

Data Mining Lab Programs

1. Creation of an ARFF FILE
2. Preprocessing
 - i. Attribute selection
 - ii. Handling missing values
 - iii. Discretization
 - iv. Converting nominal attributes to binary attributes
 - v. Normalization
 - vi. Standardization
 - vii. Outlier detection and elimination
3. Generate Association Rules using the Apriori algorithm.
4. Generate Association Rules using the FP-Growth algorithm.
5. Build the following classifiers and check their efficiency
 - i. Decision Tree
 - ii. Naïve Bayes
 - iii. Bagging
 - iv. AdaBoost
 - v. Random forest
 - vi. K-NN
4. Apply the following clustering algorithms on data sets and visualize the clusters with their mean values
 - i. K-means
 - ii. Hierarchical clustering
 - iii. DBScan
 - iv. OPTICS
10. Build a Linear Regression model.
11. Use the following packages in Rtool and implement Decision tree classifier and visualize the results
 - i. caret Package
 - ii. rpart package
12. Implement Apriori algorithm to generate association rules in Rtool
13. Implement K-means clustering algorithm in Rtool. **(optional)**