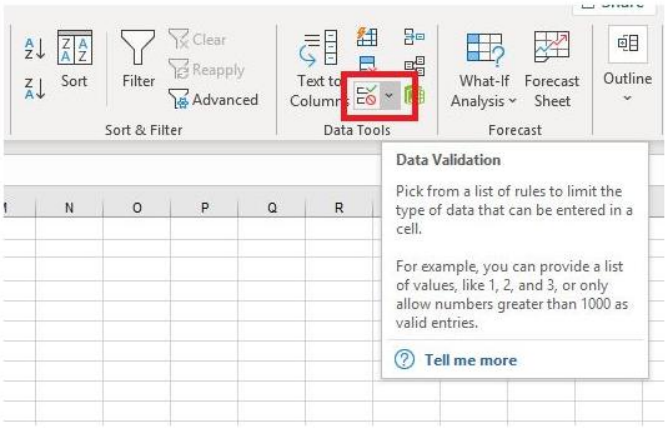
ADVANCE EXCEL

Validate Data in Excel

1. Select the cell you want to validate. Go to the Data tab > Data tools, and click on the Data Validation button.
A data validation dialogue box will appear having 3 tabs - Settings, Input Message, and Error Alerts.
2. On the settings tab, specify your validation criteria.
3. You can enter the input message if you want. This step is optional.
4. You can also set your custom error message. This step is optional.



Date Validation

You can set-up the date validation in Excel. Select date in the allow box and pick up the appropriate criteria.

Follow these steps to set-up date validation:

1. Select the cells where you'd be applying the data validation.
2. From the allowed dropdown, select the date.
3. From the Data drop-down, select between.
4. Click in the Start Date box and select cell O10, where the Start Date is entered.
5. Press the F4 key to change the cell reference to an absolute reference -- O10.
6. Click in the End Date box and select cell O11, where the End Date is entered.
7. Press the F4 key to change the cell reference to an absolute reference -- O11.
8. Click OK to close the Data Validation window.

Lookup and Reference Formulas in Excel

Function	Description
ADDRESS function	Returns a reference as text to a single cell in a worksheet
AREAS function	Returns the number of areas in a reference
CHOOSE function	Chooses a value from a list of values
COLUMN function	Returns the column number of a reference
COLUMNS function	Returns the number of columns in a reference
FILTER function	Filters a range of data based on criteria you define
FORMULATEXT function	Returns the formula at the given reference as text
GETPIVOTDATA function	Returns data stored in a PivotTable report
HLOOKUP function	Looks in the top row of an array and returns the value of the indicated cell
HYPERLINK function	Creates a shortcut or jump that opens a document stored on a

	network server, an intranet, or the Internet
INDEX function	Uses an index to choose a value from a reference or array
INDIRECT function	Returns a reference indicated by a text value
LOOKUP function	Looks up values in a vector or array
MATCH function	Looks up values in a reference or array
OFFSET function	Returns a reference offset from a given reference
ROW function	Returns the row number of a reference
ROWS function	Returns the number of rows in a reference
RTD function	Retrieves real-time data from a program that supports COM automation
SORT function	Sorts the contents of a range or array
SORTBY function	Sorts the contents of a range or array based on the values in a corresponding range or array
TRANSPOSE function	Returns the transpose of an array

Excel current date and time formulas (static)

You may not always want the figures in the file to update every time you open the file. If this is the case, then you'll want to insert a static version of the formulas.

Static formulas are:

- "Ctrl + ;" – inserts the date (Windows)
- "Ctrl + Shift + ;" – inserts the date and time (Windows)
- "COMMAND + ;" (Mac)

Insert current date and time in Excel

There are many reasons you may want to display the current date and time in Excel. Let's say that you want users to have the current time displayed on a cover page every time you print off a financial model.

Reasons to include time and date include:

- Creating an activity log
- On a cover page
- When printing a document
- For version control
- When showing time-sensitive information
- When discounting cash flows to the present (Net Present Value and XNPV function)

Change the date and time formatting

You may wish to change the format of date or time displayed in the spreadsheet. In order to do this, press F1 (or right-click on the cell and click Format Cells). Once you see the Format Cells box appear on the screen, you can click on Number and then select Date or Time and choose the formatting you want to appear in your spreadsheet.

Applications in financial modeling

The Excel current time and date function is very useful in performing financial analysis, as time is a critical factor in financial modeling and valuation. The most important use is in discounting cash flows and ensuring that the net present value date is correct. You may wish to use a static or dynamic version of the formulas shown in this article, depending on the analysis being performed.

Introduction to Excel Charting

In Microsoft Excel, charts are used to make a graphical representation of any set of data. A chart is a visual representation of data, in which the data is represented by symbols such as bars in a bar chart or lines in a line chart.

Charts Group

You can find the Charts group under the **INSERT** tab on the Ribbon.

The Charts group on the Ribbon looks as follows –

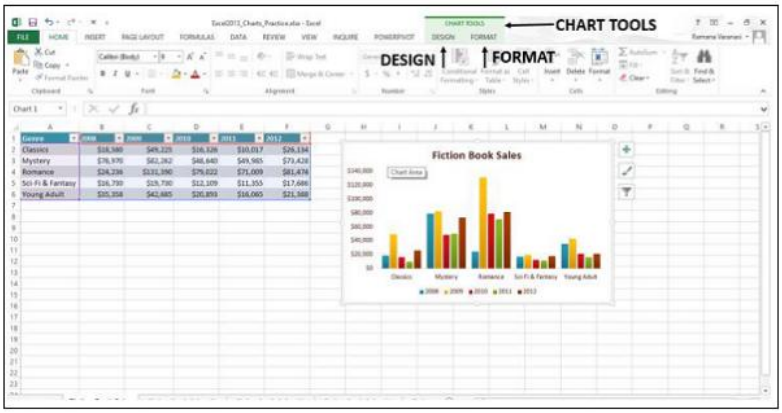
The Charts group is formatted in such a way that −

- Types of charts are displayed.
- The subgroups are clubbed together.
- It helps you find a chart suitable to your data with the button Recommended Charts.

Chart Tools

When you click on a chart, a new tab Chart Tools is displayed on the ribbon. There are two tabs under chart tools −

- Design
- Format

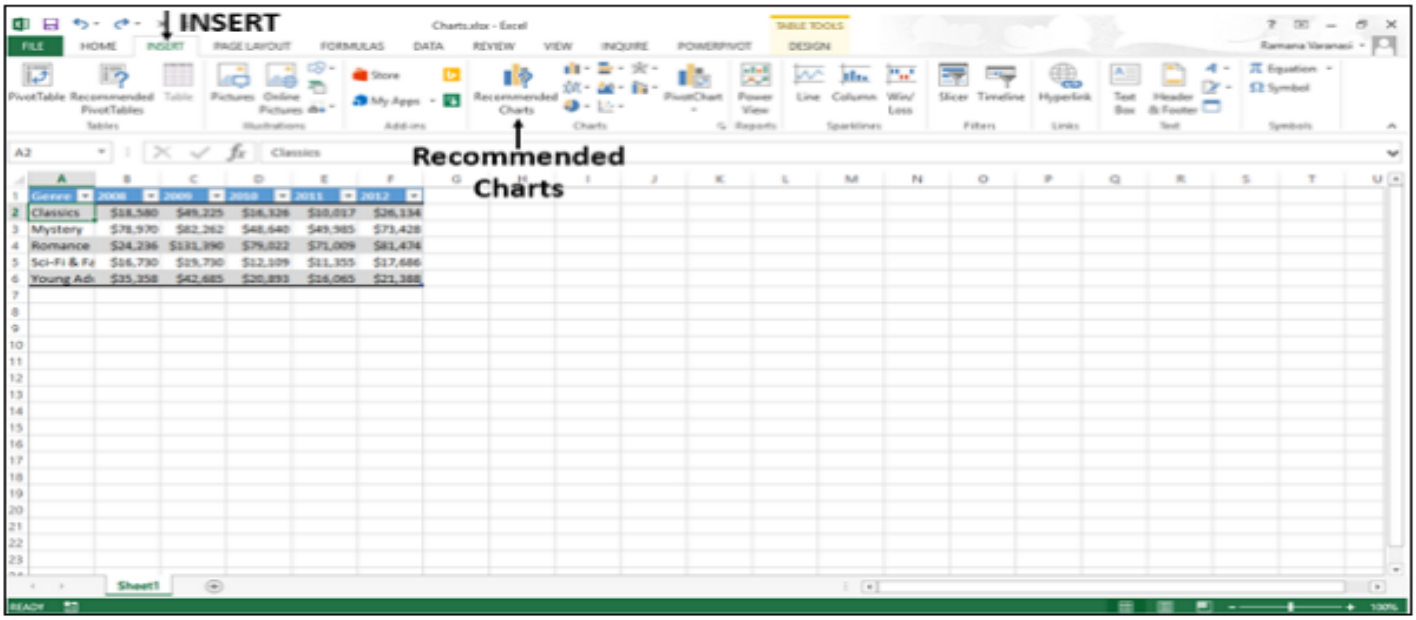


Recommended Charts

The Recommended Charts command on the Insert tab helps you to create a chart that is just right for your data.

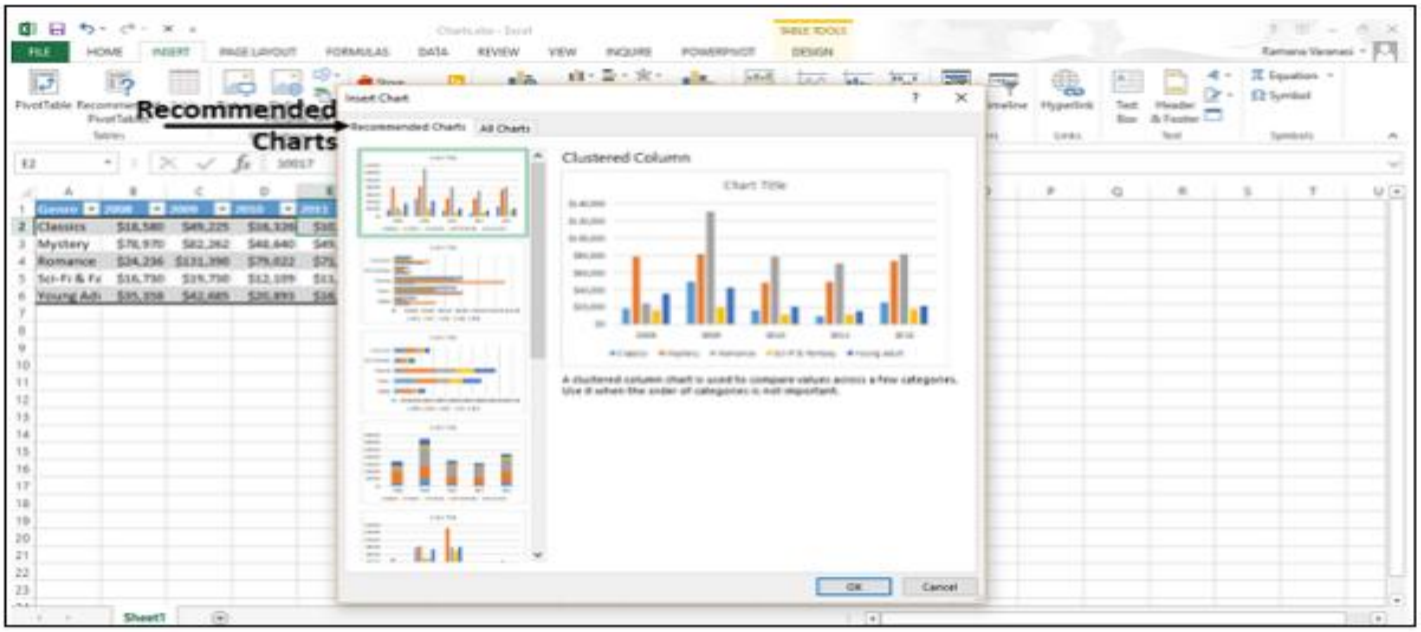
To use Recommended charts −

Step 1 − Select the data.



Step 2 – Click **Recommended Charts**.

A window displaying the charts that suit your data will be displayed.



Overview of PivotTables and PivotCharts

You can use a PivotTable to summarize, analyze, explore, and present summary data. PivotCharts complement PivotTables by adding visualizations to the summary data in a PivotTable, and allow you to easily see comparisons, patterns, and trends. Both PivotTables and PivotCharts enable you to make informed decisions about critical data in your enterprise. You can also connect to external data sources such as SQL Server tables, SQL Server Analysis Services cubes, Azure Marketplace, Office Data Connection (.odc) files, XML files, Access databases, and text files to create PivotTables, or use existing PivotTables to create new tables.

About PivotTables

A PivotTable is an interactive way to quickly summarize large amounts of data. You can use a PivotTable to analyze numerical data in detail, and answer unanticipated questions about your data. A PivotTable is especially designed for:

- Querying large amounts of data in many user-friendly ways.
- Subtotaling and aggregating numeric data, summarizing data by categories and subcategories, and creating custom calculations and formulas.
- Expanding and collapsing levels of data to focus your results, and drilling down to details from the summary data for areas of interest to you.
- Moving rows to columns or columns to rows (or "pivoting") to see different summaries of the source data.
- Filtering, sorting, grouping, and conditionally formatting the most useful and interesting subset of data enabling you to focus on just the information you want.
- Presenting concise, attractive, and annotated online or printed reports.

  For example, here's a simple list of household expenses on the left, and a PivotTable based on the list to the right:

Household expense data

	A	B	C
1	MONTH	CATEGORY	AMOUNT
2	January	Transportation	$74.00
3	January	Grocery	$235.00
4	January	Household	$175.00
5	January	Entertainment	$100.00
6	February	Transportation	$115.00
7	February	Grocery	$240.00
8	February	Household	$225.00
9	February	Entertainment	$125.00
10	March	Transportation	$90.00
11	March	Grocery	$260.00
12	March	Household	$200.00
13	March	Entertainment	$120.00

Corresponding PivotTable

AMOUNT	MONTH			
CATEGORY	January	February	March	Grand Total
Entertainment	$100	$125	$120	$345
Grocery	$235	$240	$260	$735
Household	$175	$225	$200	$600
Transportation	$74	$115	$90	$279
Grand Total	$584	$705	$670	$1,959