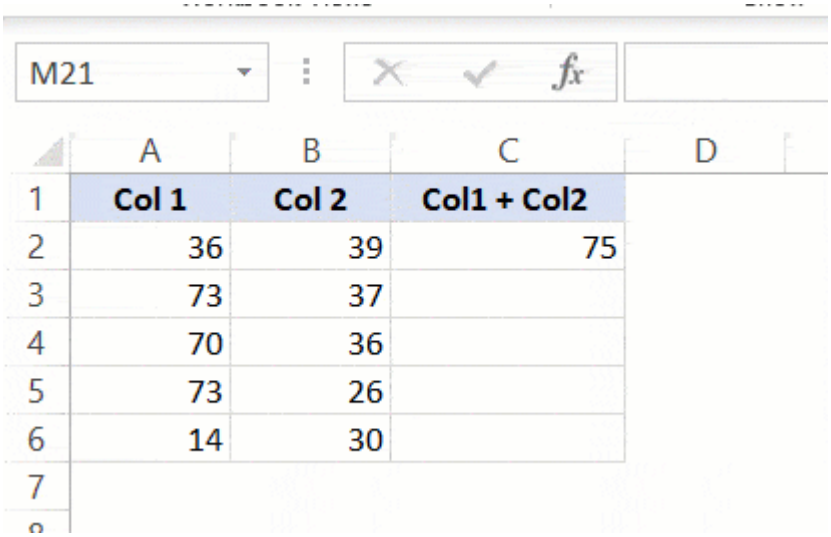
Advance Excel Assignment 2

1. What does the dollar($) sign do?

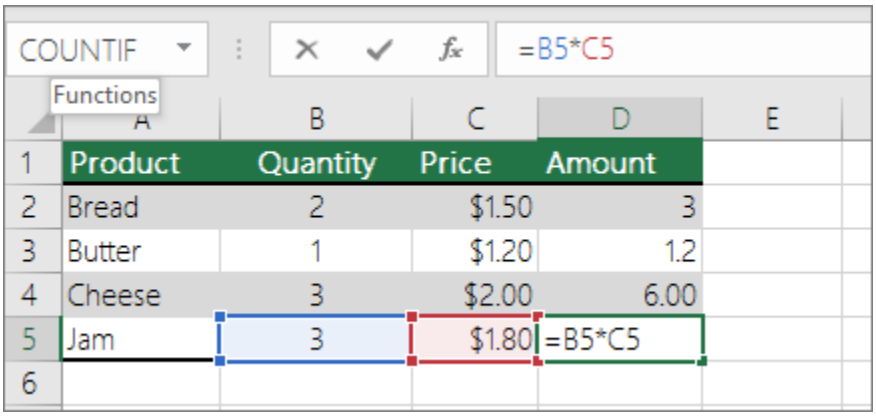
Ans: One of the things that make Excel such a powerful tool is the ability to refer to cells/ranges and use these in formulas. And when you copy these formulas, these cell references can adjust automatically. In the example below, we copied cell C2, which contains a formula, and pasted it into cell C3.



2. How to Change the Reference from Relative to Absolute (or Mixed)?

Ans: A cell reference is a relative reference, which means that the reference is relative to the location of the cell. If, for example, you refer to cell A2 from cell C2, you are actually referring to a cell that is two columns to the left (C minus A)—in the same row (2). When you copy a formula that contains a relative cell reference, that reference in the formula will change.

As an example, if you copy the formula **=B4*C4** from cell D4 to D5, the formula in D5 adjusts to the right by one column and becomes **=B5*C5**. If you want to maintain the original cell reference in this example when you copy it, you make the cell reference absolute by preceding the columns (B and C) and row (2) with a dollar sign (**$**). Then, when you copy the formula **=B4*C4** from D4 to D5, the formula stays exactly the same.



To change the type of cell reference:

1. Select the cell that contains the formula.
2. In the formula bar , select the reference that you want to change.
3. Press F4 to switch between the reference types.

3. Explain the order of operations in excel?

Ans: In general, Excel's order of operation follows the acronym PEMDAS (Parentheses, Exponents, Multiplication, Division, Addition, Subtraction) but with some customization to handle the formula syntax in a spreadsheet.

First, any expressions in parentheses are evaluated.

Next, Excel will perform exponentiation, negation, and percent conversions (in that order), followed by multiplication and division, addition and subtraction, and concatenation. Finally, Excel will evaluate logical operators, if present.
In summary, Excel solves formulas in the following order:

1. Parentheses
2. Reference operators
3. Exponents
4. Negation
5. Percent
6. Multiplication and Division
7. Addition and Subtraction
8. Concatenation
9. Logical operators

4. **What, according to you, are the top 5 functions in excel and write a basic syntax for any of two?**

Ans:

1. SUM

The sum function is the most used function when it comes to computing data on Excel. This function works to sum a group of numbers in a specific set of cells. This means you don't need to type a long cumbrous formula just to calculate the sum of all the data you need. Because of its popularity, newer versions of Microsoft Excel have a button specifically for this function.

This function is performed by typing the formula on the function bar and highlighting the cells you want summed before clicking "Enter". You also need to be careful in highlighting cells, as Excel will sum everything you include. If this happens, you can easily click the "Undo" button to reset the values back to its original state.

Syntax: "=SUM" (number1, number2, etc.).

2. Text:

   Text function is a useful tool that helps convert a date (or number) into a text string in a particular format. It falls in the category of string formulas that converts numerical values to a string. It is handy when users need to view numeric data in a readable format. Take note that the "TEXT" formula only works to convert numeric values to text. Therefore, its results cannot be calculated.

   Syntax: "=TEXT" (value, format_text).

3. VLOOKUP:

   VLookup is powerful Excel function that is often overlooked. Users will find it useful when they need to find specific data on a large table. You can also use *VLookup* to search for names, phone number, or specific data on your sheet.

4. AVERAGE:
   The *average* function is an extremely useful tool for getting the average value in a range of cells. Like the *sum* function, it is frequently used in computing and analyzing data on spreadsheet. Basically, the *average* function works to find the "arithmetic mean" for a group of cells.

5. CONCATINATE:
   This function is a good time saver when you need to combine data from 2 or more cells. Unlike the merge tool which physically merges two or more cells into a single cell, the *concatenate* function only combines the contents of the combined cells

5. **When would you use the subtotal function?**

Ans: The SUBTOTAL Function in Excel allows users to create groups and then perform various other Excel functions such as SUM, COUNT, AVERAGE, PRODUCT, MAX, etc. Thus, the SUBTOTAL function in Excel helps in analyzing the data provided.

6. What is the syntax of the vlookup function? Explain the terms in it?

Ans: Syntax :

"=VLOOKUP" (lookup_value, table_array, col_index_num, *range_lookup*).

- "lookup_value" is the data you want to find.
- "table_array" is the data column where you want to limit your search.
- "col_index_num" is the column number within the table that you want to return a value from.
- "range_lookup" is an optional argument that allows you to search for the exact match of your lookup value without sorting the table.