

## Lab Work 2

- (a) Implement the Decision-tree Classification Algorithm. You should use a standard measure such as Information Gain, Gain Ratio, Gini Index etc.
- (b) Implement the Naïve Bayesian Classification Algorithm.
- (c) Compare the performances of the above two classification algorithms using standard measures such as Accuracy, Precision, Recall, F-Measure etc. Use at least 8 real-life classification datasets.
- (d) Submit the source codes of (a) and (b) and a report for (c). You may use your preferred language for implementation and tool/package to prepare the comparison graphs/charts and description of the report. However, you cannot use any built-in classifier while implementing (a) and (b).

**Datasets:** Download real-life datasets from the following website

UCI Machine Learning Repository

<https://archive.ics.uci.edu/ml/index.php>