* **MIN, MAX AVERAGE functions**

**MIN function**: –

The MIN function returns the smallest value from the numbers provided.

If you want to know the smallest age among all, use the MIN function.

Write = MIN and specify the range, click on the first value and then press ctrl + shift +down key and press enter. This returns the minimum age.

**MAX function**: –

If you want to know the maximum age among all. Using the MAX function which returns the maximum value from the numbers provided.

Write = MAX and specify the range and press enter. It returns the maximum age.

**AVERAGE function**: –

It returns the mean, find out the mean age.

If you want to know the average age among all. Using the AVERAGE function which returns the average(mean) value from the numbers provided.

Write = AVERAGE and specify the range in the same way as you did while using the earlier two functions MIN and MAX and then press enter.

It returns the average age.

* **Standard deviation**

A standard deviation is a quantity which refers to how much the observations differ from the mean observation of the group or in other words, the standard deviation is the spread of data distribution.

Calculate the standard deviation in excel by the formula STDEV and STDEVP where STDEV refers to the standard deviation of a sample and STDEVP refers to the standard deviation of the population.

You have different formulas for finding the standard deviation of a sample and for finding the standard deviation of the population.

Calculating the two in excel.

Calculate the sample standard deviation: –

Write = STDEV and specify the range by ctrl+shift+down key and press enter. It returns the sample standard deviation.

Calculate the population standard deviation: –

Write = STDEVP and specify the range by ctrl+shift+down key and press enter. It returns the population standard deviation.

* **PERCENTILES OF DATA**

A percentile is a measure used in statistics indicating the value below which a given percentage of observations in a group of observations falls.

Find the 25th, 50th which is also known as median and the 75th percentile of any given data.

The formula for finding the percentiles in excel is PERCENTILE(array, k).

Where array is the range of values and k is the percentile value.

Finding three percentiles 25th percentile, 50th percentile and 75th percentile.

Finding the 25th percentile of age data: –

Write equals to PERCENTILE and specify the range and percentile as 0.25 and range from the first value of the age column to last value by using ctrl+shift+down key.

It returns the 25th percentile of the age column which means it returns the value below which 25 per cent of the observations lie.

Finding the 50th percentile of age data: –

Write equals to PERCENTILE and specifying the range and percentile as 0.50 and range from the first value of the age column to the last value by using ctrl+shift+down key and then press enter. It returns the 50th percentile value or the median of the age.

Finding the 75th percentile of age data: –

Write equals to PERCENTILE and specify the range and the percentile as 0.75 and the range from the first value of the age column to the last value by using ctrl+shift+down key and then press enter. It returns the 75th percentile of the age.

So, this is how you find the percentiles of the data.

* **Missing values in data**

Missing values are the observations which are not stored in the data.

Find if there are any missing values present in the data in excel by using the command COUNTBLANK which returns the number of missing values in a given range.

Find out if there are any missing values in the age variable.

Write =COUNTBLANK and specify the range from the first value to the last value and then press enter and you will get the result as 0 which means there are no missing values in the variable.

Create a missing value manually in the age column and click on that cell again and now the result is changed to 1 which shows you have 1 missing value in the age column.

Similarly, find out the missing values in other variables as well by just specifying the range in which you have searched for the missing values.