Assignment 02 [Numpy, Pandas, Matplotlib]

e1 A list is given: [34,87,892,920,974,893]

find min, max, mean of the list

e2 A list is given: [9,56,826,784]

WAP to multiply each element with 5 (without using loop)

e3 Write a NumPy program to create a random array with 1000 elements and compute the average, variance, standard deviation of the array elements

e4 A csv file is given to you (wine.csv)

[wine.csv file is shared in the google drive.]

find the following statistics for each column (except first column) min, max, mean

e5 Write a NumPy program to generate six random integers in the range provided by the user.

e6 Write a NumPy program to create a 5x5 array with random values and find the minimum and maximum values.

e7 Write a Numpy based menu-driven program with the following options:

option1. Enter list data

option2. Find Maximum in the data

option3. sort the data

option4. find the Median of the data

e8. You have the iris.csv file. Perform the following tasks.

i. Load the iris dataset.

ii. Plot the distribution of each feature

iii. Make a pair of two-two features and plot the 2-D scatter plots.

- iv. Make a pair of three-three features and plot 3-D scatter plots.
- v. Try to infer information from the scatter plots. (what could be the best set of features for classification of data? Hint: This may need some basic understanding of correlation)