**Advance Excel Assignment 2**

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

**Ans**: In Excel, a dollar sign can denote a US currency format, but it has another common use: indicating absolute cell references in formulas i.e., locking the position of the selected cell in any formula so that its value will be fixed and won’t be changed whenever the cells are being copied to other cells or sheets.

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

**Ans**: Relative reference is when you drag the formula to another cell, it will change the respective cell location as relative like at D5= B5 \* C5 and when I drag the same formula to D6 then the formula is like D6= B6 \* C6 by itself.

If you want to maintain the original cell reference when you copy it, make the cell reference absolute by preceding the columns and row with a $ sign

**D5= $B$5 \* $C$5,**

When copying this formula from D5 to D6, the formula stays exactly the same

Less often, in order to mix absolute and relative cell references by preceding either the column or the row value with a $ sign- which fixes either the column or the row (B$5 or $C5)

While writing formula F5 will help to change between related to absolute to mixed.

1. **Explain the order of operations in excel?**

**Ans:** Excel follows a standard math protocol called "order of operations". In general, Excel's order of operation follows the acronym PEMDAS (Parentheses, Exponents, Multiplication, Division, Addition, Subtraction)

### **Parentheses Operator**

In Arithmetic, there are three types of Parentheses.

1. Round Brackets ()
2. Curly Brackets {}
3. Square or Box Brackets []

Again, among these three types of parentheses, **Round Brackets** will have the first priority in terms of the order of operators and followed by **Curly Brackets** and **Square Brackets**.

### **Exponential Operator**

An **Exponential** operator is a mathematical function that calculates the value of a number raised to a given power. In Excel, the exponential operator is represented by the **Caret (^)** symbol.

### **Multiplication and Division Operators**

**Multiplication** and **Division** have the same precedence level **6**. They are calculated after the exponential operator. When operators have the same precedence level, they are evaluated from left to right. Remember that multiplication and division are **left-associative**. It means evaluation will happen from left to right.

### **Plus, Minus Operators**

The next two operators plus and minus have the same precedence level **7**. They are evaluated after multiplication and division.

#### **Plus Operator**

Summarizing or adding two or more numerical numbers together is known as an addition. The mathematical notation for addition is the **Plus** operator **(+)**. Text strings can also be joined together in Excel using the **Plus** operator.

#### **Minus Operator**

In terms of calculating the difference between two numbers, the operator normally that we use is **Minus (-)**. But in Excel, we can subtract the numbers as well as the date and time too. So, we can say, Excel is an advanced application to calculate the difference between numbers, times, and dates.

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

**Ans**: As per me here are the following 5 functions in excel:

SUM, IF, VLOOKUP, DATE, AVERAGE

The basic syntax for a function is an equal sign (=), the function name (SUM), and one or more arguments

SUM = SUM (A2:A15)

# IF = IF(A2>B2, ”OVER BUDGET”, “OK”)

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

**Ans**: The SUBTOTAL function is a very handy function that allows us to perform different calculations on a [filtered range](https://www.excelcampus.com/tables/filters-training-part-1/).  The most common use is probably to find the SUM of a column that has filters applied to it. The SUBTOTAL function is designed for columns of data or vertical ranges. It is not designed for rows of data or horizontal ranges.

It helps us to get the totals of several columns of data broken down into various categories.

For example, let's consider garment products of different sizes manufactured. The SUBTOTAL function will help you to get a count of different sizes in your warehouse (group by).

1. **What is the syntax of the VLOOKUP function? Explain the terms in it.**

**Ans**: Use VLOOKUP when you need to find things in a table or a range by row.  
**The syntax for VLOOKUP:**

=VLOOKUP(lookup\_value, table\_array, column\_index\_num, [range\_lookup])

* lookup\_value - The value to look for in the first column of a table.
* table\_array - The table from which to retrieve a value.
* column\_index\_num - The column in the table from which to retrieve a value.
* range\_lookup - [optional] TRUE = approximate match (default). FALSE = exact match.