## **Department of Computer Science & Engineering**

Final Year B. Tech. (CSE) – I : 2022-23

5CS462: PE5 - Data Mining Lab

## **Assignment No. 1**

Design the data analysis tool (GUI) to perform the following task:

- 1. Data upload ( std. format like .csv, excel etc. ) and view
- 2. Calculate and show the measures of central tendency for uploaded data : mean, median, mode, midrange, variance and standard deviation
- 3. Calculate and show the dispersion of data : range , quartiles , interquartile range , five-number summary
- 4. Graphical display of above calculated statistical description of data (provide the facility UI form to choose different attributes from uploaded data set):
  - a. Quantile plot
  - b. Quantile-quantile (q-q) plot
  - c. Histogram
  - d. Scatter plot
  - e. Boxplot

## Note:

- Don't use direct / readymade functions from library. Do basic python coding. You may compare / check the results with std. libraries.
- Use IRIS, Breast Cancer Wisconsin data sets from UCI Machine Learning Repository (<a href="http://archive.ics.uci.edu/ml/">http://archive.ics.uci.edu/ml/</a>).

Deadline: 01/08/2022

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