1. **Set a seed and take a random sample of 25 observations and find the mean Glucose and highest Glucose values of this sample and compare these statistics with the population statistics of the same variable.**

A screenshot of a computer program

Description automatically generated

RESULTS:

A graph of a comparison of glucose statistics

Description automatically generated

OBSERVATION: Population max is greater than sample max and Population mean is greater than sample mean.

1. **Find the 98th percentile of BMI of your sample and the population and compare the results using charts.**

A screen shot of a computer program

Description automatically generated

A blue and green rectangles

Description automatically generated

Observation: In the BMI 98th percentage comparison Population 98th percentage is greater than sample 98th percentage.

1. **Using bootstrap (replace= True), create 500 samples (of 150 observation each) from the population and find the average mean, standard deviation and percentile for BloodPressure and compare this with these statistics from the population for the same variable.**

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

RESULTS:

A screenshot of a graph

Description automatically generated

OBSERVATION: While comparing population mean and bootstrap mean, there is only slight difference between Population mean and bootstrap mean. And for population standard deviation, population standard deviation is slightly greater than bootstrap standard deviation. Lastly, for percentile the population percentage is slightly greater than bootstrap percentage.