Lab No. 04: Microsoft Excel (Basic Features)

Key Points:

1. Number formatting
2. Formula bar
3. Address bar
4. Cell formatting
5. Sheet formatting
6. Performing mathematical calculation

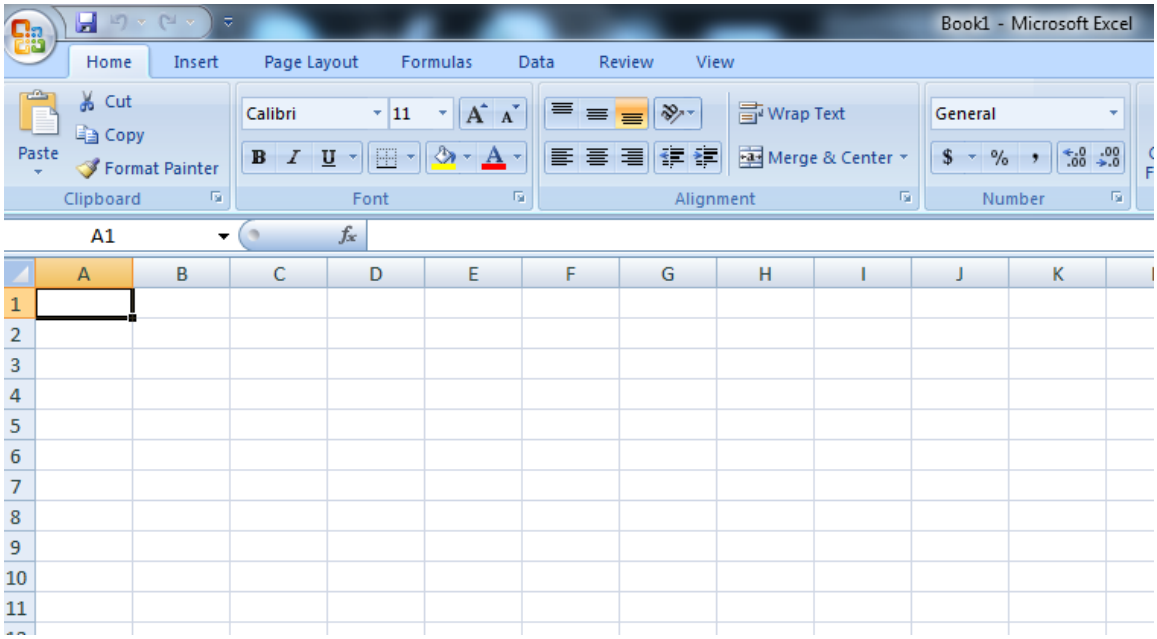
Objective:

- To understand how to work in MS Excel.

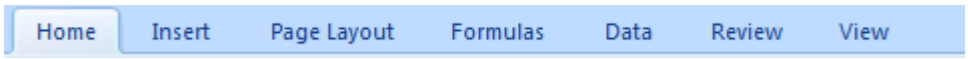
CLO's

- CLO: 01, 04, 05

The Microsoft Excel Window

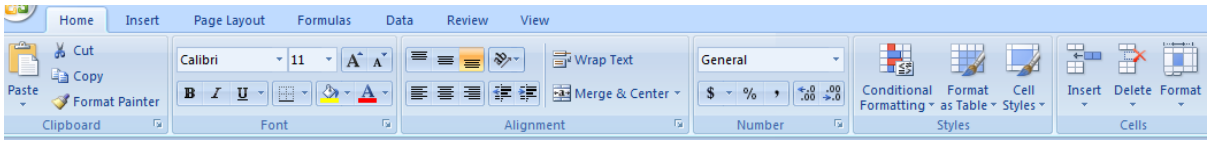


The Title Bar

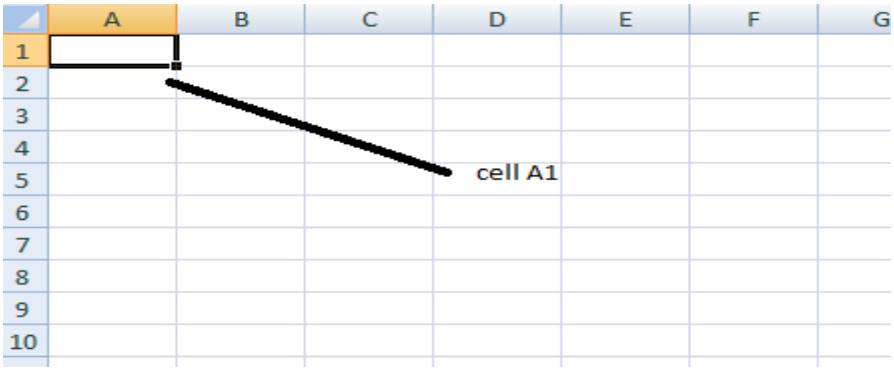


Toolbars:

The Standard Toolbar & Formatting Toolbar



Worksheets:



Microsoft Excel consists of worksheets. Each worksheet contains columns and rows. The columns are lettered A to IV **(256);** the rows are numbered 1 to **65536**. **The combination of a column coordinate and a row coordinate make up a cell address.** For example, the cell located in the upper left corner of the worksheet is cell A1, meaning column A, row 1. Cell E10 is located under column E on row 10. You enter your data into the cells on the worksheet.

The Formula Bar:

Formula Bar

The cell address displays in the Name box on the left side of the Formula bar. Cell entries display on the right side of the Formula bar

The Status Bar:

Status Bar

Entering Numbers as Labels or Values:

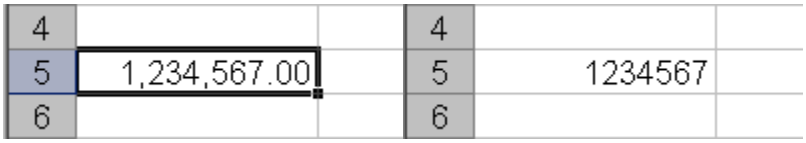
In Microsoft Excel, you can enter numbers as labels or as values.

Labels are alphabetic, alphanumeric or numeric text on which you do not perform mathematical calculations.

Values *are numeric text on which you perform mathematical calculations*. If you have a numeric entry, such as an employee number, on which you do not perform mathematical calculations, enter it as a label by typing a single quotation mark **(')** first.

Formatting Numbers:

You can format the numbers you enter into Microsoft Excel. You can add **commas** to separate thousands, specify the number of decimal places, place a dollar sign in front of the number, or display the number as a percent in addition to several other options.



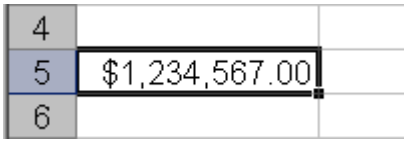
Before Formatting After Formatting

1. Move the cursor to cell A5.
2. Type **1234567**.
3. Press Enter.
4. Move the cursor back to cell A5.

5. Choose *Format* > *Cells* from the menu. The Format Cells dialog box will open.
6. Choose the Number tab.
7. Click Number in the Category box.
8. Type **2** in the Decimal Places box.
9. Place a check mark in the Use 1000 Separator box.
10. Click OK. The number should now display with two decimal places. The thousands should now be separated by commas.

Adding a Dollar Sign to a Numeric Entry:

1. Move the cursor to cell A5.
2. Choose *Format* > *Cells* from the menu. The Format Cells dialog box opens.
3. Choose the Number tab.
4. Click Currency in the Category box.
5. Make sure there is a "$" in the Symbol box.
6. Click OK. The number displays with a dollar sign.



Alternate Method: Formatting Numbers by Using the Toolbar:

1. Move the cursor to cell A6.
2. Type **1234567**.
3. Press Enter.
4. Move the cursor back to cell A6.
5. Click twice on the Increase Decimal icon to change the number format to two decimal places. Clicking on the Decrease Decimal icon decreases the decimal places.
6. Click once on the Comma Style icon to add commas to the number.
7. To change the number to a currency format, click Accounting Number format.
8. Move the cursor to cell A7.
9. Type **.35** (note the decimal point).
10. Press Enter.
11. Move the cursor back to cell A6.
12. Click the percent Style icon to turn .35 to a percent.

Performing mathematical calculations:

Making Numeric Entries

In Microsoft Excel, you can enter numbers and mathematical formulas into cells. When a number is entered into a cell, you can perform mathematical calculations such as addition, subtraction, multiplication, and division. When entering a mathematical formula, precede the formula with an equal sign. Use the following to indicate the type of calculation you wish to perform:

+ Addition

- Subtraction

* Multiplication

/ Division

^ Exponential

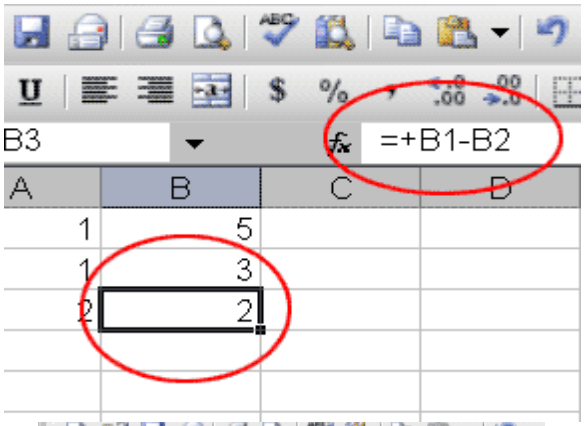
Performing Mathematical Calculations

The following exercises demonstrate how to perform mathematical calculations.

Addition

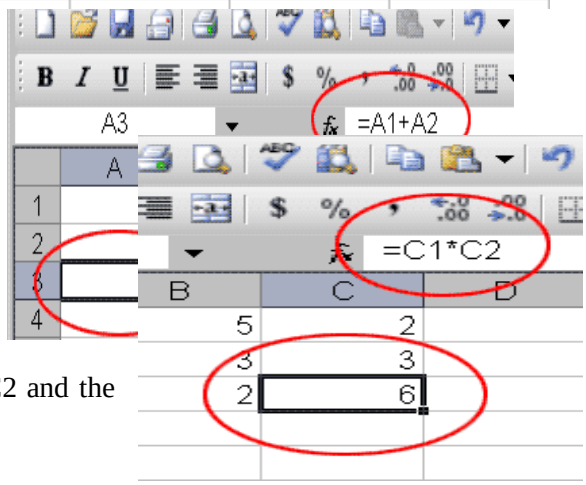
1. Move your cursor to cell A1.
2. Type **1**.
3. Press Enter.
4. Type **1** in cell A2.
5. Press Enter.
6. Type **=A1+A2** in cell A3.
7. Press Enter. Cell A1 has been added to cell A2, and the result is shown in cell A3. .

Subtraction



1. Press F5. The Go to dialog box opens.
2. Type **B1** in the Reference field.
3. Press Enter. The cursor should move to cell B1.
4. Type **5** in cell B1.
5. Press Enter.
6. Type **3** in cell B2.
7. Press Enter.
8. Type **=+B1- B2** in cell B3.
9. Press Enter. Cell B1 has been subtracted from B2, and the result is shown in cell B3.

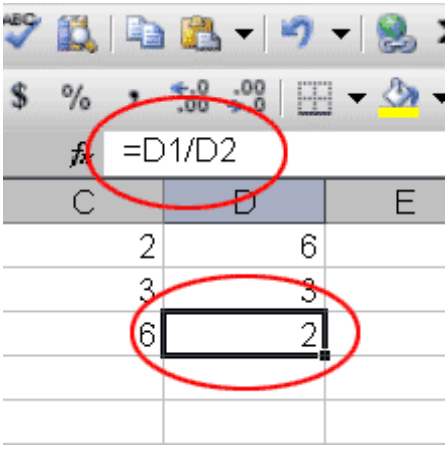
Multiplication



1. Hold down the Ctrl key while you press "g" (Ctrl-g). The Go To dialog box opens.
2. Type **C1** in the Reference field.
3. Press Enter. You should now be in cell C1.
4. Type **2** in cell C1.
5. Press Enter.
6. Type **3** in cell C2.
7. Press Enter.
8. Type **=C1*C2** in cell C3.
9. Press Enter. Cell C1 is multiplied by cell C2 and the result is displayed in cell C3
10.

Division

1. Press F5.
2. Type **D1** in the Reference field.
3. Press Enter. You should now be in cell D1.
4. Type **6** in cell D1.
5. Press Enter.
6. Type **3** in cell D2.
7. Press Enter.
8. Type **=D1/D2** in cell D3.
9. Press Enter. Cell D1 is divided by cell D2 and the result is displayed in cell D3.



Lab Task:

1. Take any five numbers then find
   - sum
   - average
   - min
   - max
   - division
2. Create the worksheet for academic record of 10 students. Type in the labels, the student numbers, the test results (which are out of 100). The total marks and the class averages for each test must be calculated. The class average for test 1 is simply the average of the marks obtained in that test.
3. Display the result of task 2 in Graph form available in excel