ASSIGNMENT- 2

1. What is the difference between inferential statistics and descriptive statistics?

Ans: Descriptive statistics summarize the characteristics of a data set. Inferential statistics allow you to test a hypothesis or access whether your data is generalizable to the broader population.

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

Ans: Population is the entire group that you want to draw conclusion about where sample is a part of population. Sample is always less than population.

3. Most common characteristics used in descriptive statistics?

Ans: a) Measure of central tendency (includes mean, median, mode)

b) Measure of spread (includes range, quartiles and the interquartile range, variance and standard deviation)

4. How to calculate range and interquartile range?

Ans: Range = difference between the highest and lowest values.

Interquartile range = a) Order the data from least to greatest.

b) Find median.

c) Calculate the median of both the lower and upper half of the data.

d) The IQR is the difference between the upper and lower medians.

5. How is the statistical significance of an insight assessed?

Ans: Statistical significance is often calculated with statistical hypothesis testing, which test the validity of a hypothesis by figuring out the probability that your assumption is true or false.