# **Advance Excel Assignment 2**

# Q1. What does the dollar(\$) sign do?

In Excel, a dollar sign can denote a currency format, but it has another common use: indicating absolute cell references in formulas.

A dollar symbol, when added in front of the row and column number, makes it absolute (i.e., stops the row and column number from changing when copied to other cells).

For example, in the above case, when I copy the formula from cell E2 to E3, it changes from =D2\*\$G\$1 to =D3\*\$G\$1.

Note that while D2 changes to D3, \$G\$1 doesn't change.

### Q2. How to Change the Reference from Relative to Absolute (or Mixed)?

To change the reference from relative to absolute, you need to add the dollar sign before the column notation and the row number.

For example, A1 is a relative cell reference, and it would become absolute when you make it \$A\$1.

If you only have a couple of references to change, you may find it easy to change these references manually. So you can go to the formula bar and edit the formula (or select the cell, press F2, and then change it).

However, a faster way to do this is by using the keyboard shortcut -F4.

When you select a cell reference (in the formula bar or in the cell in edit mode) and press F4, it changes the reference.

Suppose you have the reference =A1 in a cell.

Here is what happens when you select the reference and press the F4 key.

- Press F4 key once: The cell reference changes from A1 to \$A\$1 (becomes 'absolute' from 'relative').
- Press F4 key two times: The cell reference changes from A1 to A\$1 (changes to mixed reference where the row is locked).
- Press F4 key three times: The cell reference changes from A1 to \$A1 (changes to mixed reference where the column is locked).
- Press F4 key four times: The cell reference becomes A1 again.

# Q3. Explain the order of operations in excel?

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. 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 >< = <>

# Q4. What, according to you, are the top 5 functions in excel and write a basic syntax for any of two?

- 1. Sum
- 2. Text
- 3. VLOOKUP
- 4. Average
- 5. Concatenate

**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.

The syntax formula for sum function is "=SUM" (number1, number2, etc.).

**VLOOKUP**: VLOOKUP is powerful Excel function that is used to find specific data on a large table. The VLookup formula is

"=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.

### Q5. When would you use the subtotal function?

The Excel SUBTOTAL function returns an aggregate calculation for supplied values. Despite the name, SUBTOTAL can perform a variety of calculations, including SUM, AVERAGE, COUNT, MAX, MIN, etc.

The SUBTOTAL function can either include or exclude values in hidden rows, which makes it especially useful in Excel Tables or filtered data. By default, SUBTOTAL excludes values in rows hidden by a filter. Regardless of the calculation performed, SUBTOTAL returns an aggregate result from a set of data.

the SUBTOTAL function automatically ignores other SUBTOTAL formulas that exist in references to prevent double-counting.

#### **Syntax**

"=SUBTOTAL (function\_num, ref1, [ref2], ...)"

function\_num - A number that specifies which function to use in calculating subtotals within a list. See table below for full list.

ref1 - A named range or reference to subtotal.

ref2 - [optional] A named range or reference to subtotal.

# Q6. What is the syntax of the VLOOKUP function? Explain the terms in it?

**VLOOKUP**: VLOOKUP is powerful Excel function that is used to find specific data on a large table. The VLookup formula is

"=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.