EXCEL

THE SMART WAY

51 EXCEL TIPS

by

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Hey there,

My name is Sumit Bansal and I started TrumpExcel.com as an effort to learn and share amazing Microsoft Excel Tips and Tutorials. It's a journey, where I aim for continuous learning, and at the same time, take you all with me.

In this Ebook, I share 51 Excel Tips that you can start using today and be more productive in your work.

For more such tips and tricks, visit my blog – http://TrumpExcel.com

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In case you wish to sell this or plan to customize/commercialize it, get in touch with me at sumitbansal@trumpexcel.com

Cheers

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Disclaimer: I have tested these tips on Excel 2007, 2010, 2013, and 2016. I have NOT tested these on Excel 2003. All the snapshots in this e-book are from Excel 2016.

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Excel Tip # 1: Switch Between Excel Spreadsheets Only

It's very frustrating when you have multiple applications open (such as Excel, PowerPoint, Word, Chrome, and IE) and you want to switch between Excel spreadsheets only. No matter how efficient you are, this can get on to your nerves in a few minutes. In this tip, let me show you how to handle this.

Use Control + Tab to toggle between open spreadsheets only (keep the Control button pressed while you press Tab button to switch)

That's it! It's this simple and will save you a lot of time

Note: While most of the people are addicted to ALT + Tab, the drawback is that it does NOT differentiate between different applications. So if you have 2 excel workbooks open along with a Chrome/FireFox/IE browser window, it will toggle one by one through each of these. Control + Tab will toggle between open Excel workbooks only.

ALT + TAB will toggle between all open applications

Select any of the open workbook. Now CTRL + TAB will toggle between open Excel workbooks only

Bonus Tip: This technique works with any Microsoft application, including Power Point and Word

Excel Tip # 2: Quickly Make a Copy of a Worksheet

A lot of times you may need to quickly make a copy of the worksheet in which you are working.

Normally, one would right-click on the tab and select move or copy, and then check the "Create a Copy" check box. While there is nothing wrong in this, here is a faster way to do this.
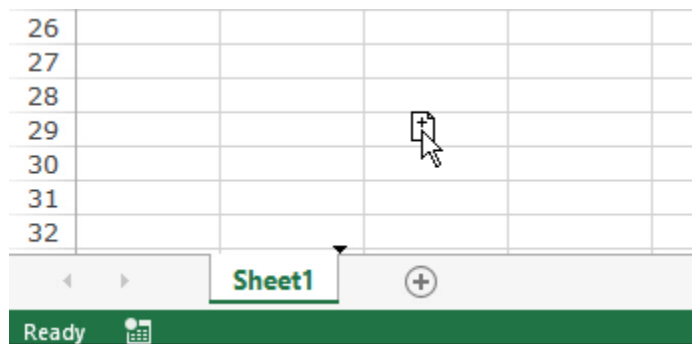
How to:

1. Select the worksheet tab for which you want to make a copy.
2. Press and hold the Control Key.
3. Left-click on the worksheet tab for which you want to create a copy (a plus sign within a sheet icon will appear next to the cursor).
4. While still holding the Control key and the Left button of the mouse, drag the tab within the worksheet.
5. Leave the mouse left-button and then leave the Control Key.

This would create a copy of the worksheet in the same workbook.

Excel Tip # 3: Multiply/Divide with a number using Paste Special

Ever faced a situation when you had to convert all the numbers into percentages or millions to billions (for example 10,000 million to 10 billion). The long way to do this is to first divide each number by 1,000 in a separate column and then copy paste the values.

The faster way would be to use Paste Special options.

Millions
28,718
44,346
47,015
2,576
2,922
23,695
33,574

Billions
28.718
44.346
47.015
2.576
2.922
23.695
33.574

How to:

1. Let's say you want to convert values in millions to billions. In an empty cell, type the number with which you want to divide the numbers *(in this case it would be 1000)*.
2. Copy the cell in which you entered 1000 (CTRL + C)
3. Select the cells in which you want to convert millions to billions.
4. Right Click and Select Paste Special. This will open Paste Special dialogue box *(Key board shortcut – Alt + E + S)*.
5. In the Operations category select Divide.
6. Click OK.

Excel Tip # 4: Freeze Panes to always Display Headers

While working with large data sets, it's frustrating to come back again to the row/column that has the headers. There is a way you can freeze the header rows/columns.

It's called Freeze Panes.
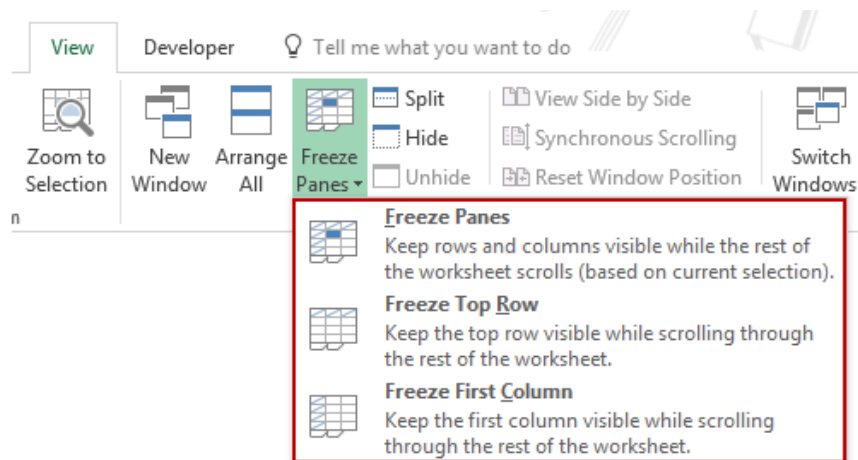
How to:

1. Go to the View Tab.
2. Select Freeze Panes.
3. Select Freeze Panes/Freeze Top Row/Freeze First Column (based on what you want to freeze – described below):
   - **Freeze Panes:** This option freezes both rows and columns. Select a cell and then go to View → Freeze Panes → Freeze Panes. This will freeze the columns to the left of the cell and the rows above it.
   - **Freeze Top Row:** Select the data set and choose this option to freeze the top row in the data set.
   - **Freeze First Column:** Select the data set and choose this option to freeze the first column in the data set.

Excel Tip # 5: STOP using Merge and Center (use Center Across Selection instead)

A lot of people use the Merge and Center feature when they want to combine cells and show it as one cell. While it gets the work done, it has a few drawbacks.

For example, you can have issues while sorting or filtering the data. It also causes issues when you try to select cells in a column that contains merged cells.

In all most all cases, a better alternative is the Center Across Selection option (when merging cells in columns).
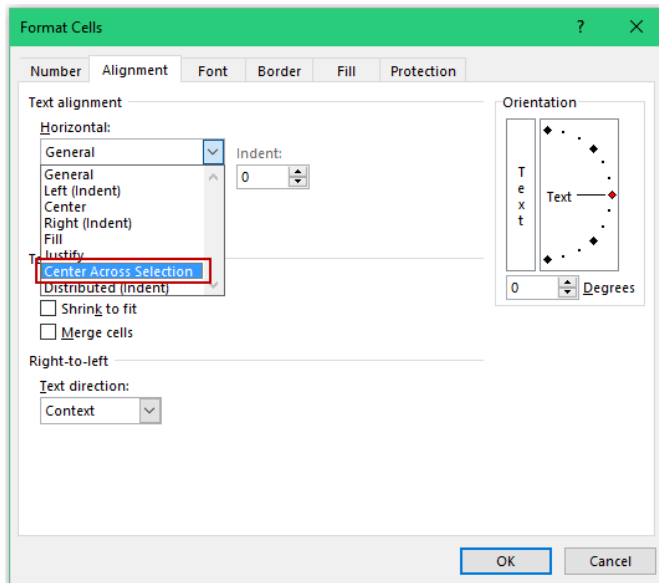
How to:

1. Select the cells that you want to merge.
2. Go to Home → Alignment → Alignment Settings *(click on the small tilted arrow in the bottom right of the group, or use the keyboard shortcut Control + 1 and the select the Alignment tab).*
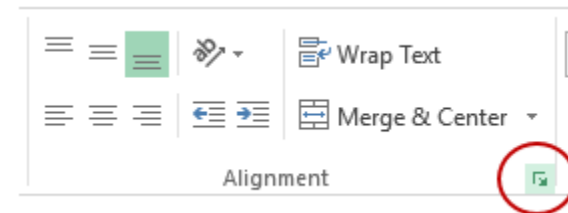
3. In the Text Alignment Horizontal dropdown, select Center Across Selection.
4. Click Ok.

Excel Tip # 6: Selective Clearing (format, content, comments, hyperlinks)

Excel gives you the flexibility to selectively clear contents from a cell. You can choose to clear contents only (keeping the formatting intact), or clear formatting only, while keeping the content as it is. Or you can choose to clear everything.

Other alternatives include clearing comments or hyperlinks.

How to:

1. Select the cell(s) from which you wish to clear the contents/formatting/comments/hyperlinks.
2. Go to Home → Editing Category → Clear → Clear (All/Formats/Contents/Comments/Hyperlinks).
3. Select the required option.
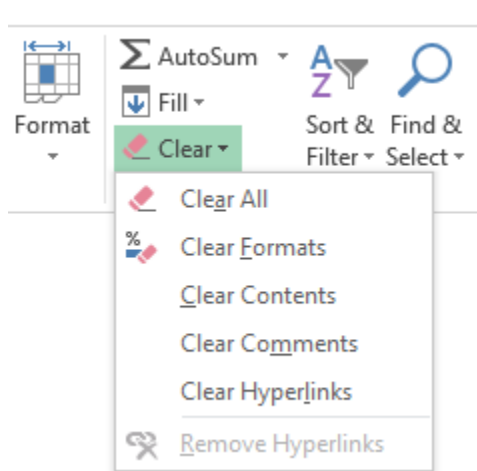
Excel Tip # 7: Select and Delete all Comments at Once

If you have a large data set full of comments, and you want to delete all the comment, there is a super quick way to do this.

How to:

1. Select the entire worksheet *(Keyboard Shortcut – Control + A).*
2. Press F5. This opens the Go To dialogue box.
3. In the Go To dialogue box, click on Special.
4. In Go To Special dialogue box, ensure that Comments option is selected.
5. Click Ok (this would select all the cells that have comment in it).
6. Go To Home → Editing → Clear → Clear Comments.
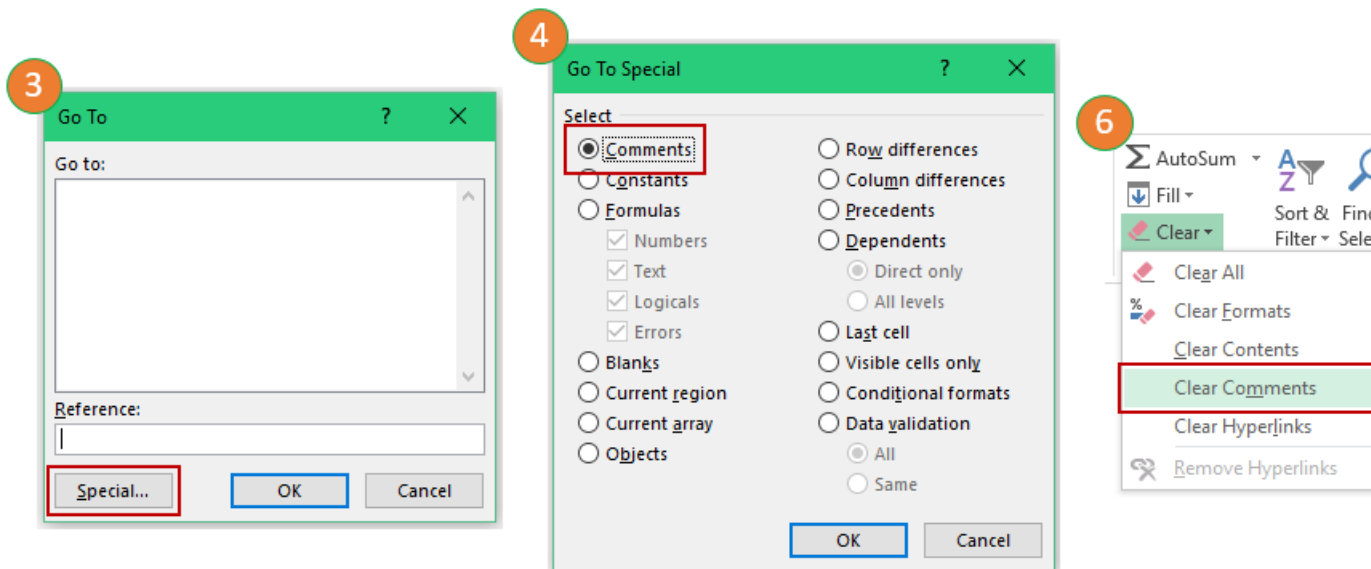
Excel Tip # 8: Use Control + Enter to Fill an Entire Range

This tip can help you to speed up your work significantly. A lot of times we have to apply the same formula for a range of cells (see image below).

Normally, we put it in one cell and then copy and paste the formula in all the other cells, or (if contiguous rows/columns), we drag the auto fill handle to apply the same formula for all the cells

Here is an alternative that save you a few seconds.

How to:

1. Select the entire data in which you wish to enter the formula. You will notice that the first cell is lighter in color when compared to the other selected cells. It's the active cell.
2. Start typing the formula (or text) that you want in all the cells in the active cell.
3. Use **Control + Enter** instead of Enter *(Keep Control key pressed when you hit Enter)*.

You'll see that all the selected cells have been filled with the result of the formula.

Sales (in $ million)				Average
Q1	Q2	Q3	Q4	
112	131	83	176	=AVERAGE(B4:E4)
190	127	24	52	
39	182	33	54	
148	70	56	30	
150	168	65	80	
95	183	59	79	
92	172	193	105	
38	145	43	189	
113	153	178	173	
47	189	173	71	

*Note that the active cell is lighter than the rest of the selection. Once you have entered the formula, press **Control + Enter** and It will populate the entire selected range*

Excel Tip # 9: Copy Formula on Clipboard to be used Later

Often when we work with long formulas or text strings in Excel, there is a need to copy and paste the same part of the text or the formula again and again.

There is a clipboard feature in Excel that lets you copy and store the copied text/formula at a single place, and you can then quickly retrieve it and paste it later.
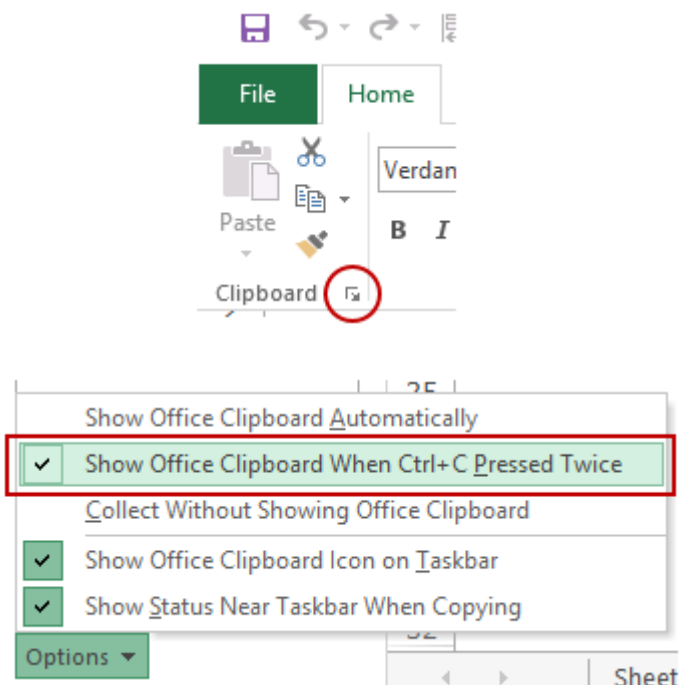
How to:

You first have to enable this feature to copy in clipboard:

1. Go to the Home tab.
2. In the Clipboard category, click on the arrow at the bottom-right *(shown in the pic). This will open the clipboard on the left*.
3. Click the Options button (at the bottom-left of the pane) and select '**Show Office Clipboard When Ctrl+ C pressed Twice**'.
4. Close the Clipboard section.
5. Now when you wish to copy the content of any cell, get into the edit mode (by pressing F2) and select the text (or formula).
6. With the text selected, press Control + C + C (hold the Control key and hit 'C' key twice). This will copy the text/formula in the clipboard.
7. Now if you want to paste this copied text sometime later, go to the cell where you want to paste this, open the clipboard pane, and double click the text that you want to paste.

Excel Tip # 10: Too Many Worksheets - Use the New Window Feature

If you work with an Excel workbook where you have to scroll up and down in the same worksheet, or go back and forth between worksheets, it could lead to a lot of frustration and time-waste.

I will show you a simple & elegant way to deal with this:

> *How to:*
>
> 1. Go to the **View** Tab.
> 2. Select **New Window** in the Windows group.
>
>
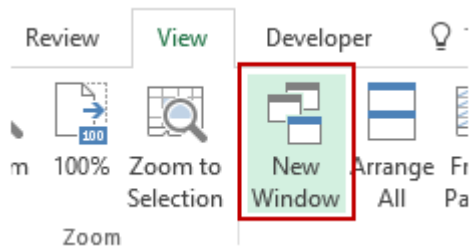
What this does:

- Suppose you have a worksheet named Test.xlsx. When you click on **New Window** in the View tab, it replaces the Test.xslx spreadsheet with 2 replicas - *Test.xlsx:1* and *Test.xlsx:2*. Any changes made in one of the workbook would be reflected in the other one (in real time). This is quite useful when you have multiple sheets within a workbook and need to refer to data in multiple worksheets. *For example, you may want to see what changes in Sheet2 when you change the values in Sheet1.*
- You can choose to arrange them vertically or horizontally to view these side by side. To do this:
  - Go to View → Arrange All.
  - In the Arrange Window dialogue box, select the way you want to arrange these.

This could be particularly helpful when you need to refer various sheets in the same workbook.

Excel Tip # 11: Split your Worksheet to be more Efficient

Excel is made to handle large data sets, but it could get really frustrating if you have to scroll back and forth again and again in the same worksheet. This neat trick will help you to get more efficient while you work with large data sets in Excel

How to:

1. Go to View Tab.
2. In Windows category select Split.

This will split will your worksheet into 4 parts.

Don't worry, nothing changes.

Now you can treat each of the four panes as a separate space and scroll up or down. This enables you to create a formula in the 100th column while you can still see the 1st column (or any column you wish).

If you only want a vertical split, just go to the horizontal split line and double click on it, and it will go away.

Super! Isn't it?

	1	2	3	4	10	11	12	1
1	Data 1	Data 2	Data 3	Data 4	Data 10	Data 11	Data 12	Data
2	70	797	194	600	523	260	826	
3	60	83	802	774	970	913	378	
4	331	844	388	346	492	627	492	
5	379	827	232	731	355	412	305	
6	86	850	64	344	850	578	307	
8	24	906	404	320	450	819	138	
9	102	372	422	749	33	858	500	
10	244	355	81	667	372	758	297	
11	375	862	119	436	62	506	585	
12	362	757	267	918	694	111	477	
13	251	880	526	550	203	276	720	
14	193	258	96	852	488	572	248	
15	269	722	383	22	310	835	744	

	1	2	3	4	97	98	99	100
1	Data 1	Data 2	Data 3	Data 4	Data 97	Data 98	Data 99	Data 100
2	70	797	194	600	771	632	548	865
3	60	83	802	774	75	776	26	678
4	331	844	388	346	927	543	916	96
5	379	827	232	731	568	361	864	434
6	86	850	64	344	295	966	483	766
8	24	906	404	320	471	369	630	47
9	102	372	422	749	458	140	563	748
10	244	355	81	667	472	290	646	441
11	375	862	119	436	256	730	168	624
12	362	757	267	918	95	567	586	659
13	251	880	526	550	723	50	565	764
14	193	258	96	852	671	270	226	509
15	269	722	383	22	460	853	629	201

Excel Tip # 12: A Quick Way to Move Rows and Columns

This is an awesome trick. It's one of those hidden gems that not many people know about.

This technique will help you in quickly moving data in rows and columns, without any of the messy stuff (cutting/pasting and inserting/deleting of rows or columns). It'll let you move the selected cells anywhere in the sheet, without messing with the other rows/columns.

You got to try it to believe it!!

Product Name	Sales Rep	Geography	Sales (in $ million)
Product 1	Arjun	India	160
Product 2	Joe	US	115
Product 3	Karen	Canada	22
Product 4	Arjun	India	63
Product 5	Karen	Canada	74
Product 6	Arjun	India	167
Product 7	Jane	Brazil	40
Product 8	Santiago	Germany	46
Product 9	Arvind	India	141
Product 10	Sumit	India	82
Product 11	Joe	US	93
Product 12	Jane	Brazil	69
Product 13	Sumit	India	197
Product 14	Karen	Canada	98
Product 15	Arvind	India	27

How to:

1. Select the cells in the column that you want to shift (works for contiguous selections only).
2. Press the right button of your mouse and hold the Shift Key from your keyboard.
3. Move the cursor to the edge of the selection. It would display the move icon (a four directional arrow icon).
4. Click on the edge (with left mouse button) while still holding the Shift-key.
5. Move it to the column where you want this to be shifted
   - *When you bring the selection to the edge of any column, you would see a vertical line (something that looks like roman numeral 1 or alphabet Capital I – shown in the image on the left)*
6. Leave the mouse button at the edge of the column where you want the data to be moved.
7. Leave the Shift-key (remember to keep the Shift key pressed till the end).

Excel Tip # 13: Quickly Create Named Ranges from Data

While this seems like a mere shortcut, it deserves its place in this Excel Efficiency Tips section.

Suppose you have the sales data in columns for 3 months (Jan, Feb, and Mar), and you want to create named ranges from the data for each month. Just use this shortcut – **Control + Shift + F3.**

How to:

1. Arrange your data in a way where you have headings (for which you need to create a named range) in Top/Bottom row or Top/Bottom column.
2. Press **Control + Shift + F3.**
3. In the dialogue box, check the option for which you wish to create the named range. In this case, since the months are in the top row, select Top row.
4. Click OK. That's it!!

Press Ctrl + Shift + F3
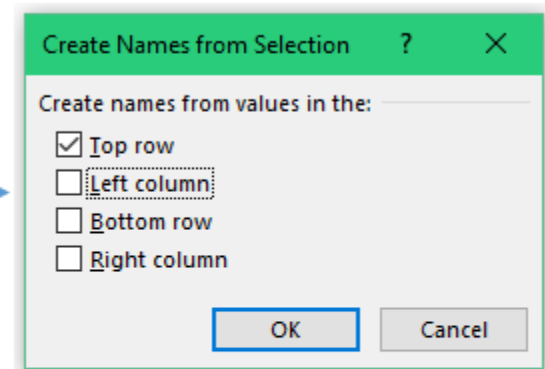
In this dialogue box, if you select Top row and click OK, it will create 3 named ranges (one each for Jan (B2:B6), Feb (C2:C6, and Mar (D2:D6))

Excel Tip # 14: Display a Message when a Cell is Selected

I am not talking about inserting a comment here. I am assuming that you already know how to do it. The drawback in a comment is that it gets displayed ONLY when you hover mouse over the cell that contains that comment (*It's sometimes irritating as well*).

In this trick, I will show you how display a message when a cell is selected either by using the mouse or by the keyboard. This could be useful for someone who creates a report that need some inputs from the user. A message on how or what needs to be entered could be of great help.
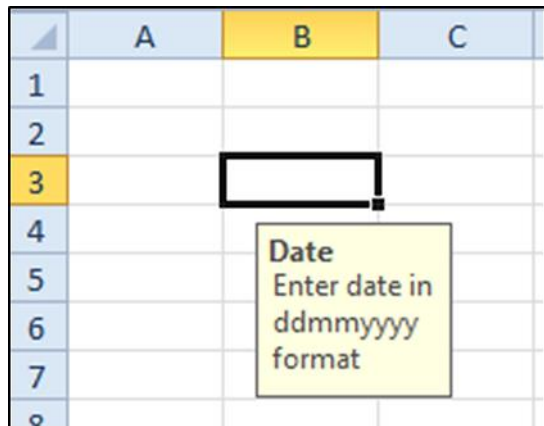
How to:

1. Select the cell in which you want to display the message on selection and go to Data tab → Data Validation.
2. In Data Validation dialogue box, select Input Message tab.
3. Ensure that "Show input message when cell is selected" check box is selected.
4. In the Input message tab, enter Title (max 32 characters, optional) and Input Message (max 256 characters)
5. Click OK.
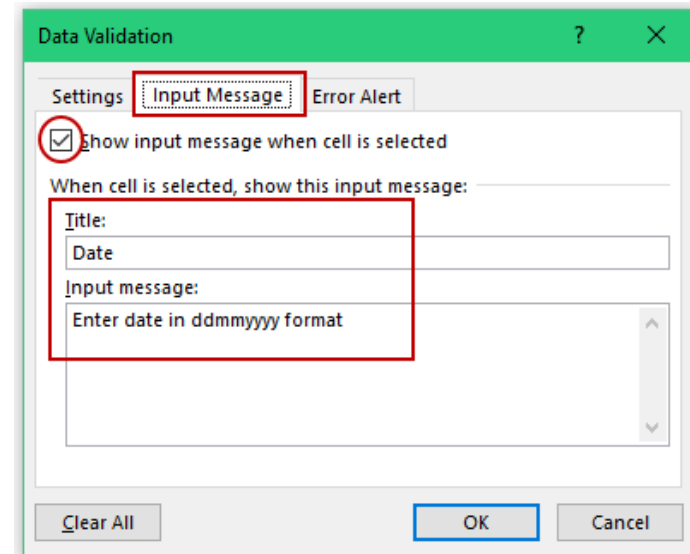
Excel Tip # 15: Group and Ungroup data

A lot of times the data you work with can have categories and sub-categories. For example, there could be a country category (say the US), and then there could be subcategories of its states. Similarly, there could be multiple countries and their states.

It might be desirable to temporarily hide the states and only display the countries. While hiding of rows/columns could be one way, there is a neater way to do this through grouping the data.

How to:

1. Select the data that you want to group.
2. Go to Data → Group.
3. Select Group by Rows or Columns.

Click 1 to get grouped categories (it will only display US and India). Click 2 to see the entire list (Countries and states as shown in the pic)

Click these buttons to collapse or cluster the data. Works as a toggle

Excel Tip # 16: Select Visible Cells only

If you a dataset that has some rows/cells hidden, and you copy the cells in this dataset, it copies the cells that are visible _as well as_ the cells that are hidden.

This can cause havoc if you copy it somewhere else thinking that you are only copying the visible cells (see the image below).

What you need is a way to copy the visible cells only. In this tip, I'll show you how to do this.

How to deal with this:

1. Select the data which has hidden rows/columns and where you want to copy only the visible cells.
2. Go to Home → Find & Select → Go To _(Keyboard Control + G)_.
3. In the Go To dialogue box, click on Special.
4. In the Go To Special dialogue box, select **Visible cells only.**
5. Click OK.
6. Now when you copy and paste, this will paste visible cells only.

This is a list of numbers

Row 2 and 3 have been hidden. Select these 4 cells and copy it (control + C)

Paste it (control + V) in an area without any hidden rows. Notice that even the hidden cells get copied

Bonus Tip: Instead of following these many steps, select the data and use the keyboard shortcut **Alt + ;** This would automatically select visible cells only. Now you can simply copy these cells and paste it.

Excel Tip # 17: Remove Blank Cells from a List

More often than not, you end up with useless blanks in the data set that need to be eliminated. Here is a simple and quick way to identify and select all the blank cells. Once selected, it's up to you to deal with these (delete it, color it, or type something into it).
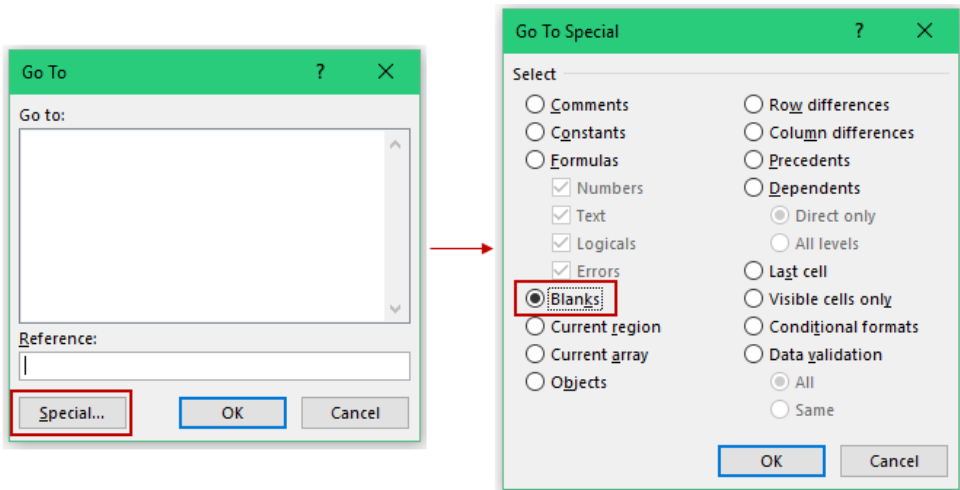
How to:

1. Select the entire data set.
2. Press F5 (this will open Go To dialogue box)
   - You can also access it from Home → Find & Select → Go To.
3. In the Go To dialogue box, select Special (this will open the Go To Special dialogue box).
4. Select Blanks.
5. Click OK (this will select all the blank cells).

Now you can do whatever you want with these cells.
Below are some examples:

- Delete blank cells or the entire row that has the blank cell.
- Color these cells to highlight it.
- Type some text in all of the blank cells (such as NA or Not Available). To do this, type the text in the active cell and press Control + Enter.

Excel Tip # 18: Angle Cell Text to make Column's Width Narrow

Sometimes, when you have long text in headers, it is better to format these (as shown below). These also save you some column width, so you can view more data at once on your screen.

	January	February	March	April	May	June	July	August	September	October	November	December
Ron	223	765	928	911	844	168	983	717	272	500	252	107
Christie	321	727	916	404	443	187	471	983	131	686	721	175
Arvind	489	679	669	425	310	207	181	630	138	704	638	359
Sumit	759	564	618	847	409	590	920	954	966	394	561	253
Karen	992	837	425	337	953	312	162	613	665	425	890	149

How to:

1. Select the headers (January, February..).
2. Go to Home → Alignment → Orientation → Angle Counterclockwise
   - *This will align your text at a 45º angle.*
3. With the headers selected, go to Home → Font → Borders → All Borders.
   a. This will give a border to the headers. You can apply border to the entire data set if you wish
4. Now you can resize your column width and you are done.

Bonus Tip: You can access all these options from Format Cells Dialogue box *(Key board shortcut – Control + 1)*

Excel Tip # 19: Split a Cell by a Diagonal Line to get 2 Headers

This technique enables you to split a cell by a diagonal line, so that you have 2 headers in the same cell (one each for row and column of headers).

Something as shown below:

Months / Sales Rep	January	February	March	April	May
Ron	223	765	928	911	844
Christie	321	727	916	404	443
Arvind	489	679	669	425	310
Sumit	759	564	618	847	409
Karen	992	837	425	337	953

How to:

1. Select the cell.
2. Go to Home → Fonts → Format Cells *(key board shortcut – Control + 1)*
3. Select Border tab and select the diagonal split option at the bottom of the dialogue box.
4. Select the cell and go into the edit mode (by pressing F2).
5. Type **Months** (or the heading you want to be at the top-right).
6. Press Alt + Enter – This takes you to the next line within the same cell.
7. Type **Sales Rep** (or the heading you want to be at the bottom-left).
8. Put some spaces before the **Months** to push it to the right (adjust accordingly).

Excel Tip # 20: Snap Objects/Pictures to Cell Borders

This technique will enable you to quickly snap a shape/picture/charts to the border of any cell in Excel. This is helpful in situations where you need to put a picture/shape within a cell

How to:

1. Select the shape/picture/chart that you want to align with a cell.
2. Press **Alt** and move the shape/picture/chart (keep the Alt pressed).

You will notice that the object will snap to the border of the cell where you moved it.

Press Alt and the left mouse button. Continue holding both and move the shape to the left

Snapped at the border of cell at left. Press Alt and left mouse button and shift the object to the top border of the cell

Snapped at the border at the top of the cell
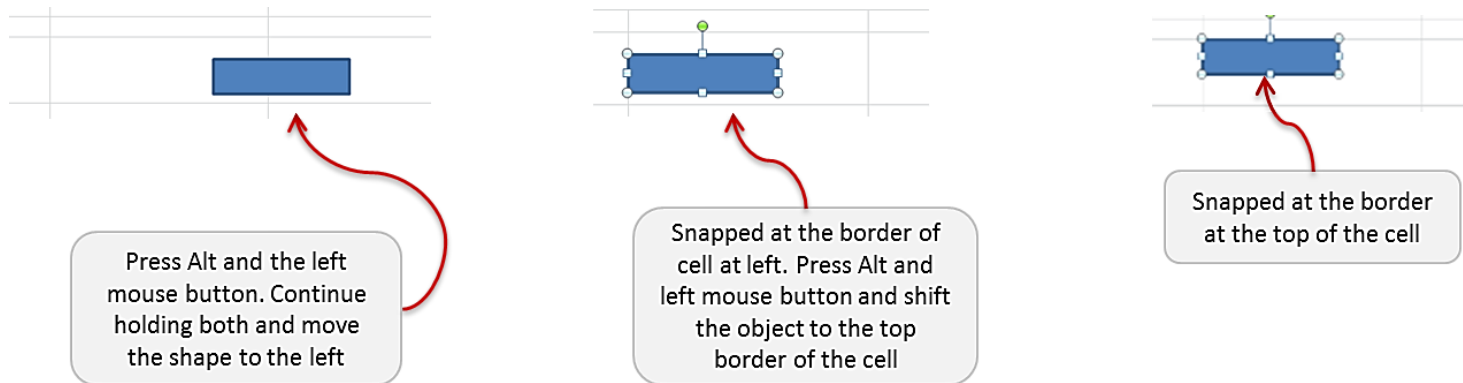
Excel Tip # 21: Highlight Alternate Rows Using Conditional Formatting

Conditional Formatting can be a great ally in creating amazing spreadsheets. A trick as simple as highlighting alternate rows could immensely increase the readability of your data set. Here is how to do this:

How to:

1. Select the data set.
2. Open the Conditional Formatting dialogue box (Home → Conditional Formatting → New Rule) [*Keyboard Shortcut - Alt + O + D*].
3. In the dialogue box, select "Use a Formula to determine which cells to format" dialogue box.
4. Enter the following formula **=ISODD(ROW())**
5. Click on the Format button to set the formatting.
6. Click OK.

Read more about this <u>here</u>

How it works:

The entire magic is in the formula =ISODD(ROW()). *[ROW() function returns the row number of a cell and ISODD checks whether the row number is odd or even.]*

This evaluates each cell and checks if it meets the criteria. Suppose the data is in A2:D10 (as shown in the pic below). So it first checks A2. Since the Row number of A2 is 2, ISODD(ROW()) would return FALSE for A2.

So it moves on to the other cell in next row. Here the row number of A3 is 3 and ISODD(ROW()) returns TRUE, which meets the condition. Hence, it highlights this cell.

	A	B	C	D
1	**Jan**	**Feb**	**Mar**	**Apr**
2	91	77	31	87
3	45	31	86	63
4	28	68	52	84
5	41	84	32	62
6	13	38	26	64
7	34	57	59	79
8	53	76	90	29
9	22	70	36	11
10	86	36	95	67

Excel Tip # 22: Search and Highlight Cells using Conditional Formatting

Suppose you have a data set as shown below, with Product Name, Sales Rep, and Geography. The idea is to type a string in cell C2, and if it matches the data in any cell(s), then that cell should get highlighted.

Something as shown below:

How to:

1. Go to Home –> Conditional Formatting -> New Rule *(Keyboard Shortcut – Alt + O + D)*.
2. In the **New Formatting Rule** dialogue box, select the option **Use a formula to determine which cells to format.**
3. Now enter this following formula **=AND(C2<>"",C2=B5)**, and then click on 'Format..' button to set the formatting.

4. Click OK

Now type anything in cell C2 and press enter. It will highlight the cells that contain the string you entered in C2.

This works when the formula returns TRUE, and the formula returns TRUE when C2 is not empty (C2<>"") and **exactly matches** the searched string.

Read more about this here

Excel Tip # 23: Highlighting Errors/Blanks using Conditional Formatting

Conditional Formatting can be really helpful if you want to identify if there are any blank cells or cells with error in the dataset. While it's easy to identify these cells manually in small dataset, doing that in large datasets could be time consuming and error prone.

How to:

Assuming that the data is in cells A2:A8

1. Go to Home → Conditional Formatting → New Rule.
2. In the New Formatting Rule dialogue box, select Use a formula to determine which cells to format.
3. Type the formula **=OR(ISBLANK(A2),ISERROR(A2))**
4. Set the formatting and Click OK.

Edit Formatting Rule

Select a Rule Type:

- ► Format all cells based on their values
- ► Format only cells that contain
- ► Format only top or bottom ranked values
- ► Format only values that are above or below average
- ► Format only unique or duplicate values
- ► **Use a formula to determine which cells to format**

Edit the Rule Description:

Format values where this formula is true:

=OR(ISBLANK(A2),ISERROR(A2))

Preview: AaBbCcYyZz   Format...

OK   Cancel

	A
1	*Data*
2	1
3	2
4	3
5	
6	#N/A
7	#DIV/0!
8	4
9	5

Excel Tip # 24: Create a Simple Gantt Chart Using Conditional Formatting

Conditional Formatting can be used to quickly create a Gantt Chart in Excel (as shown below). All you need is the right formula in right cells.

How to:

Suppose the start date is in Column B and end date in Column C. Here are the steps to highlight cells (with each cell representing a day as shown in the pic) that lie in the specified date range.

1. Go To Home → Conditional Formatting → New Rule.
2. Select '**Use a Formula to determine which cells to format**' and type the following formula
   - $=AND((COLUMNS(\$D\$5:D5)-1)>=(\$B5-\$B\$5),(COLUMNS(\$D\$5:D5)-1)<=(\$C5-\$B\$5))$
3. Select the format and click OK.

Excel Tip # 25: Find and Replace Partial Matches (Using Wildcard Characters)

Wildcard characters in excel are quite versatile. You can use it in complex formula as well as in basic functionality such as Find and Replace. Suppose you have a data set as shown below, and you want to change all the different words (such as Excel, Excels, Excellent) to Excel.

Excel
Excels
Excelling
Excellent

→

Excel
Excel
Excel
Excel

How to:

1. Select the data set.
2. Press Control + H *(Opens find and replace dialogue box).*
3. Enter the text that you want to find along with the wildcard characters (**Excel*** in Find what: field).
4. Enter the text you want to replace this with (**Excel** in Replace with: field).

Find and Replace ? ✕

Find | Replace

Find what: Excel*

Replace with: Excel

Options >>

Replace All | Replace | Find All | Find Next | Close
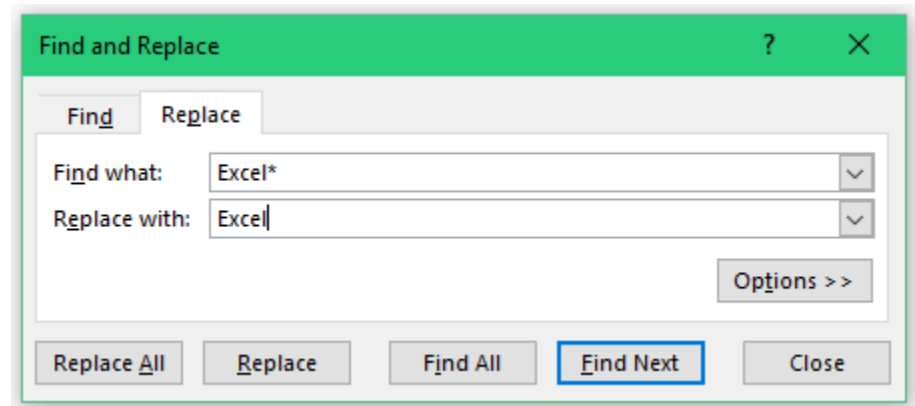
💡 Bonus Tip: You can use wildcard character at the beginning and end of your text (for example, *excel*), and it will find and replace any text that contains the text (excel) anywhere in the cell.

You can do so much more with Wildcard Characters. Read about it here

Excel Tip # 26: **Put a comment in an Excel Formula**

In this tip you'll learn a simple method to put a comment in your formula.

It could be helpful if you are creating he formulas and want to have a comment that describes what it does or the logic involved. It could also be helpful if you are sharing your work with others, so that they can easily decode your formulas.

How to:

1. At the end of a formula, use **N("Your comment")**

   - For example, if I have a formula =A1+A2, you can use *=A1+A2+N("This adds cells A1 and A2")*.

   <u>*Logic*</u>*: N() formula converts text to 0, and does not impact the original formula.*

Excel Tip # 27: Create Custom Sorting Criteria

Sorting is one of the most frequently used features in Excel. Some common examples include sorting alphabetically, by value (largest to smallest or smallest to largest), by the day of the week (Mon, Tue, Wed..), or by month names (Jan, Feb..)

While these are in-built sorting criteria, you can your own sorting criteria according to your data (such as High-Medium-Low, Good-Ok-Bad)

How to add Custom Sorting Criteria:

- Go to File –> Options.
- In the Excel Options Dialogue Box, select Advanced from the list in the left pane. Within Advanced selected, scroll down and select Edit Custom List.
- In the Custom Lists dialogue box, type your criteria in the box titled List Entries. Type your criteria separated by comma (High, Medium, Low) *[you can also import your criteria if you have it listed]*
- Click Add and then click OK.

How to sort you data based on Custom Criteria

- Select the data set.
- Go to Data –> Sort.
- In the Order drop-down list, select Custom List.
- Select the criteria and click OK.

Excel Tip # 28: **Enter Bullets in Excel**

Here is the keyboard shortcut that will insert a bullet in a cell in Excel. This could be helpful if you want a bulleted list.

| Alt + 7 | • |
| Alt + 9 | o |

How to:

1. If you have a numeric keyboard:
   - Go to the cell and double-click (or F2) to get into edit mode.
   - Press Alt + 7 or Alt + 9.
2. If you do not have a numeric Keyboard (as in my laptop), activate the NumLock.
   - Go to the cell and double click (or F2) to get into edit mode.
   - Press Alt + 7 or Alt + 9.

Excel Tip # 29: Display Negatives values in Red using Number formatting

It is a common practice to highlight the negative numbers in red. And custom formatting can make it quick and easy.

How to:

1. Select the data set where you want to highlight the negatives numbers in red.
2. Open Format Cells dialogue box *(Key Board Shortcut – Control + 1).*
3. Select **Custom** number format category.
4. In the Type field write
   - **0.00;[Red]-0.00;**

How it Works:

The number formatting in excel is divided into four parts (in the given order)

- <POSITIVE>;<NEGATIVE>;<ZERO>;<TEXT>

You can specify the format for each of these categories separately. In this example, **0.00;[Red]-0.00;** would mean that positive numbers would be displayed with 2 decimal places, and negative numbers would be displayed with 2 decimal places, a negative sign, and red color.

Excel allows you to use various colors for the text in the cell (as I have used Red here **in square brackets**)

Some Examples:

- 0.00;[Red]-0.00; - Highlights negative numbers in Red, with a negative sign
- 0.00;[Red]0.00; - Highlights negative numbers in Red, without a negative sign
- [Green]0.00;[Red]-0.00; - Highlight positive numbers and zero in green and negative numbers in red

Excel Tip # 30: Insert Picture into a Comment Box

You can easily insert an image in a comment in Excel. This could be useful if you have a list of products and you want to show the image in the comment. Remember, you would have to do this manually for each comment.
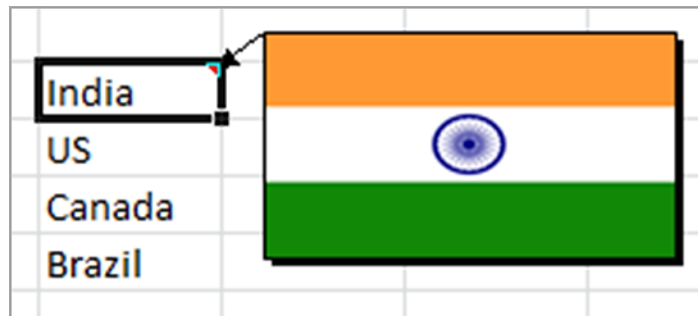
How to:

1. In a worksheet, insert a comment *(Keyboard Shortcut – Shift + F2).*
2. In the comment, delete any existing text (if any).
3. Right Click on the border of comment and click 'Format Comment'.
4. Select 'Color and Lines' tab.
5. In the Color Drop down menu select 'Fill Effects'.
6. In 'Fill Effects' dialogue box, select 'Picture' tab.
7. Click on 'Select Picture'.
8. Browse and select the picture you want in the comment and click OK.
9. That's it!!

Excel Tip # 31: Keep the Headers at the Top While Printing

If you have large data set and you print it, it prints the headers in the first sheet only. Rest all the sheets do not get the header printed.

Here is a way to get headers on all the sheets while printing the data.

How to:

1. Go to Page Layout → Page Setup → Print Titles *(Key Board Shortcut – Alt + PSP)*.
2. In the Page Setup dialogue box, go to the Sheet Tab.
3. In the Sheet tab, specify the Print Area.
4. In the **Rows to repeat at the top** field, specify the rows that should appear at the top of each printed page .

Excel Tip # 32: Enable Data Entry only when the Previous Cell is Filled

You would have seen this in a lot of online forms. It mandates you to first fill a particular field before you can enter something in the next field.

You can create the same setting in Excel as well. For example, if A1 is empty, then the user should not be able to enter anything in A2.
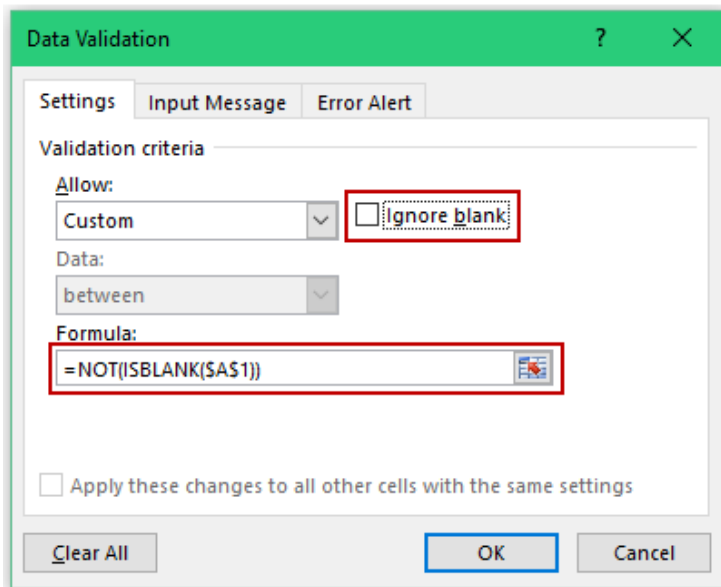
How to:

1. Select cell A2.
2. Go To Data → Data Tools → Data Validation → Data Validation.
3. In the Settings tab go to the **Allow** drop down and select **Custom.**
4. In the Formula field, type **=NOT(ISBLANK(A1))**
5. Ensure that the Ignore Blank is Unchecked.
6. Click Ok.

Now when you enter something in cell A2, and if A1 is empty, an error will be displayed

To be filled first → | A1 | A2 | ← If anything is entered in this cell and the previous cell **A1** is empty, it should show an error
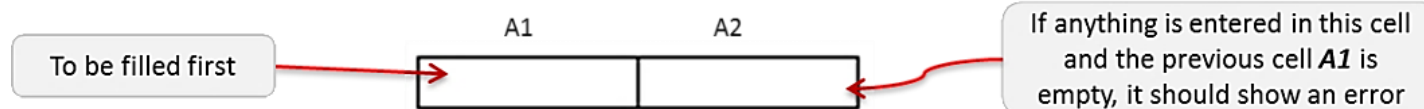
Excel Tip # 33: Create your Own Error Messages in Data Validation

This is a useful trick when you have a sheet where you seek inputs from the users. For example, you may want them to enter a 10-digit phone number, and display an error if they enter a number lower or higher than 10 characters.

How to:

1. Select the cell where you want the data validation rule
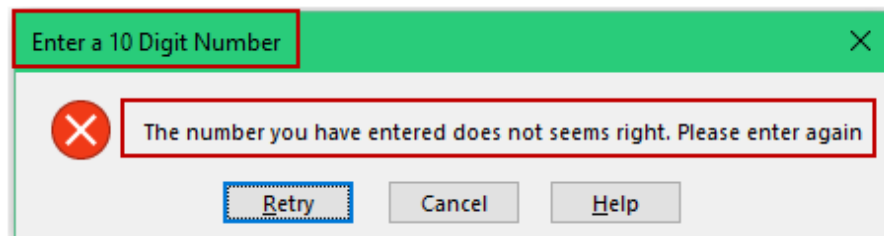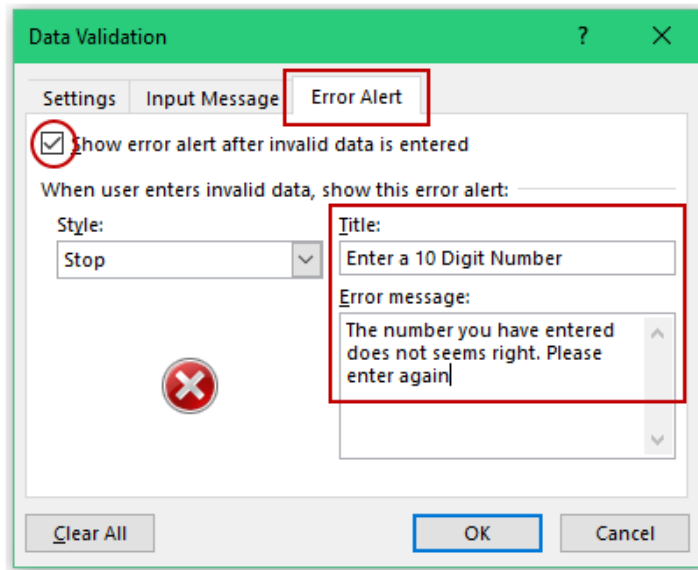2. Go To Data → Data Tools → Data Validation → Data Validation.
3. In the Settings tab go to the Allow drop down and Set the Length to **10.**
4. Go to Error Alert Tab.
5. Ensure Show error alert after invalid data is entered is checked.
6. In the Style drop down, ensure Stop is selected.
7. In the Title field type - **Enter a 10 Digit Number.**
8. In the Error message field type - **The number you have entered does not seems right. Please enter again.**
9. **That's It!!** If now you enter a number less than or more than 10 character, it will show an error that you scripted.

Excel Tip # 34: Perform Multi-Level Sorting

With multi-level sorting, you can sort one column, and then the second one in such a way that the first one is still sorted. The pic below might make it more clear:

Subject	Score
Math	93
English	32
Math	35
Arts	66
Arts	43
Math	96
Economics	37
Math	89
Literature	83
Economics	77
Literature	53

Subject	Score
Arts	66
Arts	43
Economics	77
Economics	37
English	32
Literature	83
Literature	53
Math	96
Math	93
Math	89
Math	35

Subject Column sorted alphabetically A-Z

Score Column sorted by values (largest to smallest). Notice these are sorted subject-wise

How to:

1. Select the entire data set.
2. Go to Data → Sort and Filter → Sort.
3. In the Sort dialogue box, Select Column Sort by, Sort On and Order values from drop downs [for the subject column, i.e., the first level sorting]
4. Now click on the Add Level option at the top. This will add another sorting level
5. Again select the sort criteria [for the score column, i.e., the second level sorting]

	Column	Sort On	Order
Sort by	Subject	Values	A to Z
Then by	Score	Values	Largest to Smallest
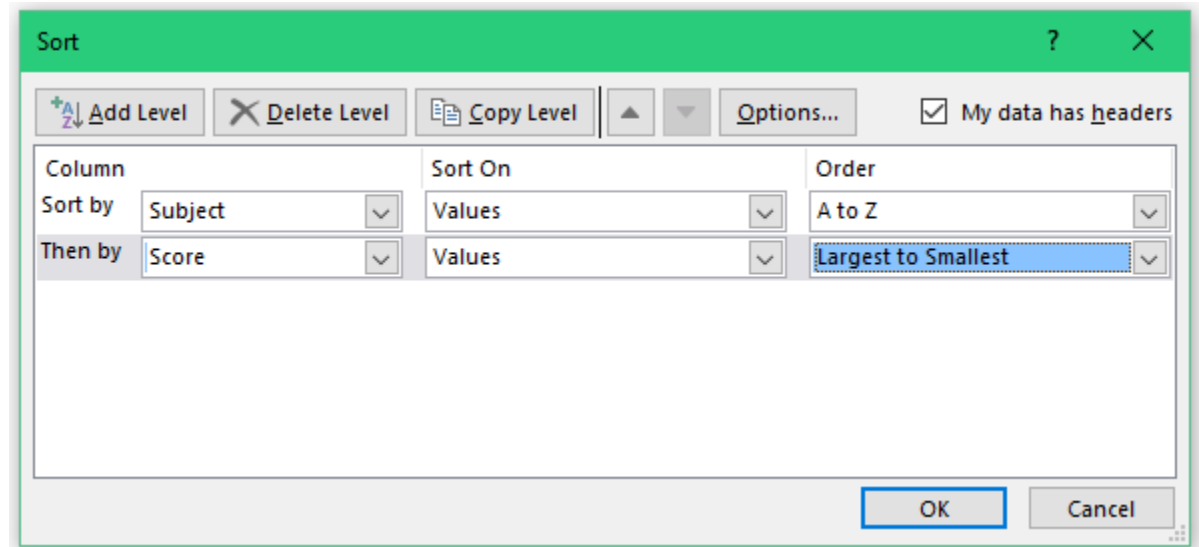
Excel Tip # 35: Disguise Numbers as Text Using Custom Number Formatting

This trick is nothing short of magic. And to add to it, this also has a practical use in our daily work. The idea is to have a cell where you type a particular number, but as soon as you hit enter, it displays a predefined text.

 I recently used this when I wanted to display the text "Not Available" whenever there was a 0 in the data. The best part is, this doesn't change the value of that cell. So it remains 0 and you can use it in calculation (precisely the reason why I used the word DISGUISE!!)
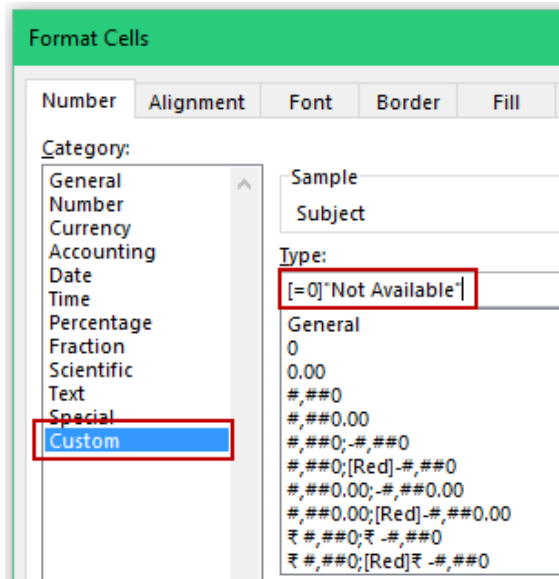
How to:

1. Select the data set.
2. Press Control + 1 (this opens the Format Cells dialogue box).
3. In the Number tab go to Custom Category.
4. Or the right panel type **[=0]"Not Available"**
5. That's it!! Note that if there are any 0's in your data they would get displayed as Not Available

How it Works:

- In this case we have specified a number format only whenever there is a 0, Not Available is displayed. If a cell has a value other than 0, General Formatting kicks in.

There are many cool things you can do using Custom Formatting. Click here to know more.

Excel Tip # 36: Evaluate a formula Step by Step

Yes. You can do this in Excel. You can evaluate your formula step by step, which is often the need during debugging a formula or trying to decode it.

How to:

Let me show you a simple formula evaluation. I have 1 in A1 and 2 in A2. In A3 I have a formula =A1+A2. Now I want to evaluate this formula

1. Click on Formula Tab.
2. Click on Evaluate Formula *(Keyboard Shortcut – **Alt + TUF**)*.
3. This will open the Evaluate formula dialogue box.
4. In this formula, press evaluate one by one to sift through the steps.

When you press evaluate, this part displays the result at each step

Press this one by one to see the steps Excel follows to calculate the result
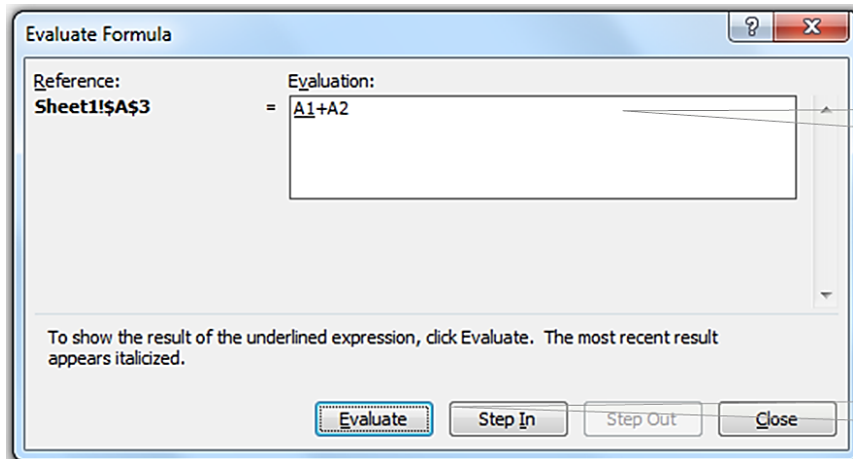
Excel Tip # 37: Get a Unique List (2 Methods)

"How do I get a unique list from this data set". This is one of the most common queries I get. And it has a very common and easy answer. I will show you 2 methods to do this. Suppose you have a data set as shown below and you want to get a list of unique items.

India
US
China
India
China
Japan
US
UK

→

India
US
China
Japan
UK
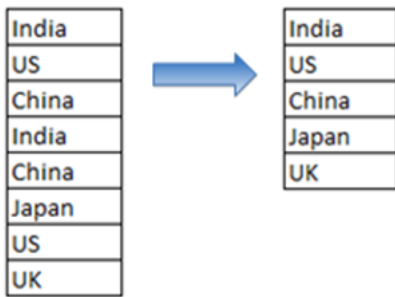
Method 1 – Remove Duplicates

1. Select the data set.
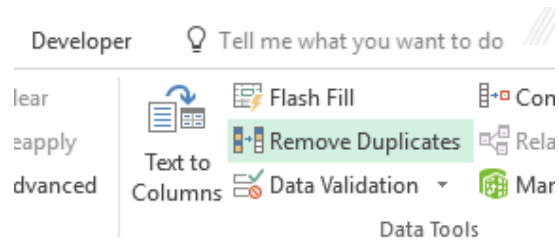2. Go to Data → Remove Duplicates (in Data Tools). This will open the Remove Duplicates dialogue box.
3. In the Remove Duplicates dialogue box, select the column in which you want to remove the duplicates. If your data has headers, select My Data has Header checkbox.
4. Click OK.

Method 2 – Advanced Filter Technique

1. Select the data set.
2. Go To Data → Sort and Filter → Advanced *(Key board shortcut – Alt + A + Q)*. This will open the advanced filter dialogue box.
3. In the advanced filter dialogue box, select Copy to another location.
4. Go to **Copy to:** field bar and select the cell where you want to copy this unique list.
5. Select Unique Records Only checkbox at the bottom.
6. Click Ok.
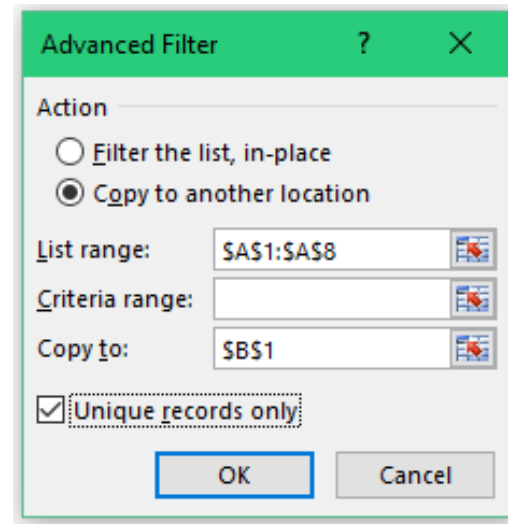
Note: Method 1 (Remove Duplicates option) would alter the original dataset. If you want it intact, make a copy.

Excel Tip # 38: **Intersect Operator in Excel**

Excel has an Intersect Operator that can be used to find the intersecting value(s) of two lists/ranges:

	A	B	C	D	E	F	G	H
1								
2		65	17	48	49	69	29	66
3		10	27	15	12	66	80	98
4		96	51	67	44	28	35	49
5		15	45	45	46	34	25	17
6		78	14	25	93	69	52	45
7		25	76	33	30	13	39	56
8		11	74	18	25	78	80	64
9		37	46	17	77	28	90	21

How to:

Suppose there is a data set as shown below.

1. Now if use **=C2:C9 B5:H5** *(Note there is a single space in between the ranges, which is also the intersect operator)*, it will give you 45 (the value in cell C5), which is the intersection of these 2 ranges.

Click here to see a practical example on how to use Intersect Operator.

Excel Tip # 39: Join Contents in 2 or more Cells – Concatenate

In excel you can join the content of various cells. For example, suppose you import a list which has First Name in one column and Last Name in second, and you want to combine these to be displayed together (as shown in the pic below).

Here are two ways to do this in Excel (take your pick)

Method 1 – CONCATENATE Formula

- Go to cell C1 and type the formula
  - **=CONCATENATE(A1," ",B1)**

Note that I have used " " (space in double quotes) in between A1 and B1. If you don't use it, you will get TrumpExcel as the output

Method 2 – Using Ampersand (&)

- Go to C1 and type the formula
  - **=A1&" "&B1**

This formula works exactly like the concatenate method.

C1		▾	⋮	✕ ✓ *fx*	=CONCATENATE(A1," ",B1)	
	A	B	C	D	E	
1	Trump	Excel	Trump Excel			

Excel Tip # 40: Debug Formula using F9

It's frustrating when you write a long formula and get an error at the end. Spotting an error in a formula could be a pain.

This technique will help you revisit the formula and identify the part that is causing the error.

How to:

1. Go to the cell which has the formula
2. Enter into edit mode (press F2)
3. Select the entire formula and press F9 – this will give you the result of the entire formula
   - You can also select a sub part of the formula and do this (see illustration below)

◢	A	B	C
1	TrumpExcel		=IF(A1="Trumpexcel","Right","wrong")

Debugging the Entire Formula

C
=IF(A1="Trumpexcel","Right","wrong")

Press F9 →

C
Right

Debugging a part of the formula

C
=IF(A1="Trumpexcel","Right","wrong")

Press F9 →

C
=IF(TRUE,"Right","wrong")

⚠️ **Caution:** Do not press Enter after pressing F9. This would hardcode the value and you would lose the formula. A good practice is to select the part of formula you want to debug, press F9 (note the result), and then press Control + Z.

Excel Tip # 41: Handle Errors in Excel Formula

Errors are not bad, we should just know how to handle it.

Sometimes errors are the inbuilt factor in your formula construct (for example, suppose you are using a VLOOKUP and it is unable to find a value, then it returns the #N/A error).

Here is a method that can handle that error for you:

For Excel 2007 and above

MS Excel team added a new formula in Excel 2007 – the IFERROR function

- Syntax - IFERROR(value, value_if_error)

Suppose you have a VLOOKUP formula **=VLOOKUP(A1,B1:B10,1,False**) and it returns an error (as the value in A1 is not there in B1:B10). You want to display 'Not in the List' instead of the ugly #N/A. Here is the formula you should use

=IFERROR(VLOOKUP(A1,B1:B10,1,False,"Not in List"))

Instead of "Not in List", you can use any other text, 0, or blank ("") if you want.

For Excel 2003

Life isn't so easy with Excel 2003, as it does not have the IFERROR function, but there is a way around. You can use a slightly longer version of the same formula.

Here it is:

=IF(ISERROR(VLOOKUP(A1,B1:B10,1,False)),"Not in List", VLOOKUP (A1,B1:B10,1,False))

Excel Tip # 42: Work with Imported Data – Some useful Tips

There are some issues that most of us face when we import a list in Excel. Here are some tips that might be helpful in getting the data in a usable format:

#1 – Change the Case of Text

1. To convert all text into UPPER CASE – Use Upper(A1) formula. This will change trump excel to TRUMP EXCEL
2. To convert text into Proper Case (first alphabet of every word is capitalize) - Use Proper(A1) formula. This will change trump excel to Trump Excel
3. To eliminate unwanted spaces – Use Trim(A1). This will remove all the spaces except single spaces between words.

#2 – Separate Text using Text-to-Column

This is a useful functionality if the text is imported in a single cell and you want to separate it to different cells. For example, you may get a list US,Canada,India,Brazil,China in a single cell and you wish to separate these in different cells

1. Go to Data → Text to Column.
2. In the Dialogue box (step 1 of the wizard), select Delimit (this uses a specified Delimiter to separate texts).
3. Click Next.
4. In the step 2 of the wizard, select the delimiter (such as a comma, dot, space, dash, etc.). In this case it is a comma(,). You can specify your own delimiter depending on your data.
5. Click Next.
6. In the step 3 of the wizard, you can specify the format of each column that will be created. Then click on Finish.

Excel Tip # 43: Count Non-blank Cells

If you are thinking that Excel already has an in-built function to do exactly this, then you are absolutely right. This can be done using the CountA() function.

There is only one small problem. A lot of times when you import data or use other people's worksheet, you will notice that there are cells that appear empty while they are not. They are blank but have ="" in it.

The trouble is that CountA does not consider this as an empty cell (it counts it as text). See the example below. Try using =CountA(A1:A11) here. It will give you 11 instead of 10. The reason is, it doesn't consider A11 as empty (while it should, because it is). But that is how excel works.

How to:

Here is the fix – use wildcard characters:

=CountA(A1:A11) + Countif(A1:A11,"?*")

This formula tells excel to count only if the cell either has a number or atleast one text character. In the ?* combo, ? (question mark) ensures that at least one character is present, and * (asterisk) makes room for any number of additional characters.

Similarly, you can use wildcards in many other formula such as IF(), Sumif(), Averageif(), and Match().

	A
1	One
2	Two
3	Three
4	Four
5	Five
6	Six
7	Seven
8	Eight
9	Nine
10	Ten
11	

This cell has ="" in it

Excel Tip # 44: Enable Fill Handle to auto-complete lists

One day, suddenly, my fill handle feature got disabled. And to be honest, I had no clue what had happened. I did not even know that I could enable it in seconds. So I kept going for months before discovering the way to enable it. Stupid me!!

In this tip I will let you know how enable it

How to:

1. Go to **File** -> **Options.**
2. Select **Advanced** from the left pane in the dialogue box.
3. In the Editing Options section, ensure that you have the **Enable fill handle and cell drag-and-drop** option checked.
4. Click **OK.**

Excel Tip # 45: Create a Scrollable List in Excel

A scrollable list is what you need when you have huge data sets and you don't want it to hijack your entire screen's real estate.

S No	State	Area in Sq Km	Population
1	Andhra Pradesh	275,045	76,210,007
2	Arunachal Pradesh	83,743	1,097,968
3	Assam	78,438	26,655,528
4	Bihar	94,163	82,998,509
5	Chhattisgarh	135,191	20,833,803
6	Goa	3,702	1,347,668
7	Gujarat	196,024	50,671,017
8	Haryana	44,212	21,144,564
9	Himachal Pradesh	55,673	6,077,900
10	Jammu & Kashmir	222,236	10,143,700
11	Jharkhand	79,714	26,945,829
12	Karnataka	191,791	52,850,562
13	Kerala	38,863	31,841,374
14	Madhya Pradesh	308,245	60,348,023
15	Maharashtra	307,713	96,878,627

List of 28 States of India

A scrollable list that displays 10 states at a time

State	Area in Sq Km	Population
Andhra Pradesh	275045	76210007
Arunachal Pradesh	83743	1097968
Assam	78438	26655528
Bihar	94163	82998509
Chhattisgarh	135191	20833803
Goa	3702	1347668
Gujarat	196024	50671017
Haryana	44212	21144564
Himachal Pradesh	55673	6077900
Jammu & Kashmir	222236	10143700

Scroll bar

Format Control

Size	Protection	Properties	Alt Text	Control

Current value: 1
Minimum value: 1
Maximum value: 19
Incremental change: 1
Page change: 5
Cell link: L3
☑ 3-D shading

How to:

1. The first step is to get your data. For the purpose of this post, I have used census 2001 data of 28 Indian States with its Area and Population.

2. Now Go to Developer Tab –> Insert –> Scroll Bar (Form Control)

3. Click on Scroll Bar (Form Control) button and click anywhere on your worksheet. This will insert a Scroll Bar in the worksheet.

4. Right click on the Scroll Bar and click on 'Format Control'. This will open a Format Control dialogue box

5. In Format Control dialogue box go to 'Control' tab, and make the settings as shown in the pic below. L3 is the cell that is linked to the scroll bar, and its value varies from 1 to 19. This is the cell value that we use to make the scrollable list.

6. Resize the Scroll Bar so that it fits at the side of 10 columns (this is just to give it a good look, as shown in the pic earlier)

7. Now enter the following formula in the first cell (H4) and then drag it to fill all the other cells
   =OFFSET(C3,L3,0)
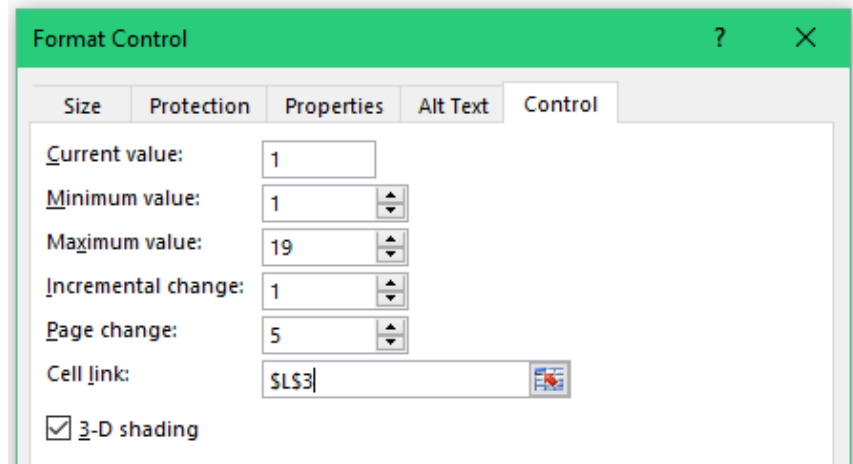
*Click here to download the data set and experiment with these formulas.*

Excel Tip # 46: Get Camera Tool in Excel

This one is for all the photography enthusiasts. Yes, excel has its own camera and its pretty amazing.

By default, you would not have camera tool activated and visible in the excel ribbon/menu. You can enable it by using the following steps:

How to Enable Camera Tool

1. Go to **File**.
2. Select **Options** → **Quick Access Toolbar** → **Command Not in the Ribbon** from the drop down.
3. Select **Camera Tool.**
4. Click **Add**.
5. Click **OK.**
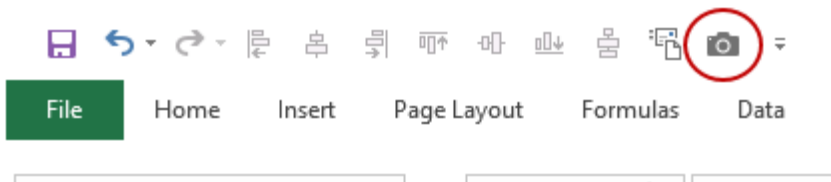
How it works

1. Select the data for which you want to create an image.
2. Click on the the camera tool icon.
3. Press anywhere in the sheet and it will create the image.
   - By default, it adds a border to the image. You can remove this right-clicking and then going into Format Picture options.

Some Examples where Camera Tool could be Helpful

1. While creating pictures of dynamic charts that update on selection.
2. When working with dependent data in multiple sheets. You could take a picture of the cell, and see how it changes when you change its dependent cell.

Excel Tip # 47: Custom design in the bars of a charts

You can customize the way the bars look in a bar chart in Excel. I have seen this trick being used by a lot of business articles by reputed newspapers and websites.

If used sparingly, this could add a bit of glamour and context to your charts. Look at the example below (this example is a complete figment of my imagination, but I hope it does a good job in demonstrating what I mean).

How to:

1. Create a bar chart as usual.
2. Right-click on any of the bars and select Format Data Series.
3. In the Format Data Series dialogue box, select Fill.
4. In Fill category, select Picture or texture fill.
5. Select Insert from File.
6. Select the picture you want to display and Click Insert.
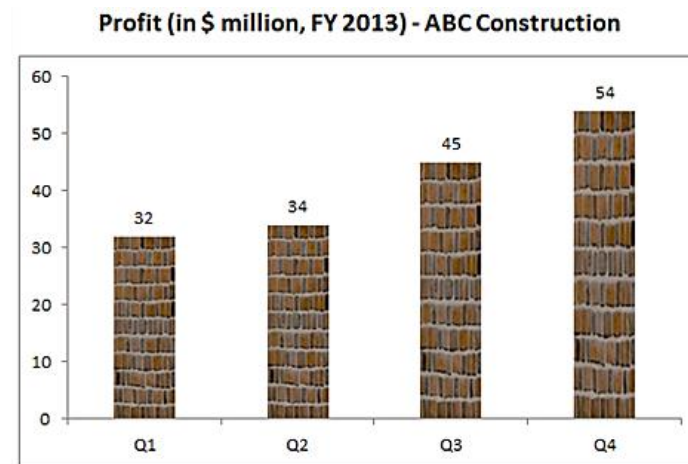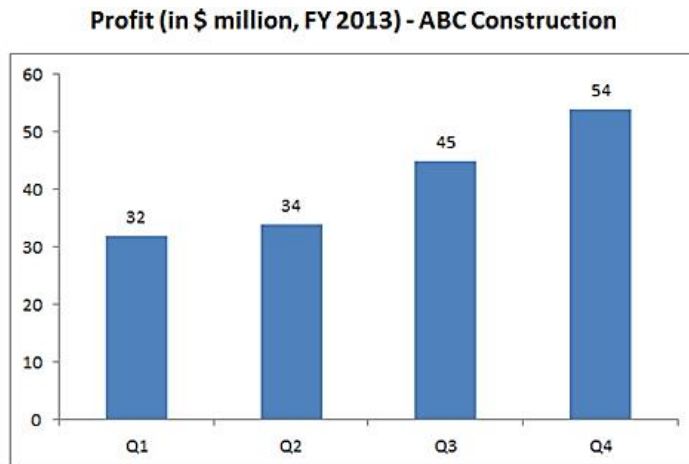
Excel Tip # 48: Get the Developer Tab Displayed in Excel Ribbon

Developer Tab is the part that enables you to create cool scroll bars and check boxes. But it is not displayed by default in excel. Here are the steps using which you can enable the developer tab to get displayed in the ribbon.

How to:

1. Go to File.
2. Click Options.
3. In Excel Options dialogue box, click Customize Ribbon.
4. On the right side panel, In the Main Tabs section, check the Developer option.
5. Click ok (*Now you will have 'Developer' displayed as one of the tabs*).

*To get the developer tab in Excel 2007 Go to Options -> Popular -> Show Developer tab in the Ribbon.*
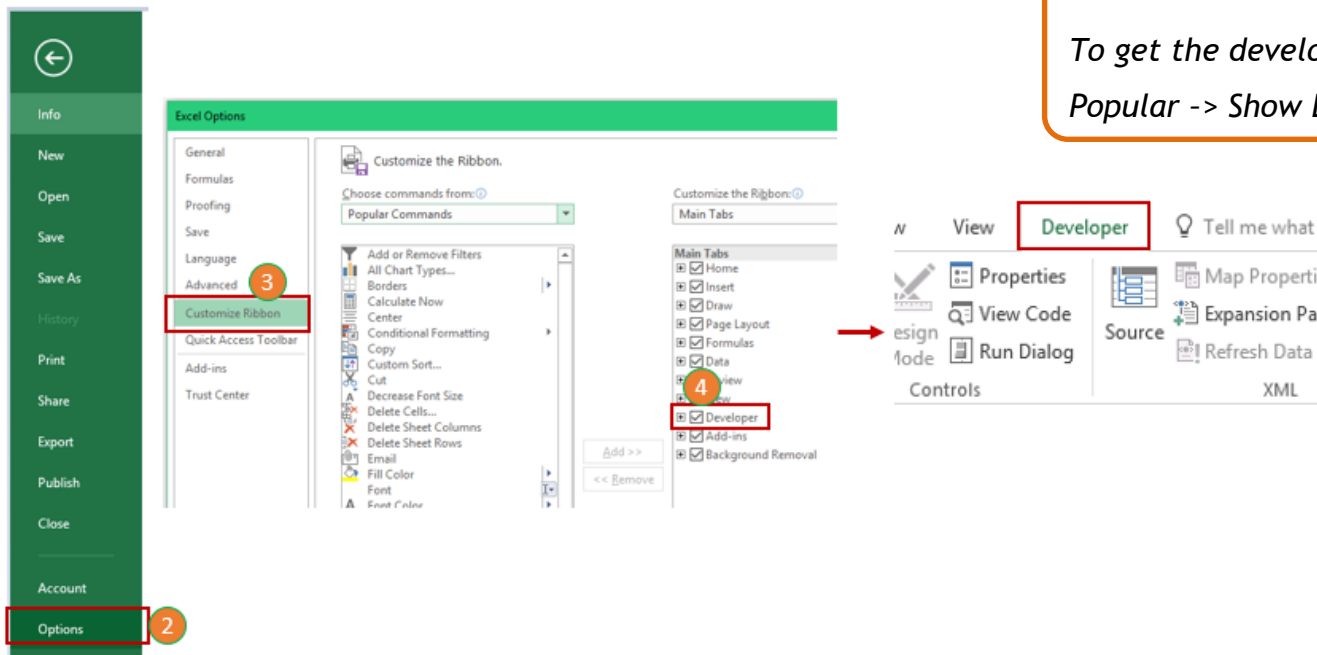
Excel Tip # 49: Reference to an area in a Worksheet

You can create a reference to an entire area in a worksheet. This is a good way when you have various tables in your data and you want to give a link to direct the user to a particular table.

How to:

1. Go to the cell where you want to create the reference link.
2. Right click and select Hyperlink.
3. In the Insert Hyperlink Dialogue box, select Place in this Document.
4. In the right-side pane, select the Sheet and type the cell reference.

Now when you click on the cell, it will take you to the sheet area that you referenced
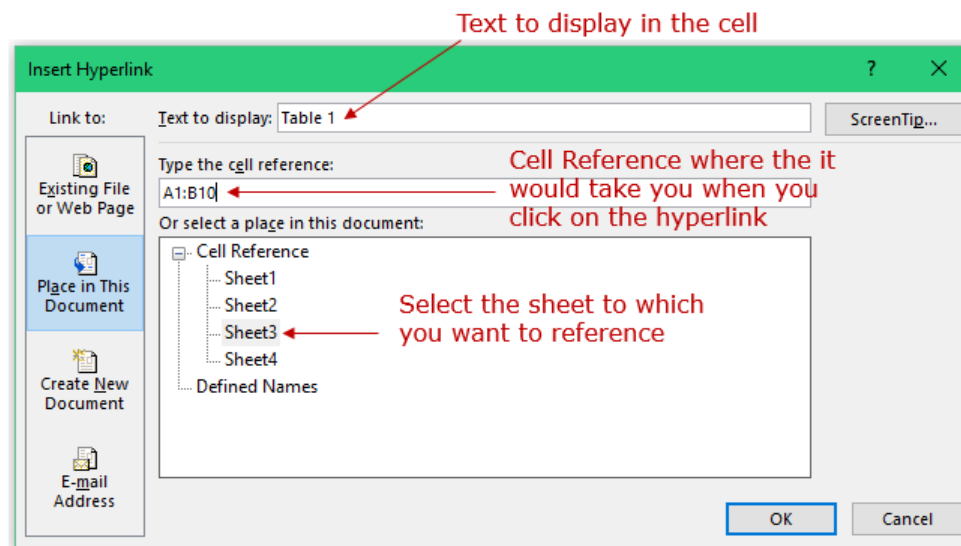
Excel Tip # 50: Display Columns Headers as Numbers (instead of alphabets)

You can change the columns headers from alphabets to number. You may want this when you either work with R1C1 reference style or you work with macros where most of the time the column is also reference by its number (for example in Offset formula).

How to:

1. Go to File → Options.
2. In the Excel Options dialogue box, select Formulas.
3. In the Working with formulas category, select R1 C1 reference style checkbox.
4. Now check your worksheet. The column headers would have changed.
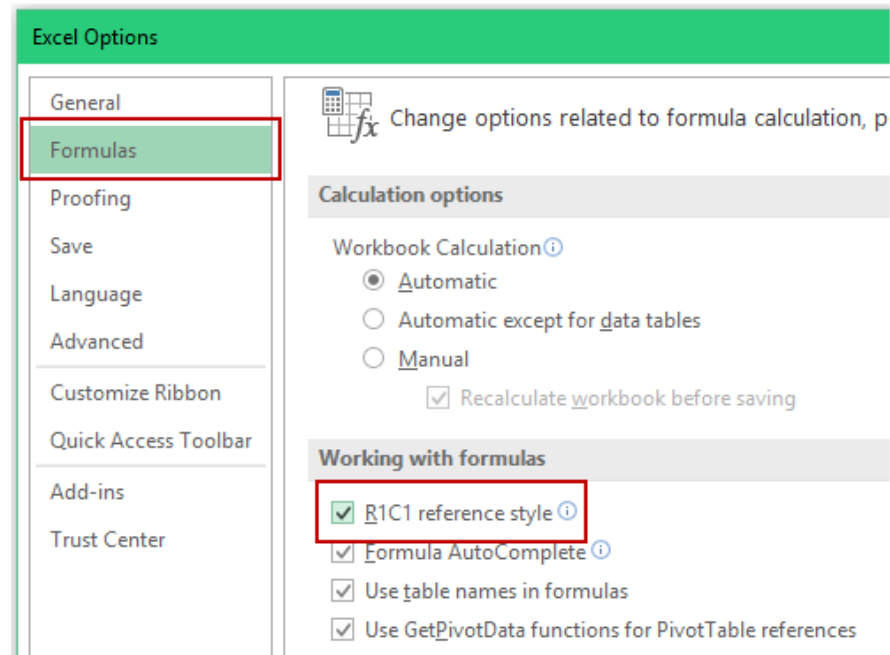
Excel Tip # 51: Create your own Calculated Field in Pivot Tables

Pivot table is a great way to summarize data. And it also enables you to play with the summarized data by adding your own field with your own calculation. For example, you may want to add 10% to the targets for each region. Here is how you can do it

	A	B
1		
2		
3	Row Labels	Sum of Target
4	Brazil	5842
5	Canada	5260
6	India	5695
7	US	6759
8	Grand Total	23556

	A	B	C
1			
2			
3	Row Labels	Sum of Target	Sum of Updated Target
4	Brazil	5842	6426.2
5	Canada	5260	5786
6	India	5695	6264.5
7	US	6759	7434.9
8	Grand Total	23556	25911.6

How to:

1. Select the Pivot Table.
2. Go to Pivot Table Tools → Options → Fields, Items, & Sets. (In Excel 2013/2016, this is in the Analyze tab).
3. Select Calculated Fields.
4. In the Insert Calculated Field dialogue box
   - **Name Field:** Type the name that you want to appear. In this case I selected **Updated Target**
   - **Formula:** Type the formula. In this case I used **=Target*1.1**
5. Click Ok.
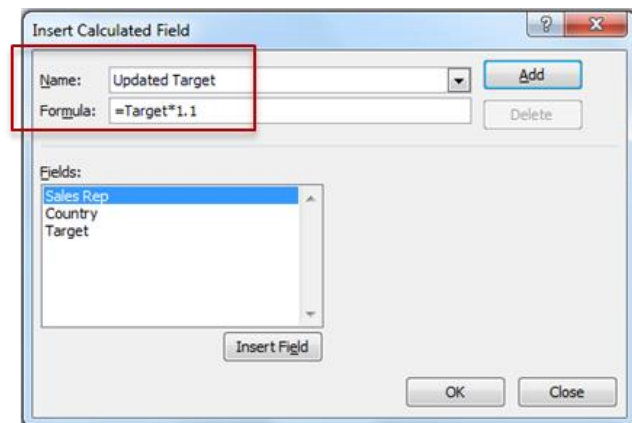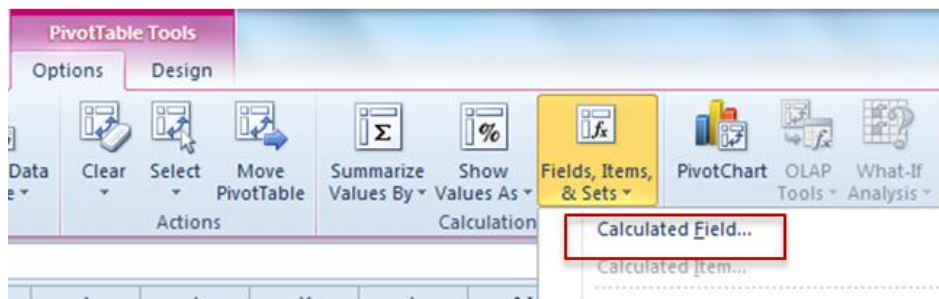
Some Additional Excel Resources

- [70+ Excel Functions (with examples and videos)](#)

- [Free Excel Templates](#)

- [Excel Course (Basic to Advanced)](#)

- [Excel Dashboard Course](#)

- [Excel VBA Course](#)

- [Free Excel Tutorials](#)

Hey there,

My name is Sumit Bansal and I started TrumpExcel.com as an effort to learn and share amazing things about Microsoft Excel. It's a journey, where I aim for continuous learning, and at the same time, take you all with me.

In this Ebook, I share 51 Excel Tips that you can start using today and be more productive in your work.

For more such tips and tricks, visit my blog – http://TrumpExcel.com

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Cheers
Sumit Bansal
Excel MVP