**Class: BE-Computer; Semester: VIII**

**Subject: Applied Data Science Lab**

**Experiment No.: 01**

**AIM:** Explore the descriptive and inferential statistics on the given dataset.

**THEORY:**  Understand the selected dataset and find the following statistics about your data

a) Descriptive statistics -

mean, median,mode, min,max, sum

Range,First quartile, Third quartile, Interquartile range

standard deviation

variance

correlation

SE of mean

coefficient of variation

N missing

N total

Cumulative N

Percent

Cumulative percent

Trimmed mean

Sum of squares

Skewness

Kurtosis

### Visualize your data using Box-and-Whisker Plot,Scatter Plot, Correlation Matrix

b) Inferential statistics -

a)Distributions -Normal,poisson, Population Parameters, Sampling Errors Confidence Intervals

#### b)principles of hypothesis testing -Z-test , t-test,type I and Type II error, Anova