

## LABORATORY 1 : Excel and Basic Statistics

1. Complete topics 1 to 4 in the Data Analysis section of the tutorial -- <https://www.excel-easy.com/data-analysis.html>. You may want to do those topics in the Data Analysis + section as well.

**Data Analysis**

This section illustrates the powerful features Excel has to offer to analyze data.

- 1 **Sort**: You can sort your Excel data on one column or multiple columns. You can sort in ascending or descending order.
- 2 **Filter**: Filter your Excel data if you only want to display records that meet certain criteria.
- 3 **Conditional Formatting**: Conditional formatting in Excel enables you to highlight cells with a certain color, depending on the cell's value.
- 4 **Charts**: A simple Excel chart can say more than a sheet full of numbers. As you'll see, creating charts is very easy.
- 5 **Pivot Tables**: Pivot tables are one of Excel's most powerful features. A pivot table allows you to extract the significance from a large, detailed data set.
- 6 **Tables**: Master Excel tables and analyze your data quickly and easily.
- 7 **What-If Analysis**: What-If Analysis in Excel allows you to try out different values (scenarios) for formulas.
- 8 **Solver**: Excel includes a tool called solver that uses techniques from the operations research to find optimal solutions for all kind of decision problems.
- 9 **Analysis ToolPak**: The Analysis ToolPak is an Excel add-in program that provides data analysis tools for financial, statistical and engineering data analysis.


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**Data Analysis +**

Become an Excel pro! You can find related examples and features at the bottom of each chapter. Below you can find an overview.

- 1 **Sort**: [Custom Sort Order](#) | [Sort by Color](#) | [Reverse List](#) | [Randomize List](#) | [SORT function](#)
- 2 **Filter**: [Number and Text Filters](#) | [Date Filters](#) | [Advanced Filter](#) | [Data Form](#) | [Remove Duplicates](#) | [Outlining Data](#) | [Subtotal](#) | [Unique Values](#) | [FILTER function](#)
- 3 **Conditional Formatting**: [Manage Rules](#) | [Data Bars](#) | [Color Scales](#) | [Icon Sets](#) | [Find Duplicates](#) | [Shade Alternate Rows](#) | [Compare Two Lists](#) | [Conflicting Rules](#) | [Heat Map](#)
- 4 **Charts**: [Column Chart](#) | [Line Chart](#) | [Pie Chart](#) | [Bar Chart](#) | [Area Chart](#) | [Scatter Plot](#) | [Data](#)

Please note that data (excel file) to be used in the tutorial is provided in the “Download Excel File” section on the right panel of the page (see photo below.)

**Excel Easy**  
#1 Excel tutorial on the net

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## Sort

One Column | Multiple Columns

You can sort your Excel data on one column or multiple columns. You can sort in ascending or descending order.

### One Column

To sort on one column, execute the following steps.

1. Click any cell in the column you want to sort.

	A	B	C	D	E
1	Last Name	Sales	Country	Quarter	
2	Smith	\$16,753.00	UK	Qtr 3	
3	Johnson	\$14,808.00	USA	Qtr 4	
4	Williams	\$10,644.00	UK	Qtr 2	
5	Jones	\$1,390.00	USA	Qtr 3	
6	Brown	\$4,865.00	USA	Qtr 4	
7	Williams	\$12,438.00	UK	Qtr 1	
8	Johnson	\$9,339.00	UK	Qtr 2	
9	Smith	\$18,919.00	USA	Qtr 3	
10	Jones	\$9,213.00	USA	Qtr 4	
11	Jones	\$7,433.00	UK	Qtr 1	
12	Brown	\$3,255.00	USA	Qtr 2	
13	Williams	\$14,867.00	USA	Qtr 3	
14	Williams	\$19,302.00	UK	Qtr 4	
15	Smith	\$9,698.00	USA	Qtr 1	

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### Chapter

Sort

### Learn more, it's easy

Sort by ColorReverse ListRandomize List

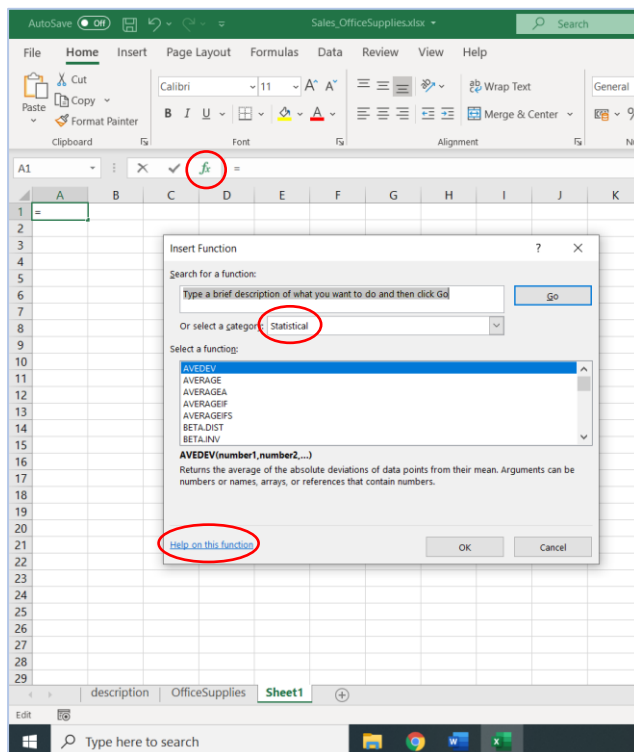
Download Excel File

data-set.xlsx

### Follow Excel Easy

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2. Check out Excel statistical functions. Browse through to see what are provided.



The screenshot shows the Microsoft Excel interface with the 'Insert Function' dialog box open. The 'Statistical' category is selected, and the 'AVEDEV' function is highlighted in the list. The 'Help on this function' link is circled in red. The background shows a spreadsheet with columns A through K and rows 1 through 29. The formula bar shows '=A1'.

3. Sales\_OfficeSupplies.xls contains 43 rows of sales of 5 products in 3 regions by 11 sales representatives.
- The company has a policy to give 5% of total sales to sales representative(s) as outstanding award. Award can be given to more than one sales representative. You, as a sales manager, are to decide (1) to whom the award should be given to (2) how much should each award recipient get.
  - List out Excel functions that you plan to use ?
  - Write down your award allocation strategy. Use Excel to allocate sales outstanding award.
  - Write a report to propose the award details to the owner of the company.

Note that you may make assumption wherever necessary. Be sure to include that in your report.

What to submit : the excel file, list of excel functions used in award allocation, award allocation strategy, award proposal