

# Excel assignment 1

1.What is Excel? Why do we use excel?

a.**Excel** is a [spreadsheet](#) application developed and published by [Microsoft](#). It is part of the [Microsoft Office](#) suite of productivity software.

Unlike a word processor, such as [Microsoft Word](#),

Excel organizes data in [columns](#) and [rows](#). Rows and columns intersect at a space called a [cell](#).

Each cell contains data, such as text, a numerical value, or a [formula](#).

Excel was originally [code-named Odyssey](#) during development. It was first released on September 30, [1985](#).

Microsoft Excel **enables users to format, organize and calculate data in a spreadsheet**. By organizing data using software like Excel, data analysts and other users can make information easier to view as data is added or changed. Excel contains a large number of boxes called cells that are ordered in rows and columns.

2.List all the versions of Microsoft excel.

Compare excel software provided from multiple vendors.

**a.Excel 365**

Excel 2021

Excel 2019

Excel 2016 and 365

Excel 2013 (Windows)

Excel 2011 (Mac)

Excel 2010 (Windows)

Excel 2008 (Mac)

Excel 2007 (Windows)

Excel 2004 (Mac)

Excel 2003 (Windows)

Older Windows versions (2002, 2000, 97, 95, 4.0, 3.0, 2.0)

Older Mac versions (2001, 2000, 98, 5, 4, 3, 2, 1)

3.How to create bar charts in excel,  
demonstrated with practical examples.

***Bar charts in Excel*** are useful in representing the single data on the horizontal bar. They represent the values in horizontal bars. Categories are displayed on the Y-axis in these charts, and values are shown on the X-axis. To create or make a bar chart, a user needs at least two variables, i.e., independent and dependent variables.

For example, we can potentially turn any Excel data into a stacked bar graph that can display comparisons between categories of data, ranking, part-to-whole, deviation, or distribution. It compares parts of a whole with the ability to break down. We can also use the clustered bar chart to represent more than one data series in clustered horizontal columns when the data is complex and difficult to understand. In addition, we can also use a 3D bar chart to provide the title to the chart and define labels and values to create the chart more understandable.

4.Create an analytics dashboard in python and  
present your findings.

a. A data analysis scenario to up your analysis game and provide better results

Way back in 1998, I was working at a growing startup and my boss came to me with a task, which was to provide a set of client reports for some of our partners. As a project manager with very little formal training, this was new to me and forced me on this path of trying to be better. Decades later, I'm still working through it and trying to teach what I've learned along the way.

If you're like me, you will likely scream if you see one more project involving the stock datasets. Gapminder is nice but by now it's played out. Seeing one more dashboard built on Covid data doesn't really give much value.

That's what drove the process behind this project and article. But, that's not all.

I regularly use economic data in my projects. My previous article focused on commodity reports, but there's a whole store of other data provided by the United States Federal Reserve's FRED system that we can also use. Here is a link to the previous article if you're so inclined

## 5.How to connect Excel with the databases?

a.You can connect Excel to a database and then import data and create tables and charts based on values in the database. In this tutorial you will set up the connection between Excel and a database table, save the file that stores data and the connection information for Excel, and then create a pivot chart from the database values.

You'll need to create a database before you get started. If you don't have one, see [Create a database in Azure SQL Database](#) and [Create server-level IP firewall](#) to get a database with sample data up and running in a few minutes.

In this article, you'll import sample data into Excel from that article, but you can follow similar steps with your own data.

You'll also need a copy of Excel. This article uses [Microsoft Excel 2016](#)

