**Descriptive vs Inferential Statistics**

*Its Importance in Data Science*

**Definition of Descriptive Statistics:**

Descriptive statistics is a branch of statistics that involves organizing, summarizing, and presenting data in a meaningful way. It provides tools and techniques to describe and understand the main characteristics of a dataset. The goal of descriptive statistics is to simplify complex data sets and provide insights into their **central tendency, variability, and distribution.**

Topics Within Descriptive Statistics:

1. Measures of Central Tendency:

* Mean

The arithmetic average of a set of values. For example, calculating the mean score of students in a class.

Formula:

= Sum of the Terms/No of Terms

* Median

The middle value in a dataset when arranged in ascending or descending order. For instance, determining the median income of a population.

* Mode

The most frequently occurring value in a dataset. For example, finding the mode of favorite colors among a group of people.