

How to use the Histogram tool in Excel

Source: <https://support.microsoft.com/en-us/help/214269/how-to-use-the-histogram-tool-in-excel>

You can analyse your data and display it in a histogram (a column chart that displays frequency data) by using the Histogram tool of the Analysis ToolPak in Microsoft Office Excel. To create a histogram, you must organize the data in two columns on the worksheet. These columns must contain input data and bin numbers. Input data is the data that you want to analyze by using the Histogram tool. Bin numbers are the numbers that represent the intervals that you want the Histogram tool to use for measuring the input data in the data analysis.

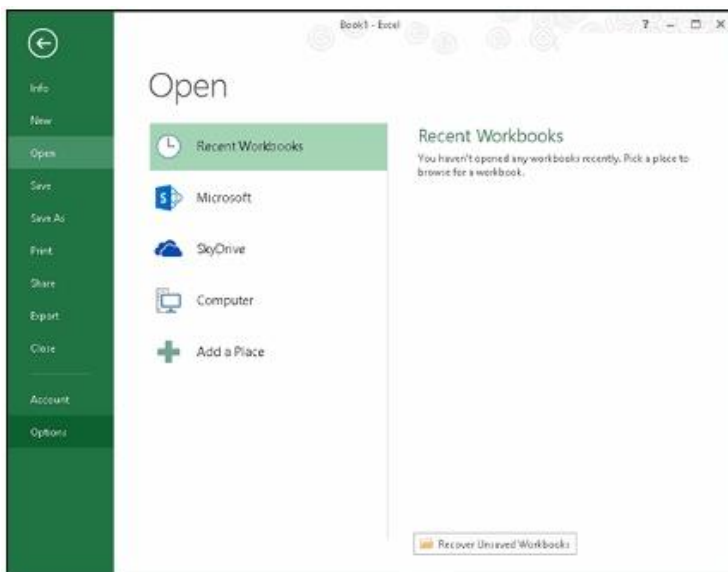
When you use the Histogram tool, Excel counts the number of data points in each data bin. A data point is included in a particular data bin if the number is greater than the lowest bound and equal to or less than the largest bound for the data bin. If you omit the bin range, Excel creates a set of evenly distributed bins between the minimum and maximum values of the input data.

The output of the histogram analysis is displayed on a new worksheet (or in a new workbook) and shows a histogram table and a column chart that reflects the data in the histogram table.

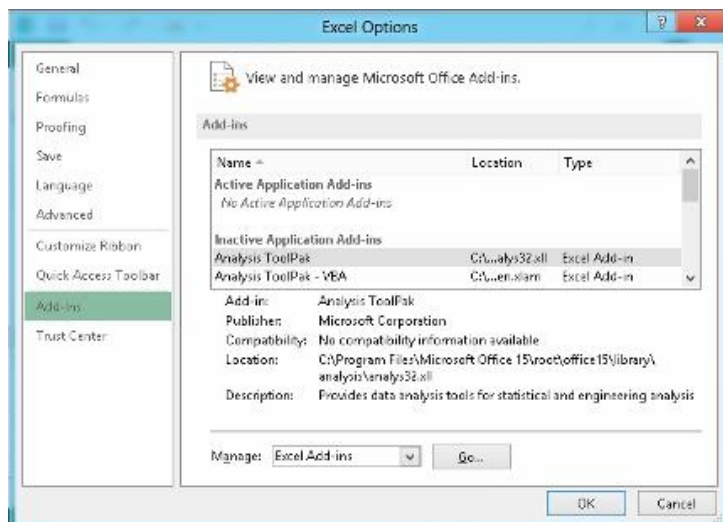
Before you can use the Histogram tool, you have to make sure that the **Analysis ToolPak** Add-in is installed.

To install the Analysis ToolPak Add-in

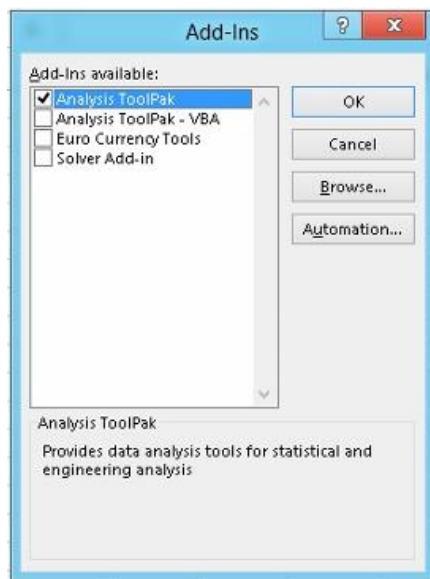
1. On the **File** menu, click **Options**.



2. Click **Add-Ins** in the navigation pane.



3. In the **Manage** list, select **Excel Add-ins**, and then click **Go**.
4. In the **Add-Ins** dialog box, make sure that the **Analysis ToolPak** check box under **Add-Ins available** is selected, and then click **OK**.



Note For the Analysis ToolPak Add-in to be displayed in the **Add-Ins** dialog box, it must be installed on your computer. If you do not see **Analysis ToolPak** in the **Add-Ins** dialog box, run Microsoft Excel Setup and add this component to the list of installed items.

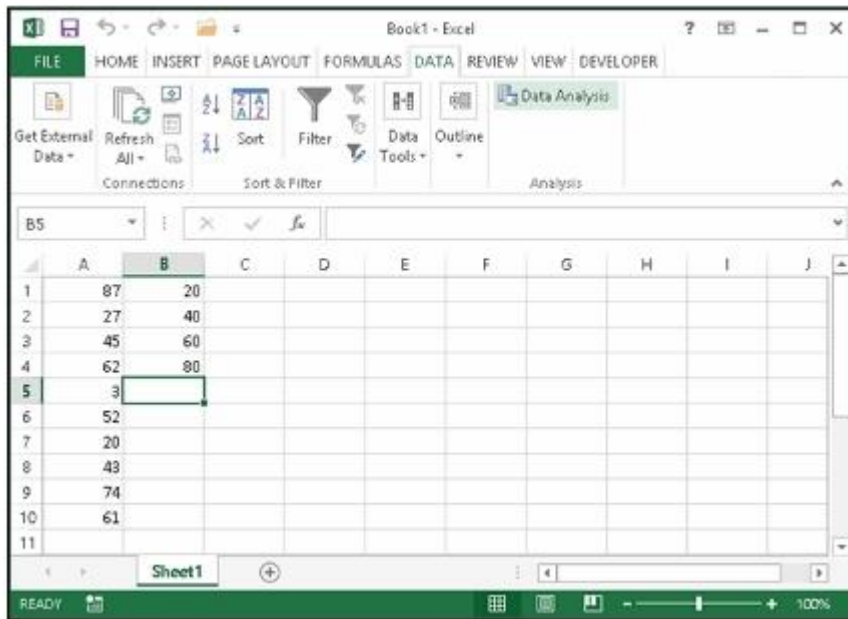
Create a histogram table

To create a histogram table, follow these steps:

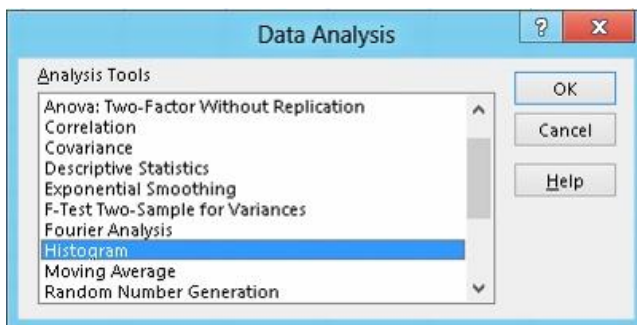
1. Copy and paste or type the following data into a new worksheet.

87	20
27	40
45	60
62	80
3	
52	
20	
43	
74	
61	

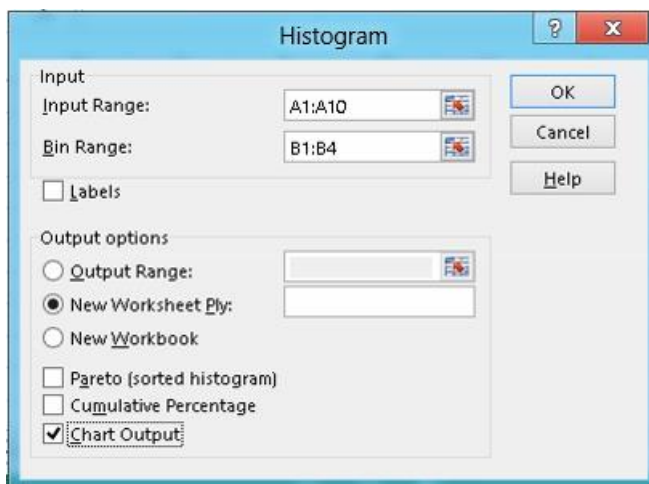
- On the **Data** tab, click **Data Analysis** in the **Analysis** group.



- In the **Data Analysis** dialog box, click **Histogram**, and then click **OK**.



- In the **Input Range** box, type A1:A10.



- In the **Bin Range** box, type B1:B4.
- Under **Output Options**, click **New Workbook**, select the **Chart Output** check box, and then click **OK**.

Excel generates a new workbook with a histogram table and an embedded chart.

Based on the sample data, the histogram table will resemble the following table:

A1: Bin	B1: Frequency
A2: 20	B2: 2
A3: 40	B3: 1
A4: 60	B4: 3
A5: 80	B5: 3
A6: More	B6: 1

Your chart will be a column chart that reflects the data in this histogram table. In this example, the bin that corresponds to data values from 0 to 20 contains two data points: 3 and 20.

