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Lab 05: Introduction to MS Excel

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## Introduction to Microsoft Excel

Microsoft Excel is a powerful spreadsheet application that allows users to create, analyze, and manage data efficiently. It is a part of the Microsoft Office suite and is widely used for various purposes such as data analysis, budgeting, accounting, and more.

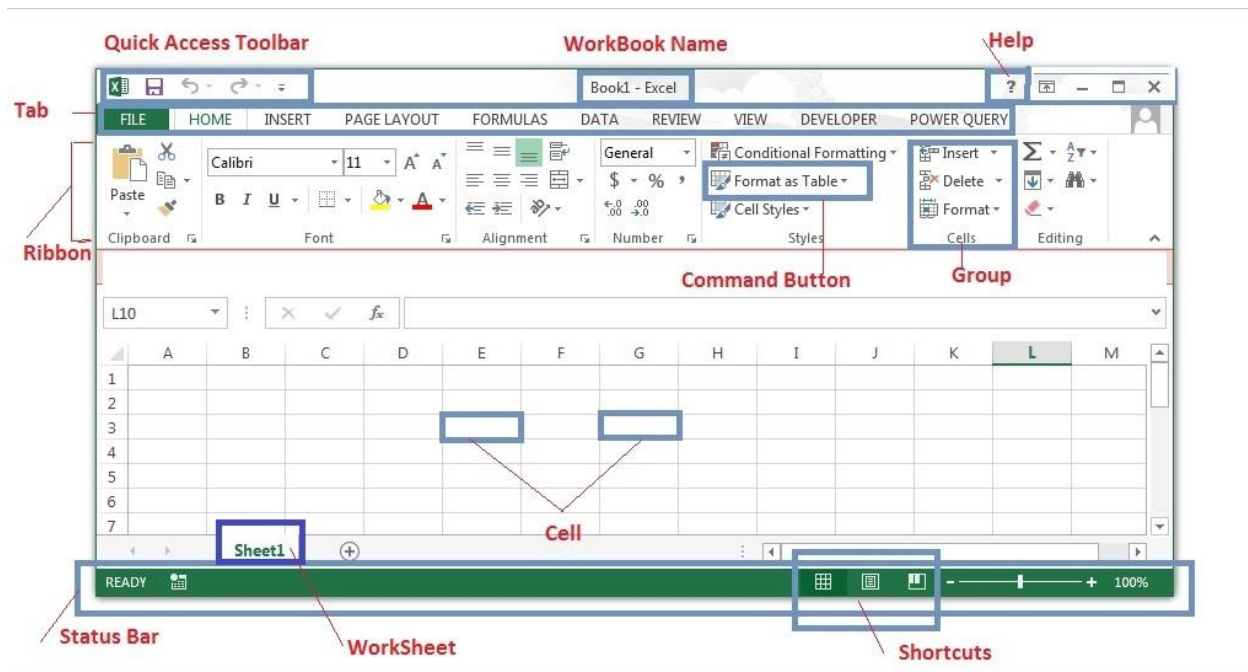
**Number of Rows and Columns:** In Excel 2013, each worksheet contains 1,048,576 rows and 16,384 columns. These rows and columns create a vast grid in which you can input and manipulate data.

## Understanding the Interface: Ribbon, Tabs, and Commands

**Ribbon:** The Ribbon is the horizontal toolbar at the top of the Excel window. It is divided into tabs, each containing various commands and tools. The tabs are organized logically, with each tab focusing on specific tasks like formatting, data, formulas, etc.

**Tabs:** Excel's Ribbon has several tabs, including Home, Insert, Page Layout, Formulas, Data, Review, and View. These tabs group related commands and tools together for easy access.

**Commands:** Commands are the specific functions and features within each tab. For example, in the Home tab, you'll find commands for formatting cells, clipboard functions, and more.



## Workbook vs. Worksheet vs. Cells:

**Workbook:** A workbook in Excel is like a file that can contain multiple worksheets. It is identified by its file name and can have one or more worksheets within it.

**Worksheet:** A worksheet is a single sheet within a workbook. It consists of a grid of rows and columns where you can input and manipulate data. Excel starts with three default worksheets in each new workbook.

**Cells:** Cells are the individual boxes within a worksheet where you enter and manipulate data. They are identified by their column letter and row number, such as A1, B2, etc.

## Navigating Excel

**Moving Between Cells, Rows, and Columns:** You can navigate through Excel using the arrow keys on your keyboard. The arrow keys allow you to move between adjacent cells, rows, and columns.

**Selecting Ranges of Cells:** To select multiple cells or a range of cells, click and drag your mouse over the desired area. Alternatively, you can hold down the Shift key and use the arrow keys to extend your selection.

## Data Entry and Editing

**Entering Text, Numbers, and Dates:** To enter data into a cell, simply click on the cell and start typing. You can enter text, numbers, or dates as needed. Press Enter to move to the next cell.

**Editing and Deleting Cell Content:** To edit cell content, double-click on the cell, or press F2, and you can modify the content. To delete cell content, select the cell and press the Delete key or use the Clear option in the Home tab.

**Using AutoFill for Quick Data Population:** AutoFill is a feature that allows you to quickly fill a series of cells with data. You can click and drag the fill handle (a small square at the lower-right corner of a selected cell) to copy and fill data patterns.

## Cell Formatting

**Changing Font Style and Size:** You can change the font style and size by selecting the cell or range, then using the Font options in the Home tab. You can also change font color and apply bold, italic, or underline formatting.

**Applying Cell Background Colors and Borders:** To change the background color of a cell, use the Fill Color option in the Home tab. To add borders around cells or ranges, use the Border option, where you can choose border styles, colors, and thickness.