Descriptive Statistics:

1.What is the purpose of descriptive statistics?

* The purpose of descriptive statistics is to summarise the data. It helps to provide various information about the data points like mean, median, mode, variance, standard deviation etc.

2.Can you explain the difference between mean, median, and mode?

* Mean helps to find out the average value in the set of data points. Median provides the middle most value or centre value in the set of data points. Mode returns the data point which has higher frequency in the set of data points.

3.How do you interpret the standard deviation of a dataset?

* Standard Deviation determines how much the data points are dispersed around the mean. If the data points are further from mean, there is a higher deviation in the data points.

4.Describe the concept of skewness in statistics.

* Skewness is a statistical measure that is used to show whether a distribution is asymmetrical.
* Right skew (also called positive skew). A right-skewed distribution is longer on the right side of its peak than on its left.
* Left skew (also called negative skew). A left-skewed distribution is longer on the left side of its peak than on its right.

Inferential Statistics:

5.What is the main goal of inferential statistics?

* Main goal of inferential statistics is to estimate the population parameter using a sample. Suppose if we want to estimate the diabetes rate in a country, then we will sample from some state in that country to make an overall prediction.

6.Explain the difference between a population and a sample.

* A population is the entire group that we want to draw conclusions about.A sample is a subset from a population which helps to estimate the population parameter.

7.What is a confidence interval, and how is it useful in inferential statistics?

* Confidence interval measures the degree of uncertainty in a sampling method. It displays the probability that a parameter will fall between a pair of values around mean.

8.Define p-value

* P-value helps us to determine whether the null hypothesis will be accepted or rejected. The P-value lies between 0 and 1. If it is greater than 0.05 then null hypothesis will be accepted. If it is less or equal to 0.05, then the null hypothesis will be rejected.