Assignment 2

1.what is the difference between inferential statistics and descriptive statistics?
Descriptive statistics summarize the characteristics of a data set.
 Inferential statistics allow you to test a hypothesis or assess whether your data is generalizable to the broader population.

2.what is the difference betwwen population and sample in inferential statistics?
A population includes all members from a specified group, all possible outcomes or measurements that are of interest. The exact population will depend on the scope of the study.

A sample consists of some observations drawn from the population, so a part or a subset of the population. The sample is the group of elements who actually participated in the study.

 3.Most common characteristic used in descriptive statistics?
     The three most common descriptive statistics can be displayed graphically or pictorially and are measures of:

Graphical/Pictorial Methods

Measures of Central Tendency

Measures of Dispersion

Measures of Association

4. How to calculate range and interquartile range?
    The range is calculated by subtracting the lowest value from the highest value.

   We can find the interquartile range or IQR in four simple steps:

   ● Order the data from least to greatest
   ● Find the median
   ● Calculate the median of both the lower and upper half of the data
   ● The IQR is the difference between the upper and lower medians.

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.