<u>ML Lab (CS360)</u>

Assignment 2

Total Marks: 10
Submission deadline: 30-Aug-2020 (5PM)
Submission mode: Google Form

Part 1: Calculate the Mean, Median, Mode and Standard deviation
                                            (0.5 + 0.5 + 4 = 5)

1. Load the wine dataset from the given 'wine.csv' file into a variable (say data).
2. From the variable, extract the numerical information into a new variable, say scores.
3. Calculate the row-wise,column-wise, and overall mean, median, mode, and standard deviation of the dataset. In this question write separate functions for each operation and pass the variable(scores) as the parameter to the function.

Part 2: Calculate the pearson correlation and covariance matrix
                                            (2 + 3 = 5)

1. Take the 'alcohol' and 'Proline' as the features from the 'wine.csv' dataset and calculate the pearson correlation for the same.
2. Take any 5 features from the 'wine.csv' datasets and load them in a matrix. Thereafter, create the covariance matrix of the same.