Tutorial: Applying simple Excel functions: SUM, AVERAGE, MAX, MIN, COUNT, COUNTIF, SUMIF

Prerequisite:
Be able to open Excel
Type in information to the cells

Typical Use
Making spreadsheet
Making grade sheet

Related Skills
Using Calculator

Using Excel Function: SUM
Step one:
Type in the information to the cell to use the Excel function of “SUM”
Example:
A1: 100
A2: 50
A3: 50
A4: 75

Step two:
Lets say you want to add up all the values from A1-A4. Click on A5 and type in the formula: =SUM(A1:A4)
The (=) sign states that you are inserting a formula.
The (SUM) states that “adding” is part of the formula.
The (A1:A4) states which values you want to add together.
Then, press “enter.”
Using Excel Function: AVERAGE
Step One: Type in the information to the cell to use the Excel function of “AVERAGE”
Example:
A1: 100
A2: 50
A3: 50
A4: 75

Lets say you want to find out the average of all the values from A1-A4. Click on A5 and type in the formula: =AVERAGE(A1:A4)
   The (=) sign states that you are inserting a formula.
   The (AVERAGE) states that “AVERAGE” is part of the formula.
   The (A1:A4) states which values you want to find the average of.
Then, press “enter.”
Using Excel Function: MAX
Step one:
Function of MAX is used to find the maximum value from all the data in a cell.
Type in your data into the cell.
Example:
A1: 32
A2: 4
A3: 19
A4: 20
Step two:
If you like to find out the maximum value between cell A1-A4. Type in the formula:
=MAX(A1:A4) in cell A5

Notice now that the maximum value between A1-A4 is listed in A5 with the value of 32.

**Using Excel Function: MIN**

Step one:
Function of MIN is used to find the minimum value from all the data in a cell.
Type in your data into the cell.
Example:
A1: 32
A2: 4
A3: 19
A4: 20
Step two:
If you like to find out the minimum value between cell A1-A4. Type in the formula:
=MIN(A1:A4) in cell A5

Notice now that the minimum value between A1-A4 is listed in A5 with a value of 4.

Using Excel Function: COUNT
COUNT is used to count the number of cells that contain numbers and counts numbers within the list of arguments.
Step one:
Type in your data to the cells.
Example:
A1: 32
A2: 4
A3: 19
A4: 20
Step two:
If you like to count the number of cells that contains numbers between cell A1-A4.
Type in the formula: =COUNT(A1:A4) in cell A5

Notice now that in cell A5, the value of 4 is displayed. This means that between A1-A4, there are 4 numbers.

Using Excel Function: COUNTIF
COUNTIF is used to count the number of cells within a range that meet the given criteria.
Step one:
Type in your data in the cells.
Example:
A1: blue circle
A2: red circle
A3: blue circle
A4: orange circle
A5: purple circle
If you want to find out how many time you have typed in “blue circle,” type in the formula: =COUNTIF(A1-A5, “blue circle”) in cell A6.

Notice that in cell A6, a value of 2 is displayed. This states that there are “blue circle” listed twice between A1-A5.

**Using Excel Function: SUMIF**

SUMIF is used to add the cells specified by a given criteria.

**Step one:**
Type in your data into the cell.

**Example:**
A1: 10000
A2: 54321
A3: 12345
A4: 7000
A5: 1000
A6: 456
Step two:
Let's say you would like to find out the sums of all the values that are less than 50,000.

Notice that in cell A7, the value of 30,801 is displayed. From cells A1-A6, there is only
one value that is greater than 50,000 (A2: 54321). This means, that the formula added
cells A1, A3, A4, A5, and A6 to get 30,801.

| A1: 10000 |
| A3: 12345 |
| A4: 7000 |
| A5: 1000 |
| **A6: 456** |

\[ 30,801 \]