1) **What is the difference between inferential statistics and descriptive statistics?**

Descriptive Statistics gives information about raw data which describes the data in some manner. It helps in organizing, analyzing and to present data in a meaningful manner. It explain already known data and limited to a sample or population having small size. It is used to describe a situation.

Inferential statistics makes inference about population using data drawn from the Population It allows us to compare data, make hypothesis and predictions. It is used to explain the chance of occurrence of an event. It allows us to compare data, make hypothesis and predictions. It attempts to reach the conclusion about the population.

2) **What is the difference between population and sample in inferential statistics?**

A population is a large volume of observations (data) and the sample is a small portion of that population. Because of the large volume of data in the population, it raises the computational cost. The availability of all data points in the population is also an issue. In short. We calculate the statistics using the sample; Using these sample statistics, we make conclusions about the population.

3) **Most common characteristics used in descriptive statistics?**

Descriptive statistics consists of two basic categories of measures: measures of central tendency and measures of variability (or spread).

4) **How to calculate range and interquartile range?**
Range is the difference between the highest and lowest values. The range is calculated by subtracting the lowest value from the highest value.
Interquartile range is the range of the middle half of a distribution.
IQR = Q3 - Q1

Where IQR = interquartile range, Q3 = 3rd quartile or 75th percentile

Q1 = 1st quartile or 25th percentile

5) **How is the statistical significance of an insight assessed?**

Statistical significance is often calculated with statistical hypothesis testing, which tests the validity of a hypothesis by figuring out the probability that your results have happened by chance. The result of a hypothesis test allows us to see whether this assumption holds under scrutiny or not.