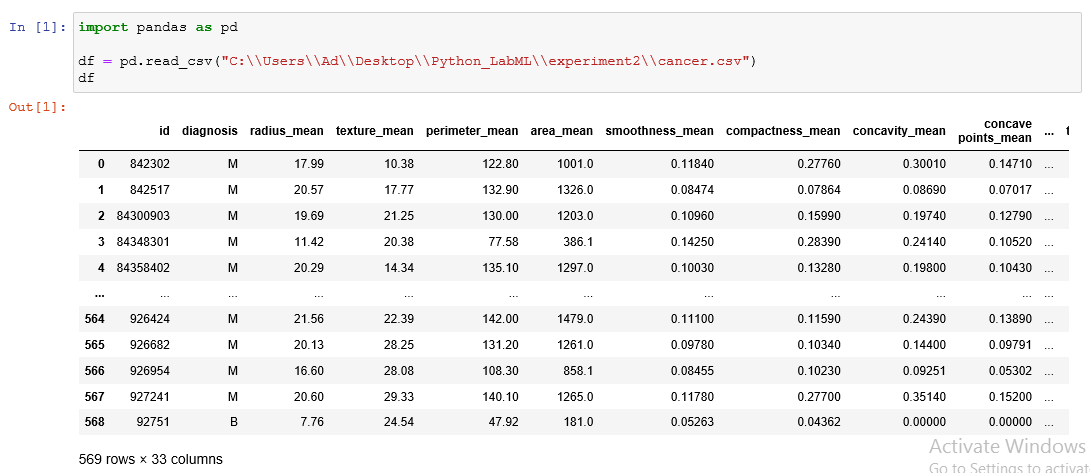
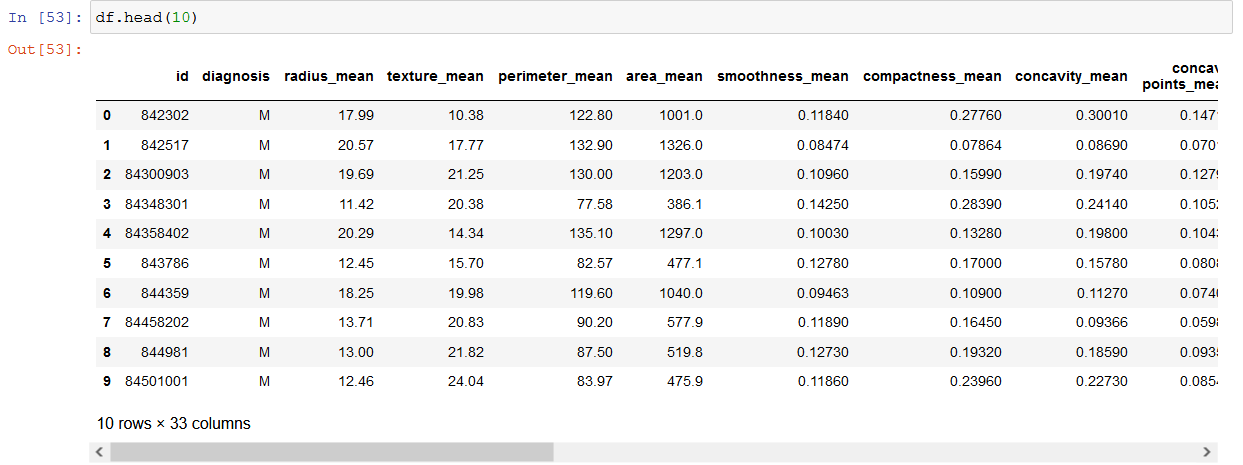
**Name: HARNAM KAUR Enrolment No: 00423207218 Class: CSE1**

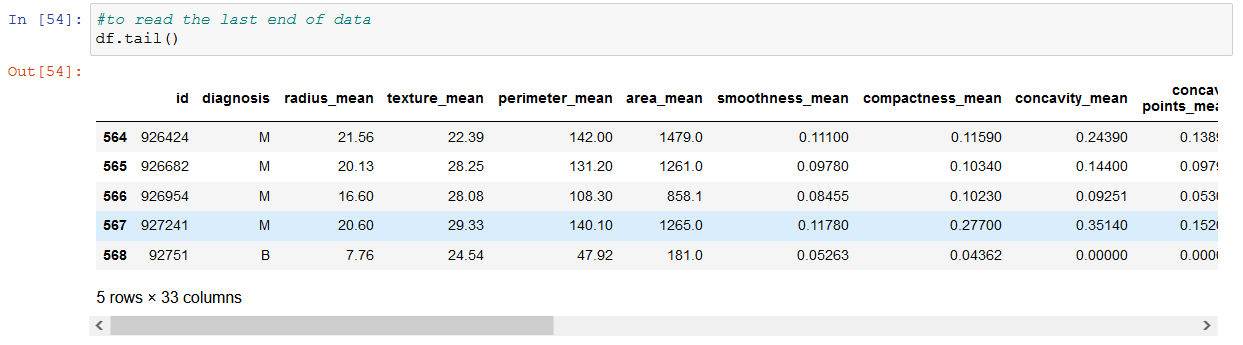
**MACHINE LEARNING LAB (EXPERIMENT NO 2)**

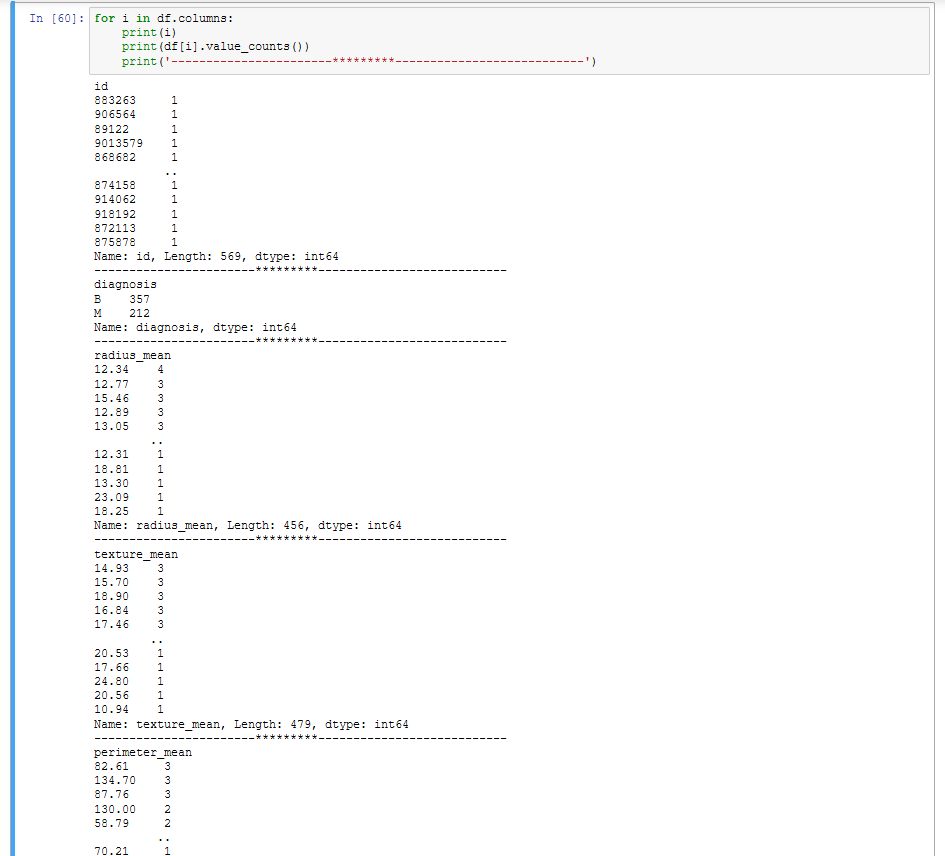
**AIM:** STUDY AND IMPLEMENT THE DECISION TREE CLASSIFIER ON THE BREAST CANCER DATASET USING SCIKIT LEARN IN PYTHON.

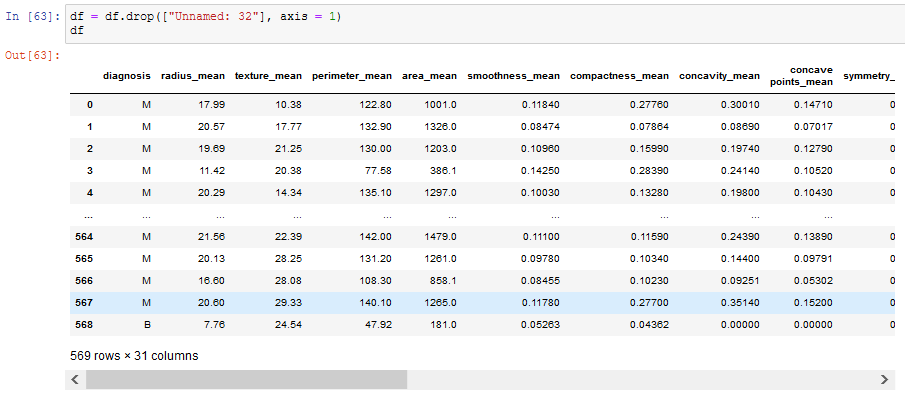
**Program Code Snippet**

**Loading Dataset**

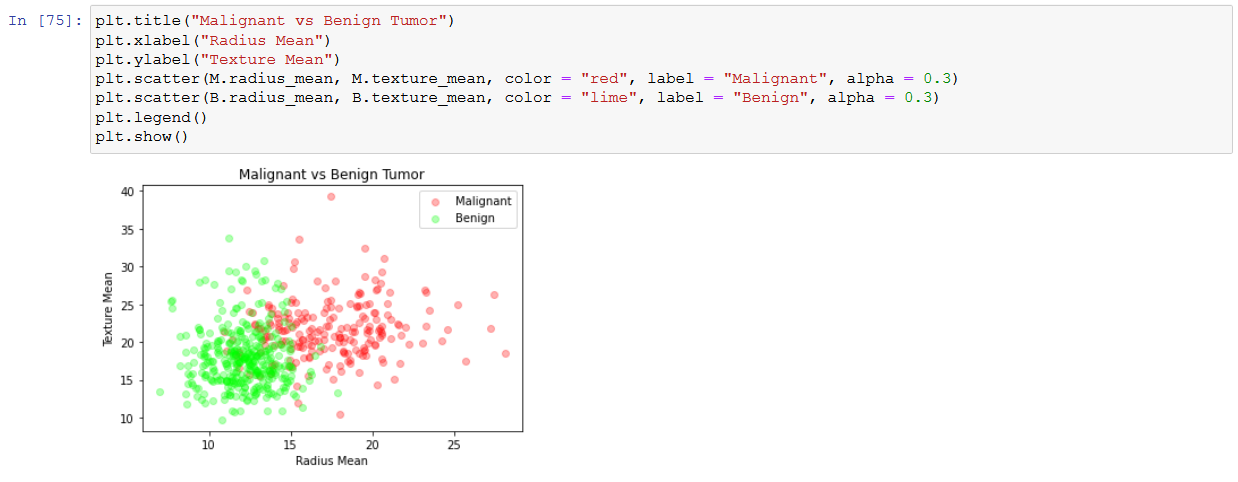
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**Preprocessing/Cleaning of dataset**



**Visualization**



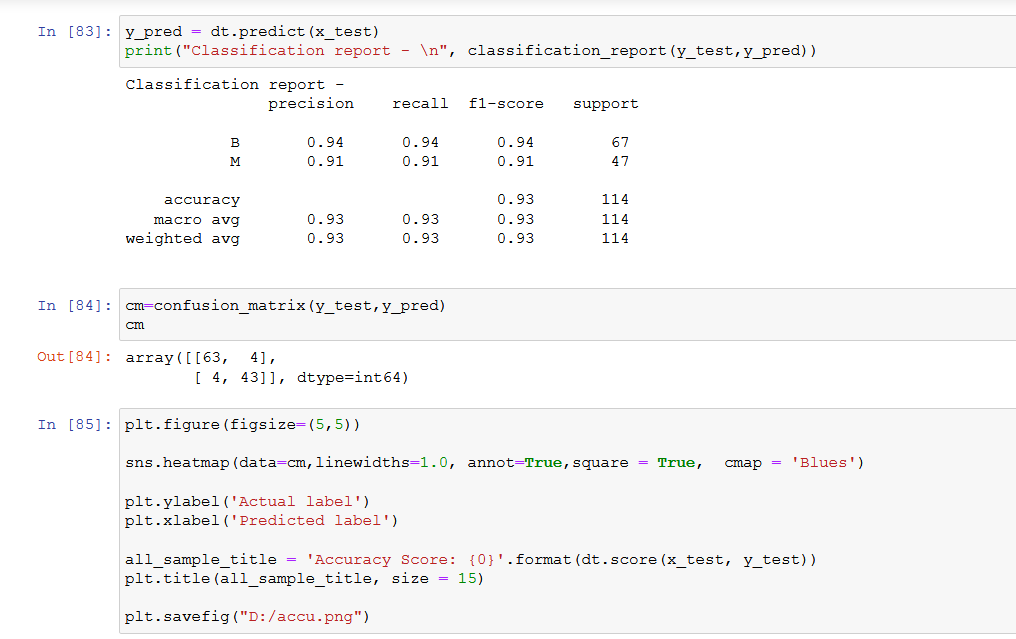
**ML algorithm implementation of prediction or comparison**

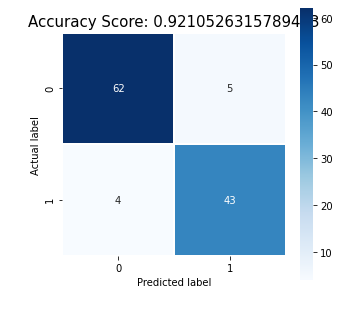
Decision tree models where the target variable uses a discrete set of values are classified as Classification Trees. In these trees, each node, or leaf, represent class labels while the branches represent conjunctions of features leading to class labels.

A decision tree where the target variable takes a continuous value, usually numbers, are called Regression Trees. The two types are commonly referred to together at CART (Classification and Regression Tree).

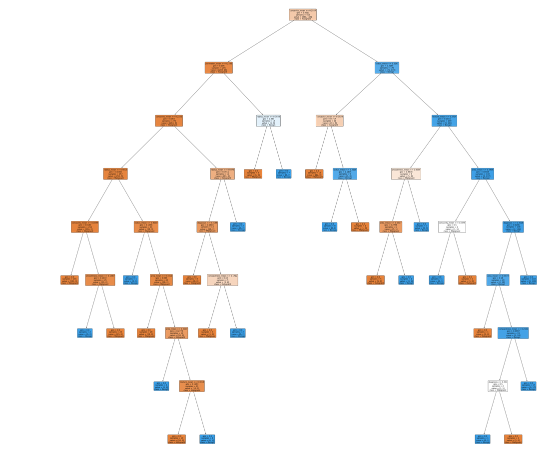


**ROC/AUC/Confusion matrix**



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**Final graph**

****

**Github Link of Jupyter Notbook:**

<https://github.com/Harnam99/Lab-Program-2->

<http://localhost:8973/notebooks/Experiment%20No2.ipynb#>

<https://github.com/Harnam99/Lab-Program-2-/blob/main/Experiment%20No2.ipynb>