Title: - Red Wine Quality Detection

Aim : -

To experiment with different classification methods to see which yields the highest accuracy. To determine which features are the most indicative of a good quality wine

Dataset : -

Kaggle's Red wine Quality dataset. The dataset is collection of 1599 rows and 12 columns. Each wine in this dataset is given a "quality" score between 0 and 10. For the purpose of this project, I converted the output to a binary output where each wine is either "good quality" (a score of 7 or higher) or not (a score below 7). The quality of a wine is determined by 11 input variables. Variables includes Fixed acidity, Volatile acidity, Citric acid, Residual sugar, Chlorides, Free sulfur dioxide, Total sulfur dioxide, Density, pH, Sulfates ,Alcohol.

Techniques: -

Using feature extraction, logistic regression , k-nearest neighbour, svc, decisionTree, gausian NB, Random Forest and Xg-boost. Various visual plots for visual Analysis.

Expected Results: -

Comparing various models performance and find the one with best accuracy. Guessing that Random Forest algorithm will be the one with good accuracy and best for training the model

Group member-1: -CHARVEE SARAIYA

Group member-2: -TANUSH BANCHHOD

Group member-3: -PRAVEEN KUMAR