Project

For the below provided dataset (<u>MTcars & Heart Disease</u>) perform Decision Tree model and Linear regression model and predict their target variable. and build an efficient Dashboard for the same.

Theoretical assignment (Decision Tree Model)

- 1. What is the main objective of the decision tree algorithm?
- 2. What is homogeneity and how do you measure it?
- 3. What are the various split criteria?
- 5. What are underfit, overfit and best fit models?
- 6. What's the functioning difference between Decision Tree Regressor and Decision Tree Classifier?

Explore the answers to these extra questions on your own:

- 1. Why is the decision tree called a greedy technique?
- 2. What is pruning?
- 3. What is the best use case for decision tree model?
- 4. Explain an example where decision tree will fail to perform
- 5. What is the advantage of Decision tree over linear/logistic regression?