Descriptive Statistics Introduction

The science of scraping or collecting the data and then analyzing it on various parameters is called statistics. This analysis is done on sample of the total population. In simple terms, it can be said that statistics helps in analyzing or interpreting the data to make useful predictions out of it.

There are two branches of statistics:

1. **Descriptive Statistics**: This branch of statistics is used to describe the data.
2. **Inferential Statistics**: It makes inferences about the whole population by taking random data points.

Descriptive Statistics

In descriptive statistics, the data is described and summarized with the help of numbers and their representations in various forms. The idea of descriptive statistics works with the measure of central tendency. This central tendency measure can be done with the help of various statistical tools like:

1. **Mean**: Mean is also known as the simple average. We can find mean of a number of elements by adding all the elements in a dataset and then dividing by the number of elements in the dataset.

2. **Median**: Median is the number which divides the dataset into two equal halves. To calculate the median, we have to arrange our dataset of n numbers in ascending order.

3. **Mode**: Mode of a dataset is the value that occurs most often in the dataset. Mode is the value that has the highest frequency of occurrence in the dataset.

There are variability and dispersion tools like variance or standard deviation that helps in understanding the dataset more accurately. All these are going to be discussed in further detail.