

Assignment: Wine Quality Prediction

- Dataset: Red Wine Quality dataset from Kaggle

Objective:

Build machine learning models to predict the quality of red wine based on various features.

Machine Learning Models:

- Multiple Linear Regression
- Lasso Regression
- Ridge Regression
- Elastic Net
- K-Nearest Neighbors (KNN)
- Decision Tree
- Random Forest

Hyperparameter Tuning Techniques:

Implement Grid Search CV and Random Search CV for hyperparameter tuning on any one model.

Output Metrics:

- Mean Absolute Error
- Mean Squared Error
- Root Mean Squared Error