

# Classification Assignment

## Problem statement

1. Stage-1 : Machine Learning
2. Stage-2 : Classification
3. Stage-3 : Random forest classifier

Dataset:-

399 rows × 25 columns

Pd.get\_dummies method is used to convert string data into nominal data

Decision tree:-

Accuracy:- 0.92

Roc:- 0.9279053084648493

SVM:-

Accuracy:- 0.99

Random Forest

Accuracy:- 0.99

**Final Model:-**

**Random Forest:-**

"The Random Forest Classifier was selected due to its superior performance, demonstrated by high accuracy and a strong ROC-AUC score."