

Advance Excel Assignment 2_solution

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

Ans:

- In Microsoft Excel, the dollar sign (\$) or currency symbol is also known as the absolute referencing operator.
- It is used to lock a cell reference in a formula so that it remains constant, even when the formula is copied or moved to other cells.
- For example, if you have a formula = A1+B1 and you copy this formula to another cell, the cell references will change to = A2+B2. However, if the formula is = \$A\$1+\$B\$1, the cell references will not change when the formula is copied or filled to other cells.

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

Ans: Followings are two ways to Change the Reference from Relative to Absolute (or Mixed):

First way:

1. Select the cell containing the formula you want to change.
2. Edit the formula by double-clicking on the cell or pressing F2.
3. Locate the cell reference you want to change.
4. To change a relative reference to an absolute reference, add a dollar sign before the column letter and the row number. For example, change A1 to \$A\$1.
5. To change an absolute reference to a mixed reference, add a dollar sign before either the column letter or the row number. For example, change \$A\$1 to A\$1 or \$A1 to A1.
6. Press Enter to apply the changes. The reference in the formula should now be changed to an absolute or mixed reference.

Second way: F4 key to quickly toggle between relative, absolute, and mixed references

- Press F4 once to create a cell reference fully absolute, such as \$A\$6.
- Press F4 a second time to create a mixed reference where the row number is absolute, such as A\$6.
- Press F4 a third time to create a mixed reference where the column letter is absolute, such as \$A6.

3. Explain the order of operations in excel?

Ans:

The order of operations in Microsoft Excel, also known as the order of precedence or “Rule of precedence” determines the sequence in which calculations are performed in a formula.

The order of operations in Excel is as follows:

1. **Parentheses:** Calculations inside parentheses are performed first i.e. () bracket.
2. **Exponents:** Exponents (raised to a power) are calculated next (e.g., 3²).
3. **Multiplication and Division:** Multiplication and division are performed from left to right in the formula.
4. **Addition and Subtraction:** Finally, addition and subtraction are performed from left to right in the formula.

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

Ans:

According to me, the top 5 functions in Microsoft Excel are:

1. **SUM:** Calculates the sum of a range of cells. Syntax: =SUM (number1, number2,)
2. **AVERAGE:** Calculates the average of a range of cells. Syntax: AVERAGE (1st cell: last cell in range).
3. **IF:** Tests a condition and returns one value if the condition is true and another value if the condition is false. Syntax: IF (condition, value if true, value if false).
4. **COUNT:** Counts the number of cells in a range that contain numbers. Syntax: COUNT (1st cell in range: last cell in range).
5. **COUNTA:** It will total the number of nonempty cells in a range. It doesn't matter if the cell contains a number, a string of letters, or an error, COUNTA will count it.

Syntax= COUNTA (first cell in range:last cell in range)

6. **VLOOKUP:** Searches for a value in the first column of a table and returns a corresponding value from another column. Syntax: VLOOKUP (value, table, column, [exact match])

Tip: Try using the new XLOOKUP function, an improved version of VLOOKUP that works in any direction and returns exact matches by default, making it easier and more convenient to use than its predecessor.

5. When would you use the subtotal function?

Ans: **Subtotal function:** It is Similar to SUM, SUBTOTAL performs a function on a group of numbers.

Its power, however, comes from its modifiers. Depending on the modifier you include, SUBTOTAL can display the average, count, or range of your data set, among other things. Syntax = SUBTOTAL (function modifier, number1, number2,...)

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

Ans:

There are four pieces of information that important to build the VLOOKUP syntax:

1. The value you want to look up, also called the **lookup value**.
2. The **range** where the lookup value is located (table array).
3. The **column index number** in the range that contains the return value.
4. The **range lookup** is an optional argument that specifies whether you want VLOOKUP to find an exact match (**FALSE**) or an approximate match (**TRUE**). By default, **range lookup** is set to **TRUE**.

Syntax = VLOOKUP (Lookup value, lookup value, column index number, range lookup)

Example:

	A	B	C	D	E
1	ID	Last name	First name	Title	Birth date
2	101	Davis	Sara	Sales Rep	12/08/68
3	102	Fontana	Olivier	VP (Sales)	02/19/52
4	103	Leal	Karina	Sales Rep	08/30/63
5	104	Patten	Michael	Sales Rep	09/19/58
6	105	Burke	Brian	Sales Manager	03/04/55
7	106	Sousa	Luis	Sales Rep	07/02/63
8					
9					
10	Formula	=VLOOKUP(B3,B2:E7,2,FALSE)			
11	Result	Olivier			
12					

VLOOKUP looks for *Fontana* in the first column (column B) in table_array B2:E7, and returns *Olivier* from the second column (column C) of the table_array. FALSE returns an exact match.