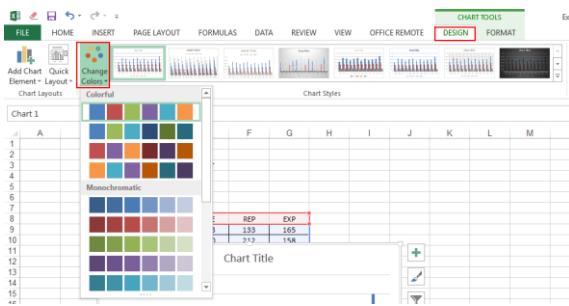


3. Click on the + symbol next to the chart

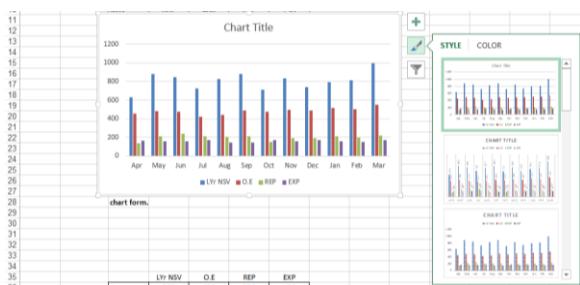


To change the color & style

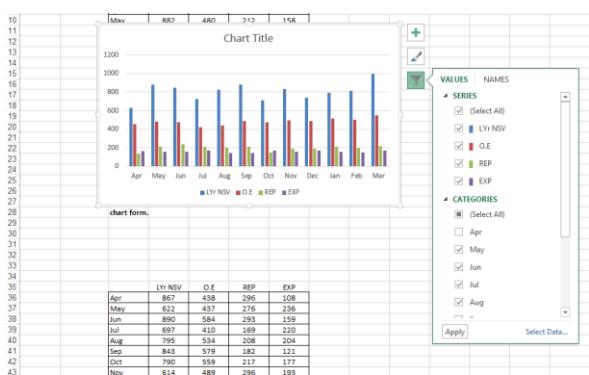
1. Design → Change Color or Chart Styles



2. Click on Brush Tool



Like filter the table you can also filter the chart also, click on Filter icon next to the chart

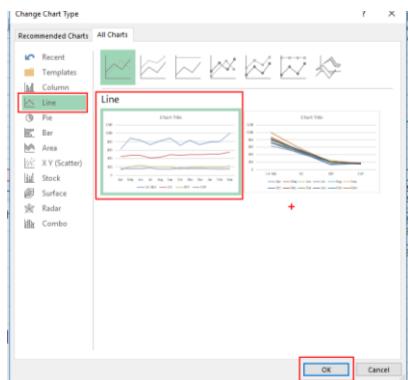


## Change Chart Type

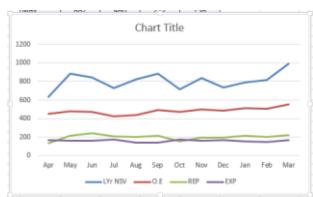
### 1. Select the chart



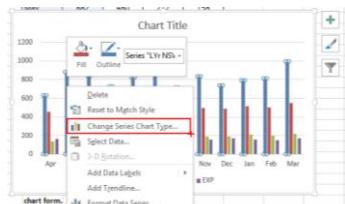
### 2. Design → Change Chart Type



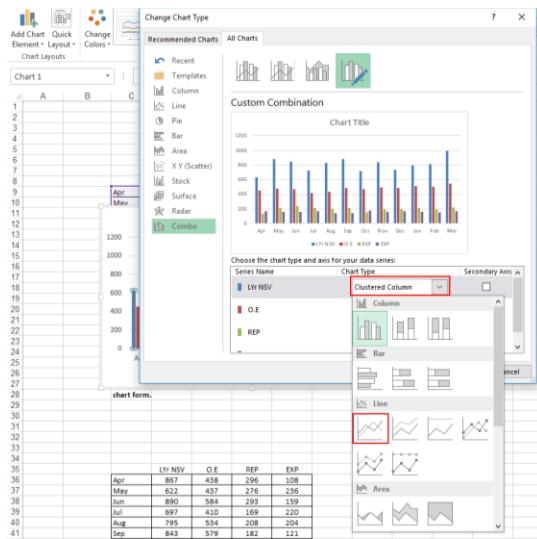
### 3. On the new dialog box, selected the desired chart and click Ok



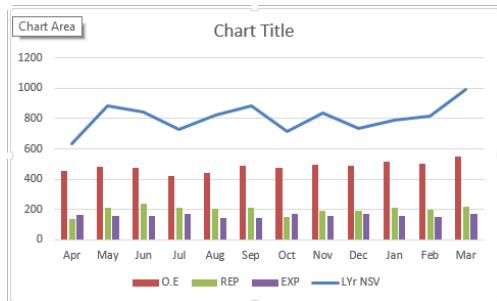
But the entire chart will turn into the Line chart, but if we want to change the only LYr NSV as Line chart



### 4. Right click on the desired column chart, select Change Series Chart Type

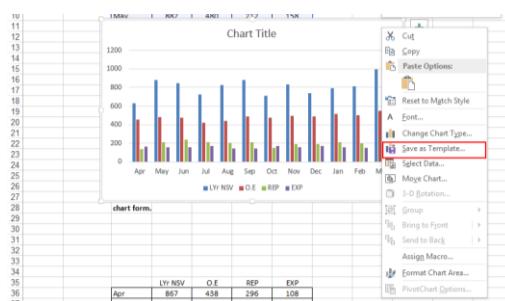


5. On the opened dialog box, in the drop down, selected chart which you want, here I have selected Line Chart
6. Click OK

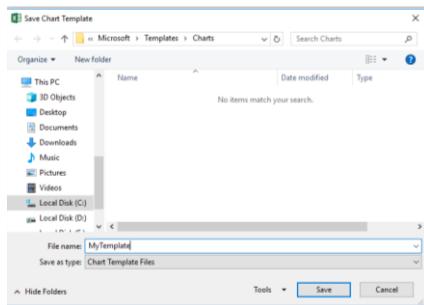


### Save the chart as Template

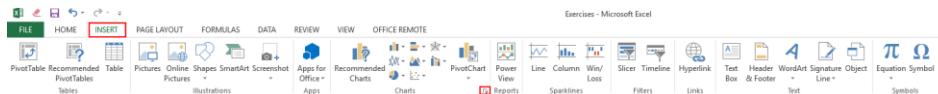
Instead of creating the chart with same design, layout, color, style & design, we can save the chart as template



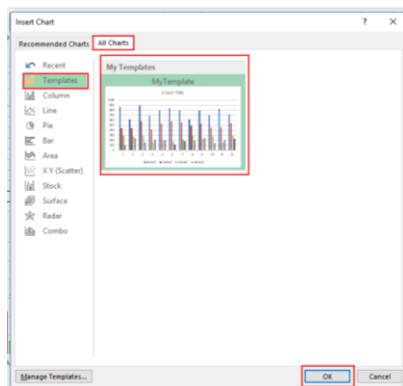
1. Right Click on empty area of the chart
2. Click on Save as Template



3. On the new opened dialog box just give File Name and Save
4. Assume we have to create same chart for some data it's simple

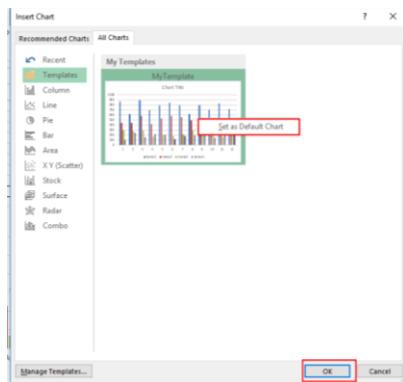


5. Select the data, Insert → Chart → Dialog Box Launcher



6. On the opened dialog box, All Charts, select Templates ,click on our template & OK
7. A new chart will be created with the same design

Note: Right on the Template and Set as Default



Now when press F11 or Alt F1 our template chart will be created

## Other Charts

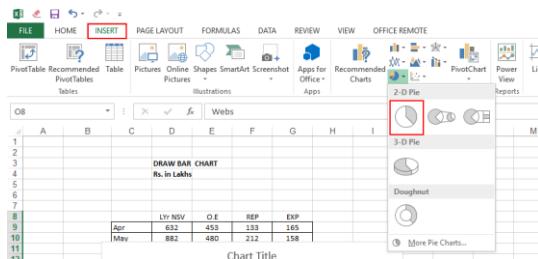
For the below data we have to create chart

Webs	No of Hits
Google	45
Facebook	318
Twitter	158

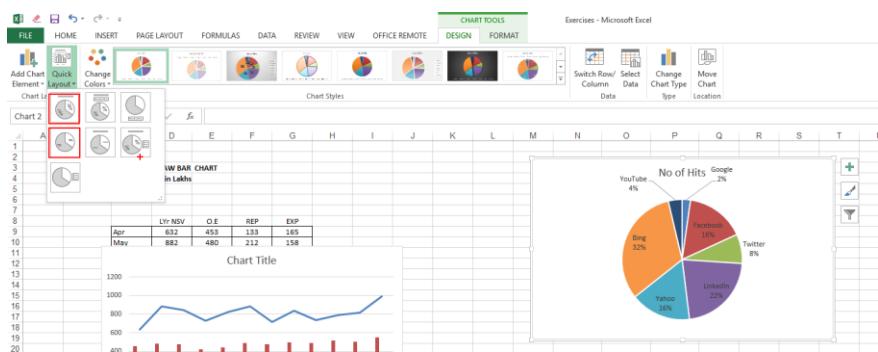
LinkedIn	440
Yahoo	326
Bing	639
YouTube	74

Place the cursor on the table

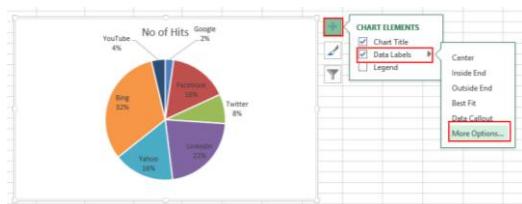
Here we have to choose one out of many, so the best chart is Pie Chart, let us create it



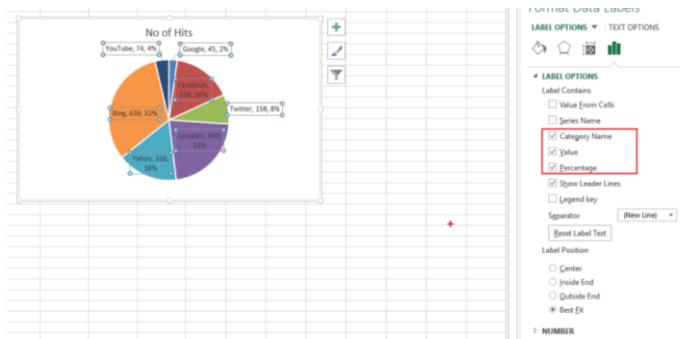
Insert → Pie → 2-D Pie



But in the Pie Chart, either we can display either % or value, if we want to display both then



Click on + symbol next to the Chart → Data Labels → More Options



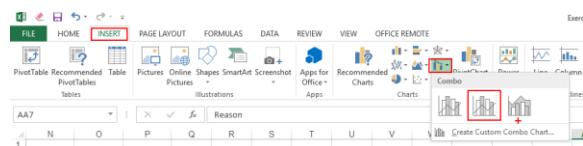
On the new dialog box, check the option which we want

For the below data we have to create a chart, but the challenge is one data is number and other is %.

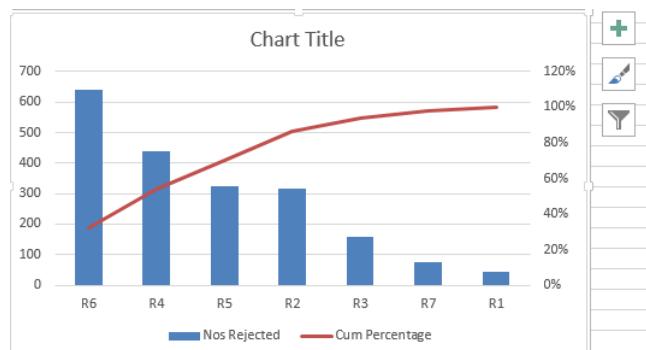
Best chart for this is

Reason	Nos Rejected	Cum Percentage
R6	639	32%
R4	440	54%
R5	326	70%
R2	318	86%
R3	158	94%
R7	74	98%
R1	45	100%

### 1. Place the cursor on the table



### 2. Insert the combo chart no.2



That it, we have chart with 2 axis, Primary & Secondary

## List of 202 Shortcut keys

1. Navigate Worksheets	
Arrow Keys	Move one cell up, down, left, or right in a worksheet
Page Down/Page Up	Move one screen down / one screen up in a worksheet
Alt+Page Down/Alt+Page Up	Move one screen to the right / to the left in a worksheet
Tab/Shift+Tab	Move one cell to the right / to the left in a worksheet
Ctrl+Arrow Keys	Move to the edge of next data region (cells that contains data)
Home	Move to the beginning of a row in a worksheet
Ctrl+Home	Move to the beginning of a worksheet
Ctrl+End	Move to the last cell with content on a worksheet
Ctrl+F	Display the Find and Replace dialog box (with Find selected)
Ctrl+H	Display the Find and Replace dialog box (with Replace selected)

<b>1. Navigate Worksheets</b>	
Shift+F4	Repeat last find
Ctrl+G (or F5)	Display the 'Go To' dialog box
Ctrl+Arrow Left/Ctrl+Arrow Right	Inside a cell: Move one word to the left / to the right
Home/End	Inside a cell: Move to the beginning / to the end of a cell entry
Alt+Arrow Down	Display the AutoComplete list eg in cell with dropdowns or autofilter
End	Turn 'End' mode on In End mode, press arrow keys to move to the next nonblank cell in the same column or row as the active cell From here use arrow keys to move by blocks of data, home to move to last cell, or enter to move to the last cell to the right

<b>2. Basic and Advanced Cell Selections</b>	
Shift+Space	Select the entire row
Ctrl+Space	Select the entire column
Shift+Arrow Keys	Extend the selection by one cell
Shift+Page Down/Shift+Page Up	Extend the selection down one screen /up one screen
Shift+Home	Extend the selection to the beginning of the row There is no Shift+End equivalent
Ctrl+Shift+Arrow Key	Extend the selection to the last cell with content in row or column
Ctrl+A (or ctrl+Shift+Spacebar, or Ctrl+Shift+*)	Select the entire worksheet or the data-containing area Pressing ctrl+a a second time then selects entire worksheet
Ctrl+Shift+Home	Extend the selection to the first cell of the worksheet
Ctrl+Shift+End	Extend the selection to the last used cell on the worksheet (lower-right corner)
F5+ column or row reference	F5, then eg type d:g selects columns D-G, or 1:5 selects rows 1-5 etc
F2	Edit Cell
Shift+Home/End	Inside a cell: Select from the insertion point to the beginning / to the end of the cell
Shift+Arrow Left/Arrow Right	Inside a cell: Select or unselect one character to the left / to the right
Ctrl+Shift+Arrow Left/Arrow Right	Inside a cell: Select or unselect one word to the left / to the right

<b>3. Navigate Inside Selected Text Blocks</b>	
Tab/Shift+Tab	Move active cell right / left in a selection
Shift+F8	Lock Selection which allows to add another (adjacent or non-adjacent) range of cells to the selection Use arrow keys and shift+arrow keys to add to selection
F8	Turn on extension of selection with arrow keys without having to keep pressing shift
Enter/Shift+Enter	Move active cell down / up in a selection
Shift+Backspace	Select only the active cell when multiple cells are selected
Ctrl+Backspace	Show active cell within selection
Ctrl+. (period)	Move clockwise to the next corner of the selection
Ctrl+Alt+Arrow Right/Ctrl+Alt+Arrow Left	Move to the right / to the left between non-adjacent selections (with multiple ranges selected)
Esc	Cancel Selection

<b>4. Edit Complete Cells</b>	
Ctrl+D	Fill Down Select cells with value in first row Ctrl+D fills the value of that first cell in selection to all cells in selection downwards
Ctrl+R	Fill Right: Select cell with value in first cell Ctrl+E fills value of that first cell in selection to all cells rightwards
Ctrl+-	Delete Cell/Row/Column Menu
Ctrl+- with row / column selected	Delete row / delete column
Ctrl+Shift++	Insert Cell/Row/Column Menu
Ctrl+Shift++ with row / column selected	Insert row/ insert column
Shift+F2	Insert / Edit a cell comment
Shift+F10, then M	Delete comment
Ctrl+K	Insert a Hyperlink (for complete cell only)
Ctrl+9	Hide the selected rows
Ctrl+Shift+9	Unhide any hidden rows within the selection
Ctrl+0 (zero)	Hide the selected columns Since Excel 2010, there is no more shortcut to unhide columns

<b>4. Edit Complete Cells</b>	
Ctrl+` (Accent Grave)	Alternate between displaying cell values and displaying cell formulas This is Accent Grave on top left of keyboard, not a quotation mark

<b>5. Edit Content of Cells</b>	
F2	Edit the active cell with cursor at end of the line
Alt+Enter	Start a new line in the same cell
Enter	Complete a cell entry and move down in the selection With multiple cells selected: fill cell range with current cell
Shift+Enter	Complete a cell entry and move up in the selection
Tab/Shift+Tab	Complete a cell entry and move to the right / to the left in the selection
Esc	Cancel a cell entry
Backspace	Delete the character to the left of the insertion point, or delete the selection
Delete	Delete the character to the right of the insertion point, or delete the selection
Ctrl+Delete	Delete text to the end of the line
Ctrl+; (semicolon)	Insert current date
Ctrl+Shift+: (colon)	Insert current time
Ctrl+'	Duplicate value from Cell above into current Cell

<b>6. Excel Basics</b>	
Shift+F10	Display the shortcut menu for the selected command (simulates right mouse button)
Ctrl+Z	Undo last action (multiple levels)
Ctrl+Y	Redo last action (multiple levels)
Ctrl+C	Copy contents of selected cells
Ctrl+X	Cut contents of selected cells
Ctrl+V	Paste content from clipboard into selected cell
Ctrl+Alt+V	If data exists in clipboard: Display the Paste Special dialog box
Ctrl + L or Ctrl+ T	Converts the table into a Dynamic Table

<b>7. Format Cells</b>	
Ctrl+1	Open Format Cells dialog with last selection active
Ctrl+Shift+F	Open Format Cells dialog with Font Tab active

<b>7. Format Cells</b>	
Ctrl+B	Apply or remove bold formatting
Ctrl+I	Apply or remove italic formatting
Ctrl+U	Apply or remove an underline
Ctrl+5	Apply or remove strikethrough formatting
Ctrl+Shift+~	Apply the General number format
Ctrl+Shift+1	Apply the Number format with two decimal places, thousands separator, and minus sign (-) for negative values
Ctrl+Shift+2	Apply the Time format with the hour and minute, and indicate AM or PM
Ctrl+Shift+3	Apply the Date format with the day, month, and year
Ctrl+Shift+4	Apply the Currency format with two decimal places
Ctrl+Shift+5	Apply the Percentage format with no decimal places
Ctrl+Shift+6	Apply the Scientific number format with two decimal places
F4	Repeat last formatting action: Apply previously applied Cell Formatting to a different Cell
Alt+H, AL	Align Left
Alt+H, AR	Align Right
Alt+H- AC	Align Cight
Alt+H, AT	Align Top
Alt+H, AM	Align Middle
Alt+H- AB	Align Bottom
Alt+H, W	Wrap or unwrap text (Home - Wrap Text)
Alt+H, H	Highlight Cell (change cell background color)
Alt+H, FC	Font Color
Alt+H, FS	Font Size
Alt+H, MM	Merge Cells - Merge
Alt+H, MU	Merge Cells - Unmerge
Alt+H, MC	Merge Cells - Merge and Center
Alt+H, MA	Merge Cells - Merge Across

<b>8. Apply Basic Borders to Cells</b>	
Ctrl+Shift+7	Apply outline border from cell or selection
Ctrl+Shift+_ (underscore)	Remove outline borders from cell or selection
Alt+HB, O	Bottom Border
Alt+HB, P	Top Border
Alt+HB, R	Right Border

<b>8. Apply Basic Borders to Cells</b>	
Alt+HB, L	Left Border
Alt+HB, A	All Borders
Alt+HB, O	Outside Borders
Alt+HB, N	No Border

<b>9. Formulas</b>	
=	Start a formula
Alt+=	Insert the AutoSum formula
Shift+F3	Display the Insert Function dialog box
Ctrl+A	Display Formula Window after typing formula name
Ctrl+Shift+A	Insert Arguments in formula after typing formula name
Shift+F3	Insert a function into a formula
Ctrl+Shift+Enter	Enter a formula as an array formula
F4	After typing cell reference (eg =E4) makes reference absolute (=E\$4). Repeat if you want to toggle from absolute reference to partial or complete removal (\$E\$4 -> E\$4 -> \$E4 -> returning to E4.

<b>10. Manage Multiple Worksheets</b>	
Ctrl+Page Down/Page Up	Move to the next / previous worksheet in current workbook
Shift+F11/Alt+Shift+F1	Insert a new worksheet in current workbook
Ctrl+Shift+Page Up / Page Down	Select the current and previous sheet / and next sheet in a workbook
Alt+O then H R	Rename current worksheet (format, sheet, rename)
Alt+E then L	Delete current worksheet (Edit, delete)
Alt+E then M	Move current worksheet (Edit, move)

<b>11. Manage Multiple Workbooks</b>	
F6/Shift+F6	Move to the next pane / previous pane in a workbook that has been split
Ctrl+F4	Close the selected workbook window
Ctrl+N	Create a new blank workbook (Excel File)
Ctrl+Tab/Ctrl+Shift+Tab	Move to next / previous workbook window
Alt+Space	Display the Control menu for Main Excel window
Ctrl+F9	Minimize current workbook window to an icon Also restores ('un-maximizes') all workbook windows

<b>11. Manage Multiple Workbooks</b>	
Ctrl+F10	Maximize or restores the selected workbook window
Ctrl+F7	Move Workbook Windows which are not maximized
Ctrl+F8	Perform size command for workbook windows which are not maximized
Alt+F4	Close Excel

<b>12. Various Excel Features</b>	
Ctrl+O	Open File
Ctrl+S	Save the active file with its current file name, location, and file format
F12	Display the Save As dialog box
F10 (or alt)	Turn key tips on or off
Ctrl+P	Print File (Opens print menu)
F1	Display the Excel Help task pane
F7	Display the Spelling dialog box
Shift+F7	Display the Thesaurus dialog box
Alt+F8	Display the Macro dialog box
Alt+F11	Open the Visual Basic Editor to create Macros

<b>13. Ribbon Shortcuts</b>	
Ctrl+F1	Minimize or restore the Ribbons
Space/Enter	Activate the selected command or control in the Ribbon, Open the selected menu or gallery in the Ribbon
Enter	Finish modifying a value in a control in the Ribbon, and move focus back to the document
F1	Get help on the selected command or control in the Ribbon (If no Help topic is associated with the selected command, the Help table of contents for that program is shown instead)

<b>14. Pivot Tables</b>	
Arrow Keys	Navigate inside Pivot tables
Home/End	Select the first / last visible item in the list
Alt+C	Move the selected field into the Column area
Alt+D	Move the selected field into the Data area
Alt+L	Display the PivotTable Field dialog box

<b>14. Pivot Tables</b>	
Alt+P	Move the selected field into the Page area
Alt+R	Move the selected field into the Row area
Ctrl+Shift+*	Select the entire PivotTable report
Enter	Display the selected item
Space	Select or clear a check box in the list
Ctrl+Tab/ Ctrl+Shift+Tab	Select the PivotTable toolbar
Enter then Arrow Down /Arrow Up	On a field button: select the area you want to move the selected field to
Alt+Shift+Arrow Right	Group selected PivotTable items
Alt+Shift+Arrow Left	Ungroup selected PivotTable items

<b>15. Dialog Boxes</b>	
Arrow Keys	Move between options in the active drop-down list box or between some options in a group of options
Ctrl+Tab/Ctrl+Shift+Tab	Switch to the next/ previous tab in dialog box
Space	In a dialog box: perform the action for the selected button, or select/clear a check box
Tab/Shift+Tab	Move to the next / previous option
A ... Z	Move to an option in a drop-down list box starting with the letter
Alt+A ... Alt+Z	Select an option, or select or clear a check box
Alt+Arrow Down	Open the selected drop-down list box
Enter	Perform the action assigned to the default command button in the dialog box
Esc	Cancel the command and close the dialog box

<b>16. Auto Filter</b>	
Alt+Arrow Down	On the field with column head, display the AutoFilter list for the current column
Arrow Down/Arrow Up	Select the next item / previous item in the AutoFilter list
Alt+Arrow Up	Close the AutoFilter list for the current column
Home/End	Select the first item / last item in the AutoFilter list
Enter	Filter the list by using the selected item in the AutoFilter list
Ctrl+Shift+L	Apply filter on selected column headings

<b>17. Data Forms</b>	
Tab/Shift+Tab	Move to the next / previous field which can be edited
Enter/Shift+Enter	Move to the first field in the next / previous record
Page Down/Page Up	Move to the same field 10 records forward / back
Ctrl+Page Down	Move to a new record
Ctrl+Page Up	Move to the first record
Home/End	Move to the beginning / end of a field

<b>18. Adjust Column Width and Row Height</b>	
Alt+HO, A	Format - Autoheight Row
Alt+HO, I	Format - Autowidth Column

<b>19. Other Shortcuts</b>	
Ctrl+Shift+O	Select all cells with comments
Alt+Shift+Arrow Right	Group rows or columns
Alt+Shift+Arrow Left	Ungroup rows or columns
Ctrl+6	Alternate between hiding and displaying objects
Ctrl+8	Display or hides the outline symbols
Ctrl+6	Alternate between hiding objects, displaying objects, and displaying placeholders for objects
Alt+' (apostrophe / single quote)	Display the Style dialog box
Ctrl+Shift+[+]	If data exists in clipboard: Display the Insert dialog box to insert blank cells
F9	Calculate all worksheets in all open workbooks
Shift+F9	Calculate the active worksheet
Ctrl+Alt+F9	Calculate all worksheets in all open workbooks, regardless of whether they have changed since the last calculation
Ctrl+Alt+Shift+F9	Recheck dependent formulas, and then calculates all cells in all open workbooks, including cells not marked as needing to be calculated
Ctrl+Shift+U	Toggle expand or collapse formula bar
Ctrl+F3	Define a name or dialog
Ctrl+Shift+F3	Create names from row and column labels
F3	Paste a defined name into a formula
Alt+F1	Create and insert chart with data in current range as embedded Chart Object
F11	Create and insert chart with data in current range in a separate Chart sheet

## About the Author

S.Sathish Kumar,



### EDUCATION

<b>Graduation</b>	B.Com
<b>Post-Graduation</b>	M.Com
<b>Other Qualification</b>	Higher Diploma in Software Engineering, Diploma in RDBMS, Diploma in Tally, Diploma in C,C++, Diploma in Hardware, Diploma in Web designing, and Diploma in MS Project (Project Management), Diploma in VB.Net.
<b>International Certifications</b>	Microsoft® Certified Trainer Certificate No. G680-4138  Microsoft® Office Specialist Master (Microsoft Word, Excel, Excel Expert, Power point, Outlook) Certificate No. wrmW-kMuo

### EXPERIENCE

<b>Faculty at Training Institutes</b>	3 Years (1998 – 2000)
<b>Free Lance Corporate Trainer</b>	18 Years (Since 2000)
<b>No of In-house Corporate training</b>	More than 1000
<b>No. of Public Program</b>	More than 50
<b>No. of Clients</b>	More than 100
<b>No. of participants</b>	20000 Approx.
<b>No of student got Microsoft Certificates</b>	50
<b>Guest Faculty</b>	25 Institute
<b>Software Consultant</b>	50 Corporates
<b>Projects Done</b>	More than 50

### EXPERTISE AREAS

**MS Office 2007, 2010, 2013, 2016 (Excel, Excel VBA Macros, Power Point, Access, Project)**

### TECHNICAL SKILLS

<b>Operating system</b>	WINDOWS XP/ 7 / 8 / 10
<b>Programming languages</b>	C, VB 6.0
<b>Open source</b>	Open Office , Kingsoft, Libra office
<b>Software packages</b>	Excel, Excel VBA, Word, Power Point, Access, Outlook for all version of Microsoft office (2003,2007, 2010, 2013 & 2016)
<b>Project Management</b>	MS Project – All Version (2007, 2010, 2013 & 2016)
<b>Databases</b>	MS Access
<b>Other Tools</b>	Tally, Crystal Report

## Notes