Lab: Predicting Housing Prices with Random Forest

In this lab, you will work on building and evaluating a **Random Forest and Decision Tree** model to predict housing prices, similar to the earlier lab where you used linear regression. Random Forest is a powerful ensemble learning technique that builds multiple decision trees and averages their predictions, often leading to better performance than a single decision tree or linear regression.

By following along with this lab, you will:

- Train a Decision Tree model using the California housing dataset.
- Train a Random Forest model using the California housing dataset.
- Evaluate its performance using metrics such as Mean Squared Error and R^2 score.
- Visualize and interpret feature importances in the Random Forest model.

Instructions

To begin this lab, please click on the link below to access the Google Colab notebook:

Random Forest Lab: Predicting California Housing Prices

Follow the instructions in the notebook and run the provided code blocks to build and evaluate your model. Make sure to explore how Random Forest compares to linear regression in predicting house prices!