# **ACTIVITY-1**

# Real-life Data Analysis Challenge



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**ROLL NO. : 32** 

**COURSE CODE: MTH302** 

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## DATA CONSISTS OF daily stydy hours vs exam scores

## Dataset consists of:

• (X): Daily Study hours

• (Y): Exams Score

#### **Statistical Calculation:**

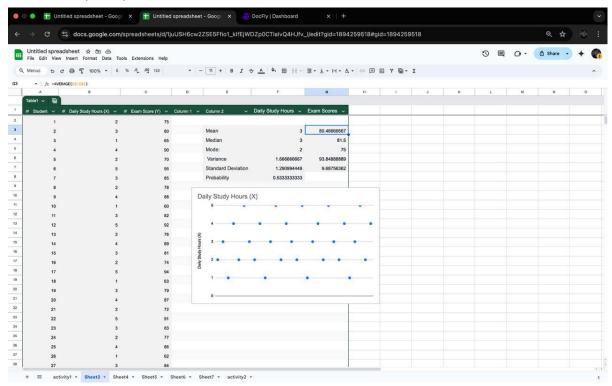
Mean:

The mean(average) is calculated as:

Mean= =∑X/N

where X is the sum of all values, and N is the total number of values.

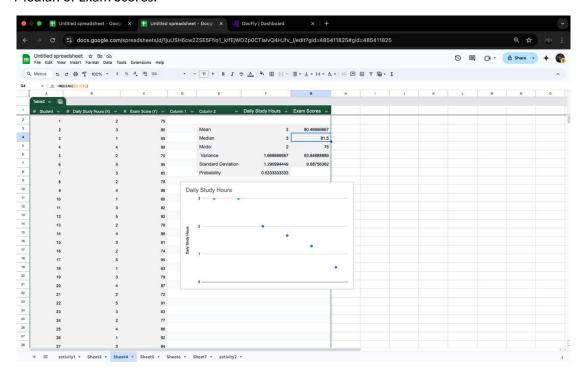
Mean of Daily Study Hours(X) and Mean of Exams Score(Y):



## Median:

• The median is the middle value when data is stored.

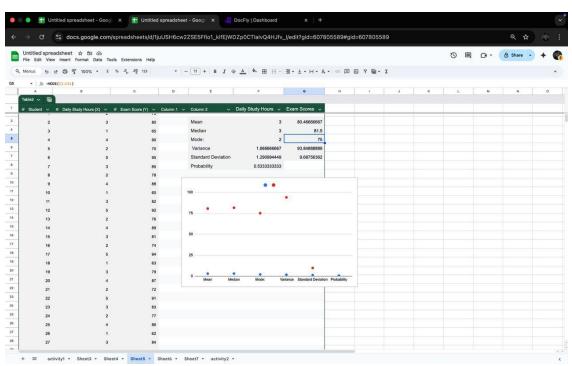
#### Median of Exam Scores:



#### MODE:

The mode is the most frequency of occurring value.

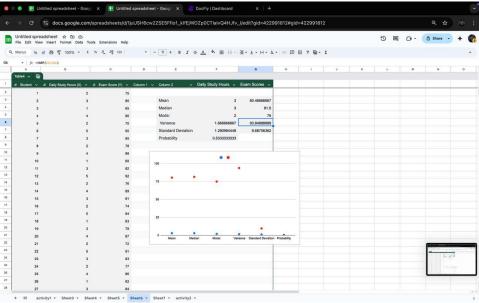
#### Mode of Exam scores:



#### Variance:

Variance quantifies the variability or spread of a dataset around its mean (average).

Variance of Exams Score:



## Standard Deviation:

- Standard deviation tells us how much values deviate from the mean.
- Standard deviation is square root of Variance.

## Standard Deviation of Exams Score:

