**MAJOR PROJECT**

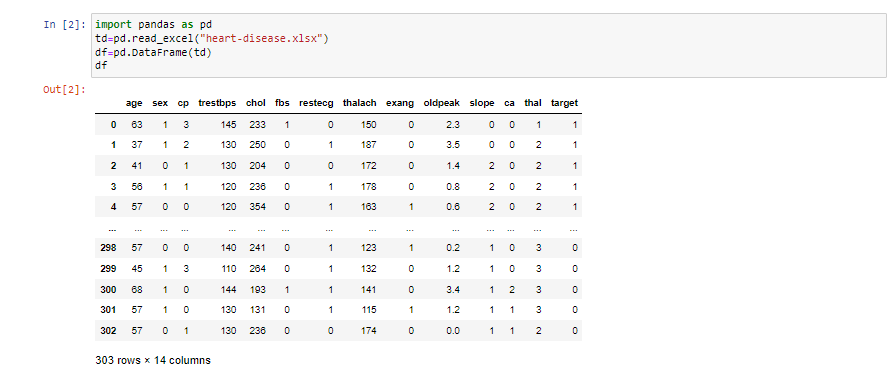
*Exploring the workflow of a Random Forest Classifier utilized in classifying heart disease.*

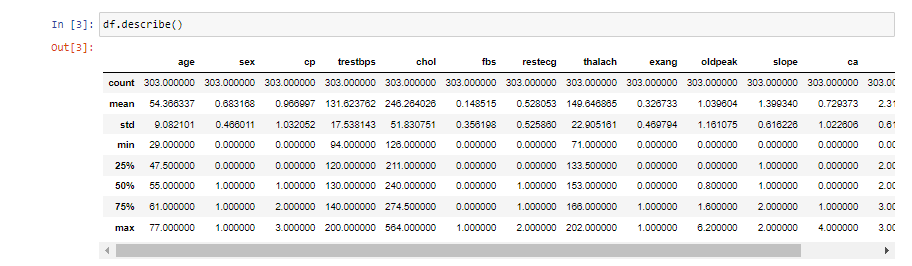
**PROBLEM STATEMENT:**

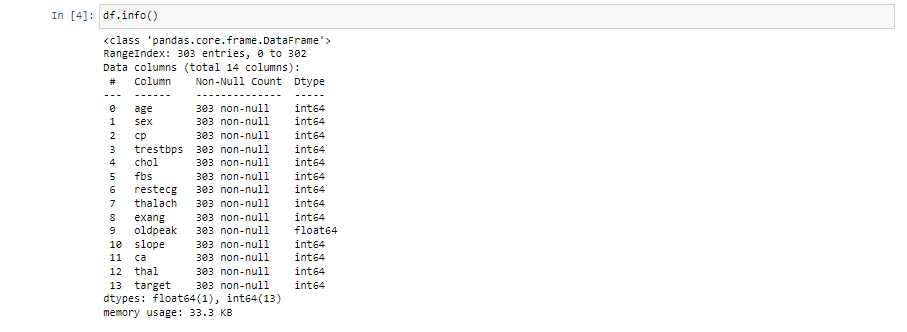
Understand the Random Forest algorithm's intuition, advantages, and disadvantages. Learn about feature selection using Random Forests and the difference between Random Forests and Decision Trees. Explore the relationship between Random Forests and nearest neighbors, import necessary libraries and datasets, conduct exploratory data analysis, perform feature engineering, and build Random Forest Classifier models with default and tuned parameters. Evaluate model performance using confusion matrix and classification report, visualize important features, and draw conclusions based on the results.

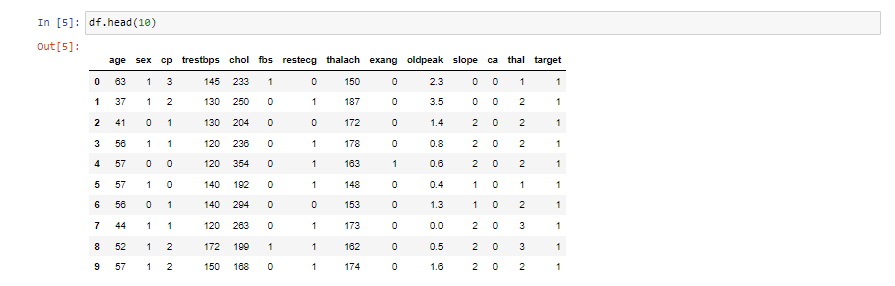
**SOLUTION:**

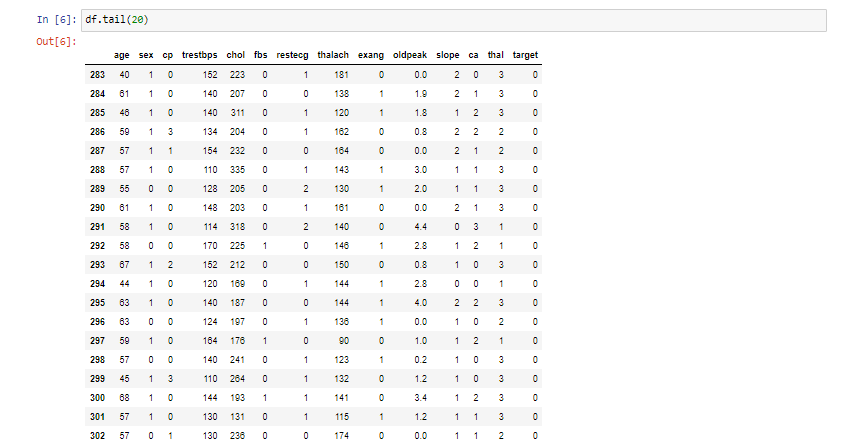
**Using jupyter notebook for the operation**

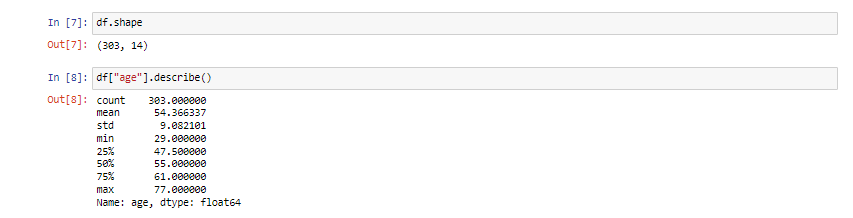
****

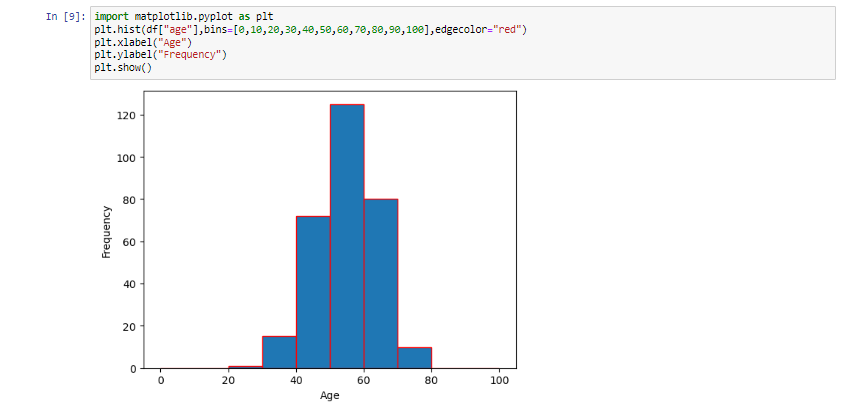
****

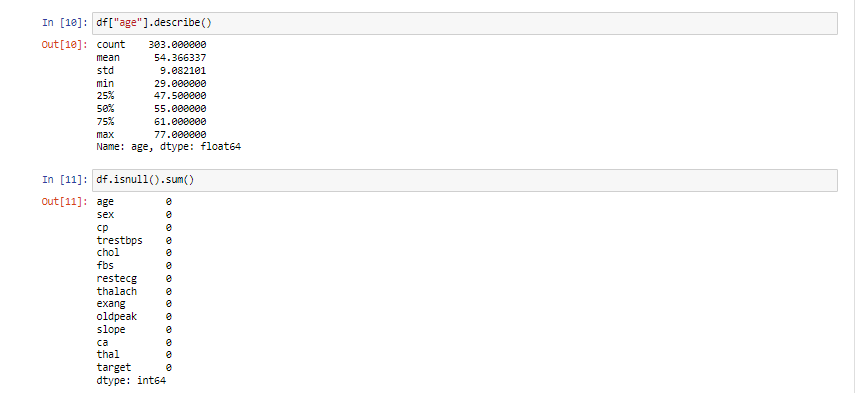
****

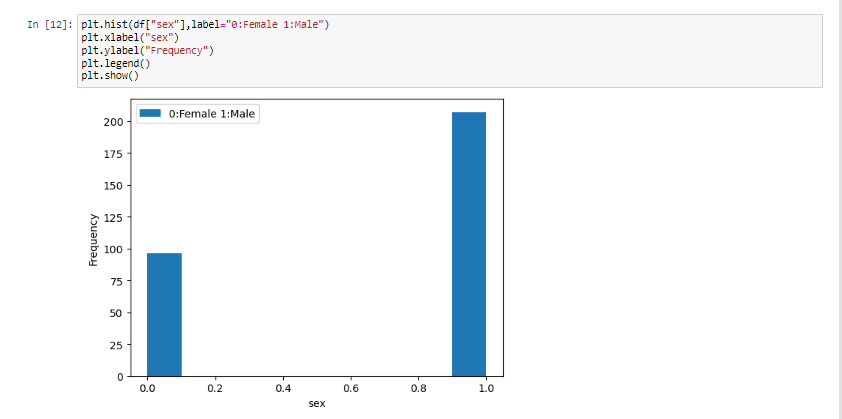
****

****

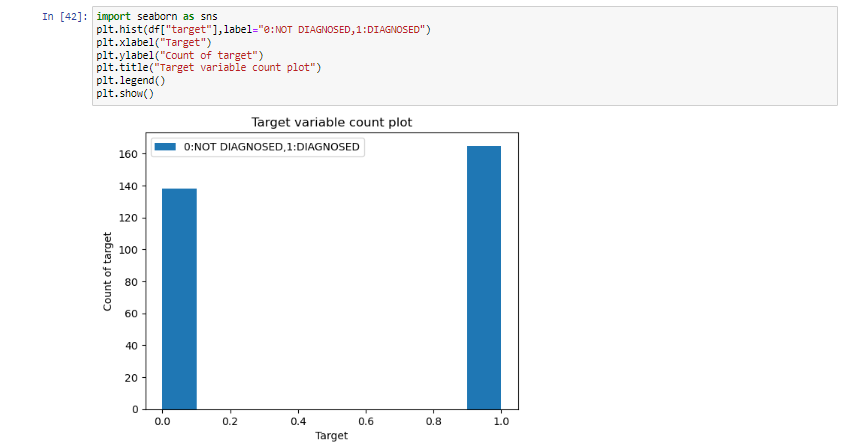
****

****

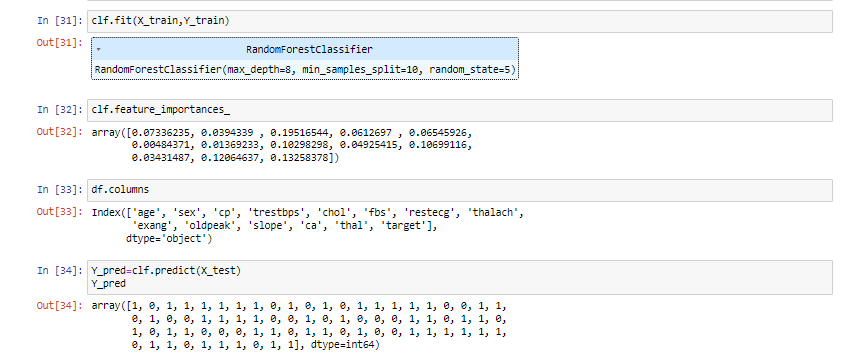
****

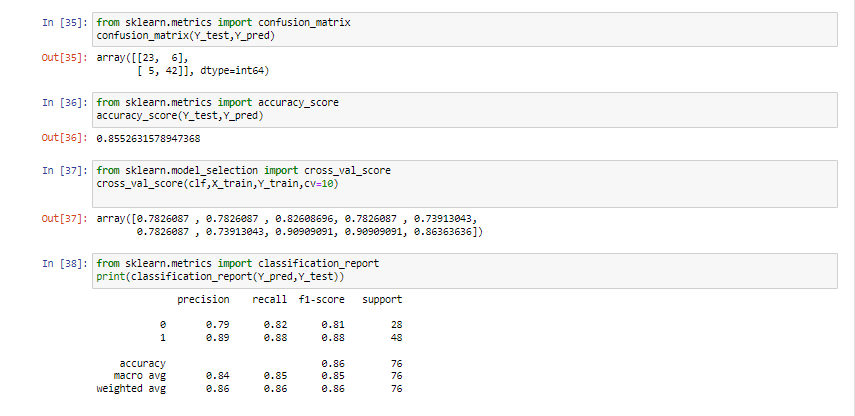
****

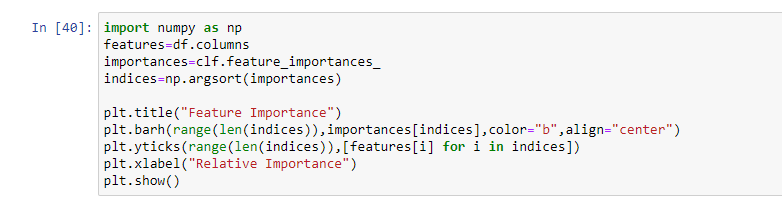
****

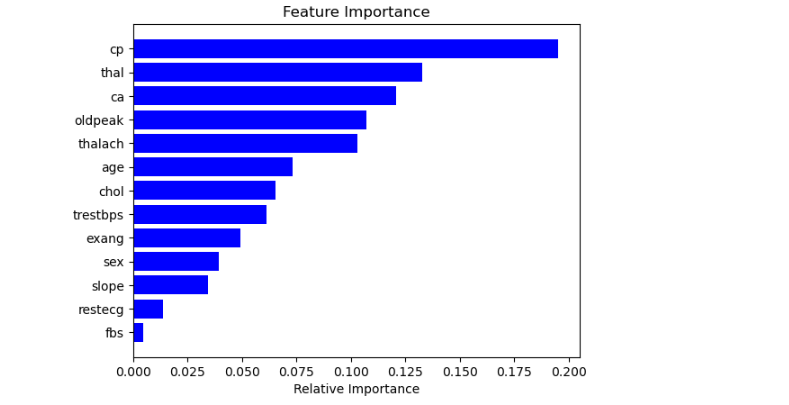
****

****

****

****

****

****