

Assignment 4 Due: 7th April 12 Noon 5 Marks

Ques : Carry out classification tasks on the following UCI Machine Repository Datasets :

Balance Scale - <https://archive.ics.uci.edu/ml/datasets/Balance+Scale>

Car Evaluation - <https://archive.ics.uci.edu/ml/datasets/Car+Evaluation>

Lenses - <https://archive.ics.uci.edu/ml/datasets/Lenses>

All of them are simple problems. They are all categorical and exactly follow the example done in class.

You have to use split the dataset into two parts – approximately 70% of training and 30% for testing.

⇒ For each case read the data description carefully. **Do NOT bug the TA's.**

Your task is to implement Naïve Bayes Classifier in MATLAB and apply it on the aforesaid problems for classification.

You have to report the '**Classification Accuracy**'. *Classification accuracy* is defined as the ratio of the test samples your algorithm has correctly classified and the total number of test samples. Fill the following table and submit your code.

Dataset	Accuracy
Balance Scale	0.26
Car Evaluation	0.154
Lenses	0.714

NOTE:

You have to write the algorithm on your own. If you copy for the internet, it will be considered plagiarism. If you copy from a fellow student, it will be considered plagiarism. Appropriate action will be taken.