**Advance Excel Assignment 2**

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

Answer: The dollar sign fixes the reference to a given cell, so that it remains unchanged no matter where the formula moves. In other words, using $ in cell references allows you to copy the formula in Excel without changing references.

Example: if you have 10 in cell A1 and you use an absolute cell reference (*$A$1*), the formula =$A$1+5 will always return 15, no matter what other cells that formula is copied to. On the other hand, if you write the same formula with a relative cell reference (*A1*), and then copy it down to other cells in the column, a different value will be calculated for each row.

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

Answer: 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. 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 (**$**). Then, when you copy the formula **=$B$4\*$C$4** from D4 to D5, the formula stays exactly the same.

3. Explain the order of operations in excel?

Answer: 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) but with some customization to handle the formula syntax in a spreadsheet.

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?

Answer:

1. AutoSum
2. COUNT
3. MIN
4. MAX
5. AVERAGE

5. When would you use the subtotal function?

Answer: The SUBTOTAL function in Excel is amazingly versatile - as it can perform different arithmetic as well as logical operations which will be including the following things as well:

1. Counting of the respective cells.
2. Calculation of the average easily.
3. And the finding of the minimum or the maximum value in the given Excel sheet.

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

Answer: The VLOOKUP function says:

=VLOOKUP(What you want to look up, where you want to look for it, the column number in the range containing the value to return, return an Approximate or Exact match – indicated as 1/TRUE, or 0/FALSE

Use the VLOOKUP function to look up a value in a table.

**Syntax**

**VLOOKUP (lookup\_value, table\_array, col\_index\_num, [range\_lookup])**

For example:

* =VLOOKUP(A2,A10:C20,2,TRUE)
* =VLOOKUP("Fontana",B2:E7,2,FALSE)
* =VLOOKUP(A2,’Client Details’!A:F,3,FALSE)

