**EXPERIMENT-3**

# AIM:

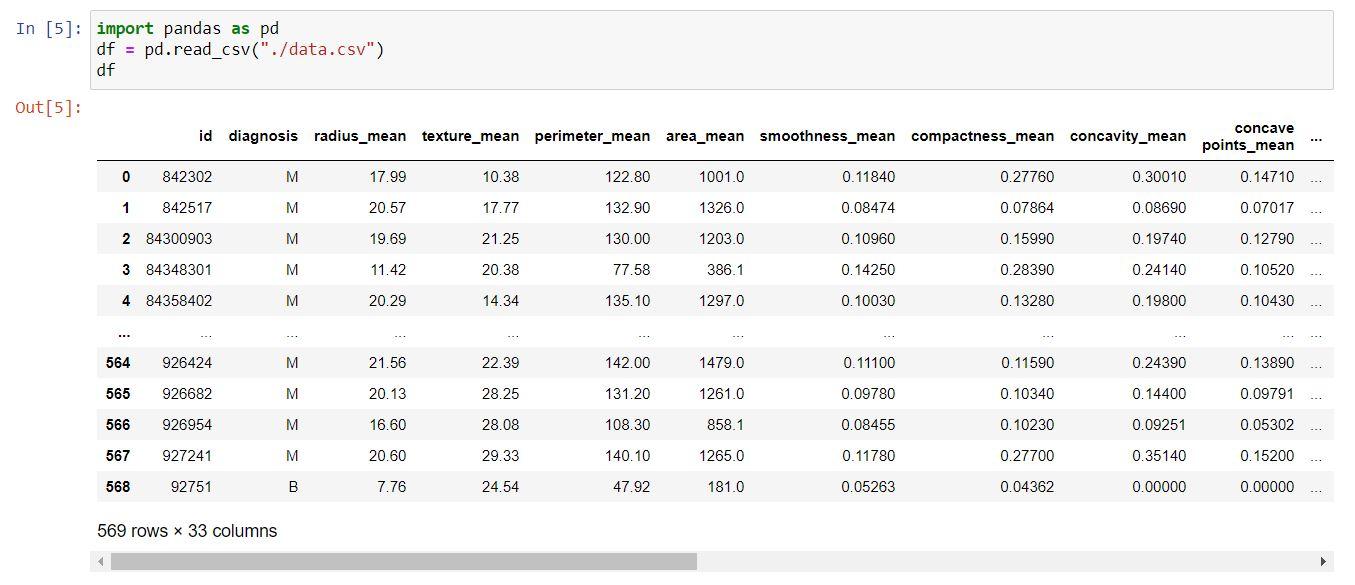
Estimate the accuracy of decision classifier on breast cancer dataset using 5 fold cross validation.

# ALGORITHM:

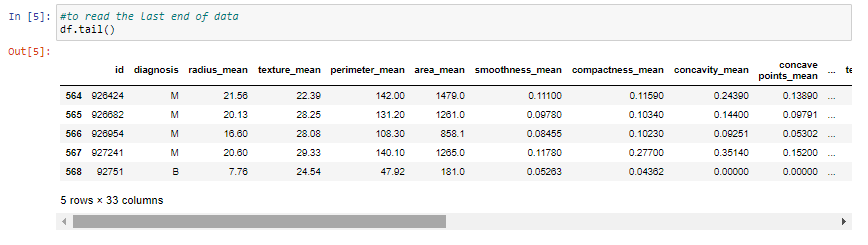
1. Select the best attribute using Attribute Selection Measures (ASM) to split the records.
2. Make that attribute a decision node and breaks the dataset into smaller subsets.
3. Starts tree building by repeating this process recursively for each child until one of the conditions will match:
   1. All the tuples belong to the same attribute value.
   2. There are no more remaining attributes.
   3. There are no more instances.

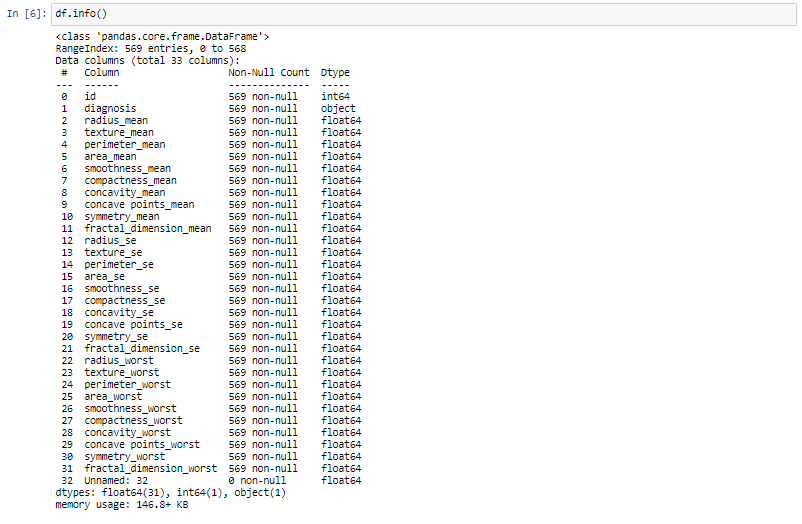
# PROGRAM CODE SNIPPET:

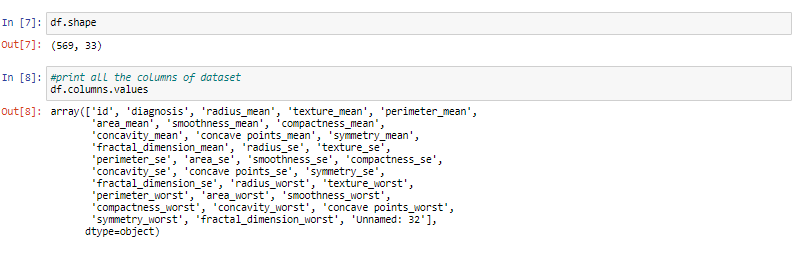
## LOADING DATA SET:

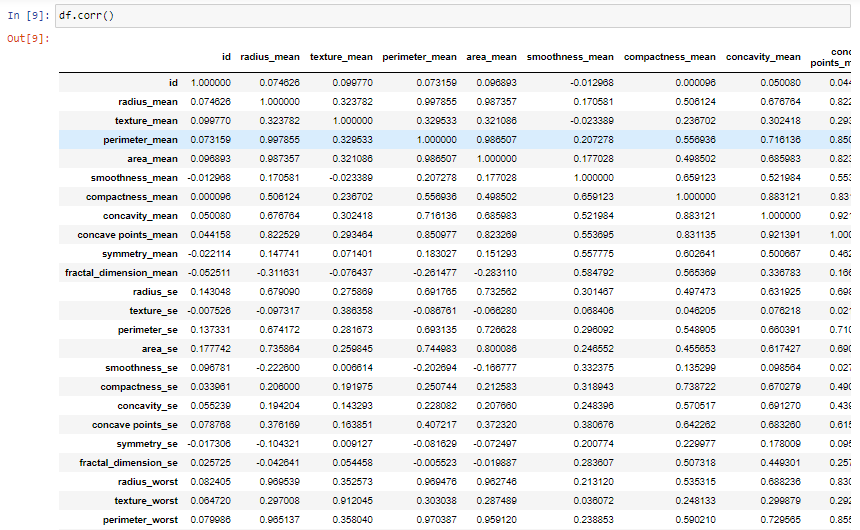


## PREPROCESSING:

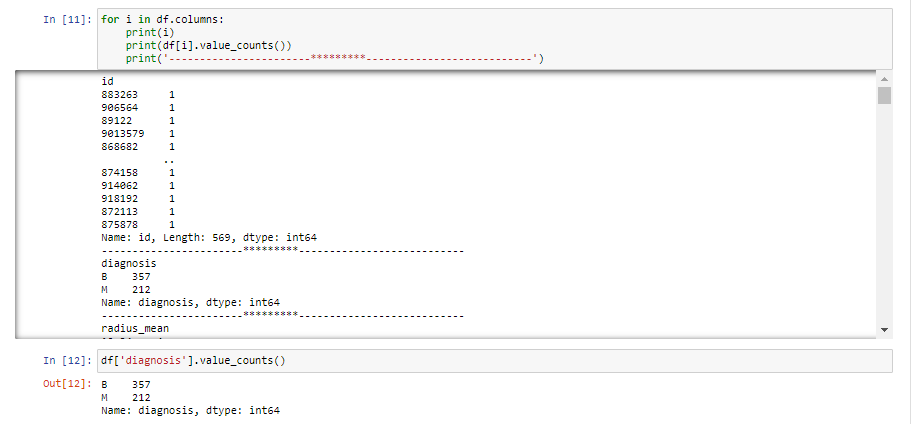


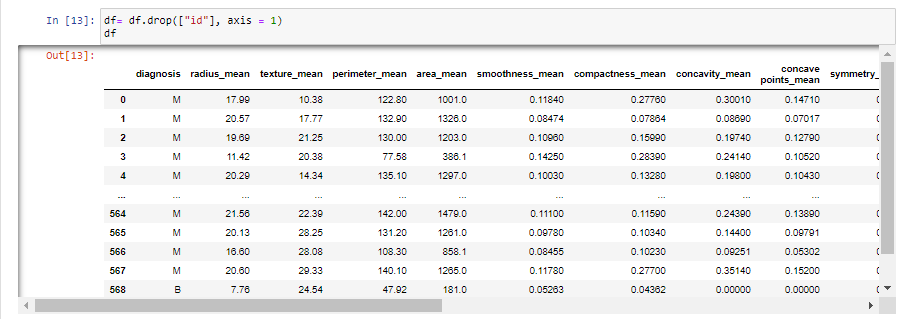


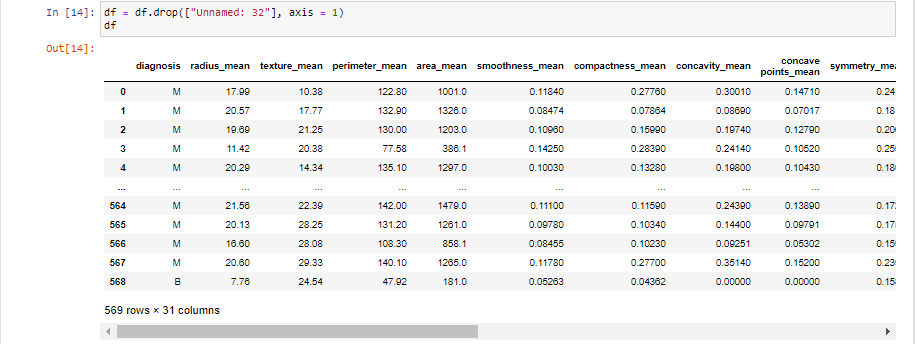






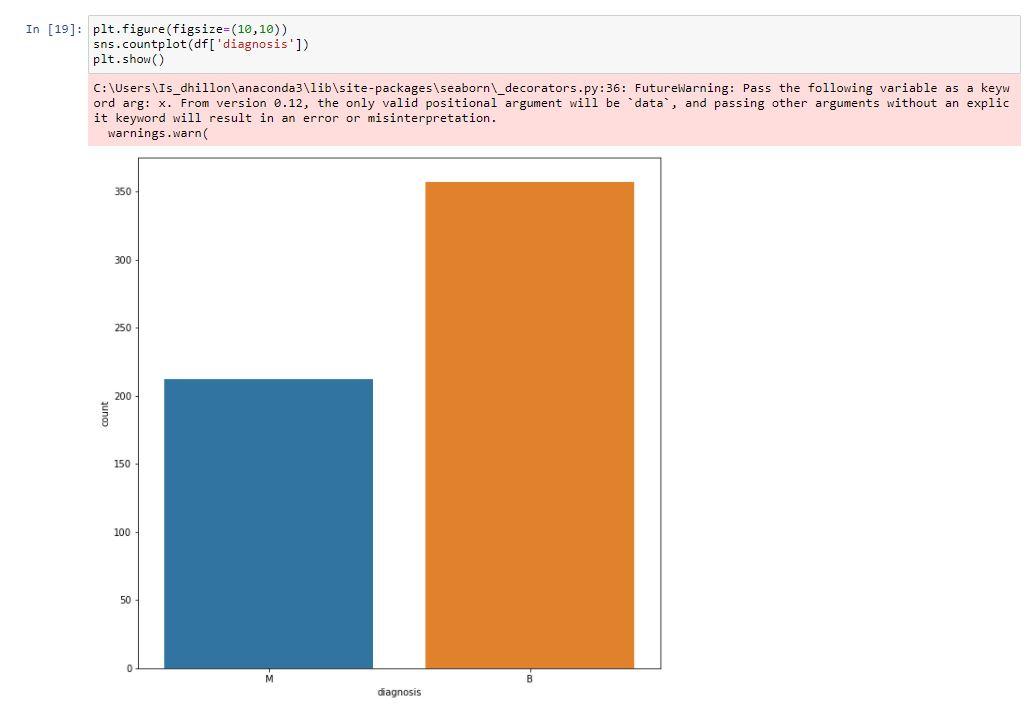


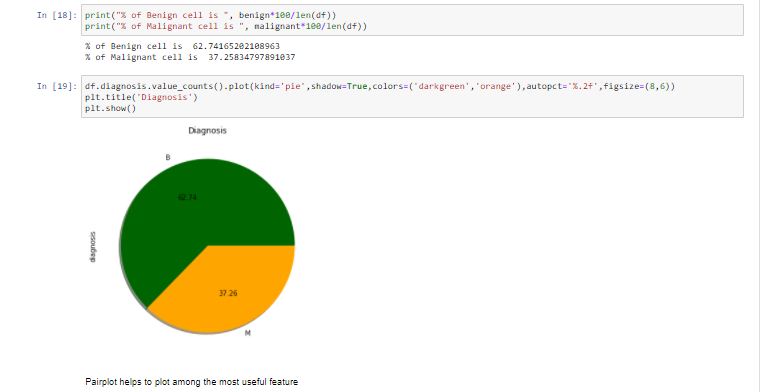


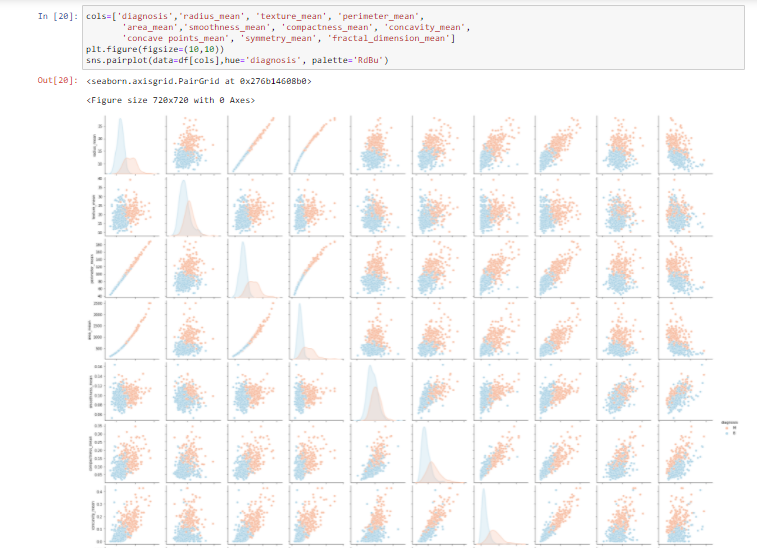


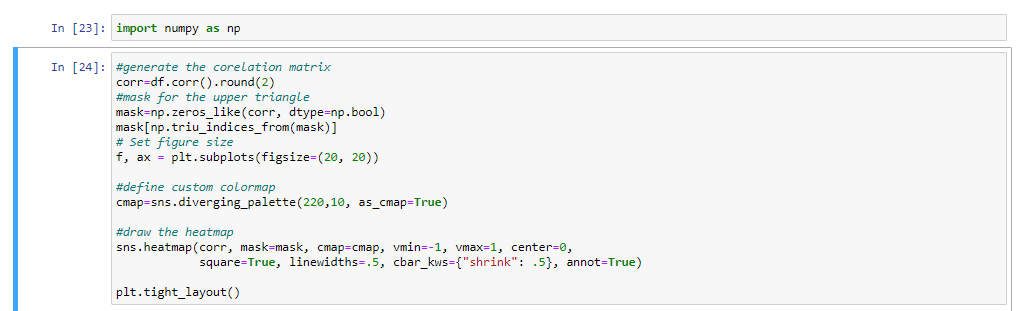
## VISUALIZATION:

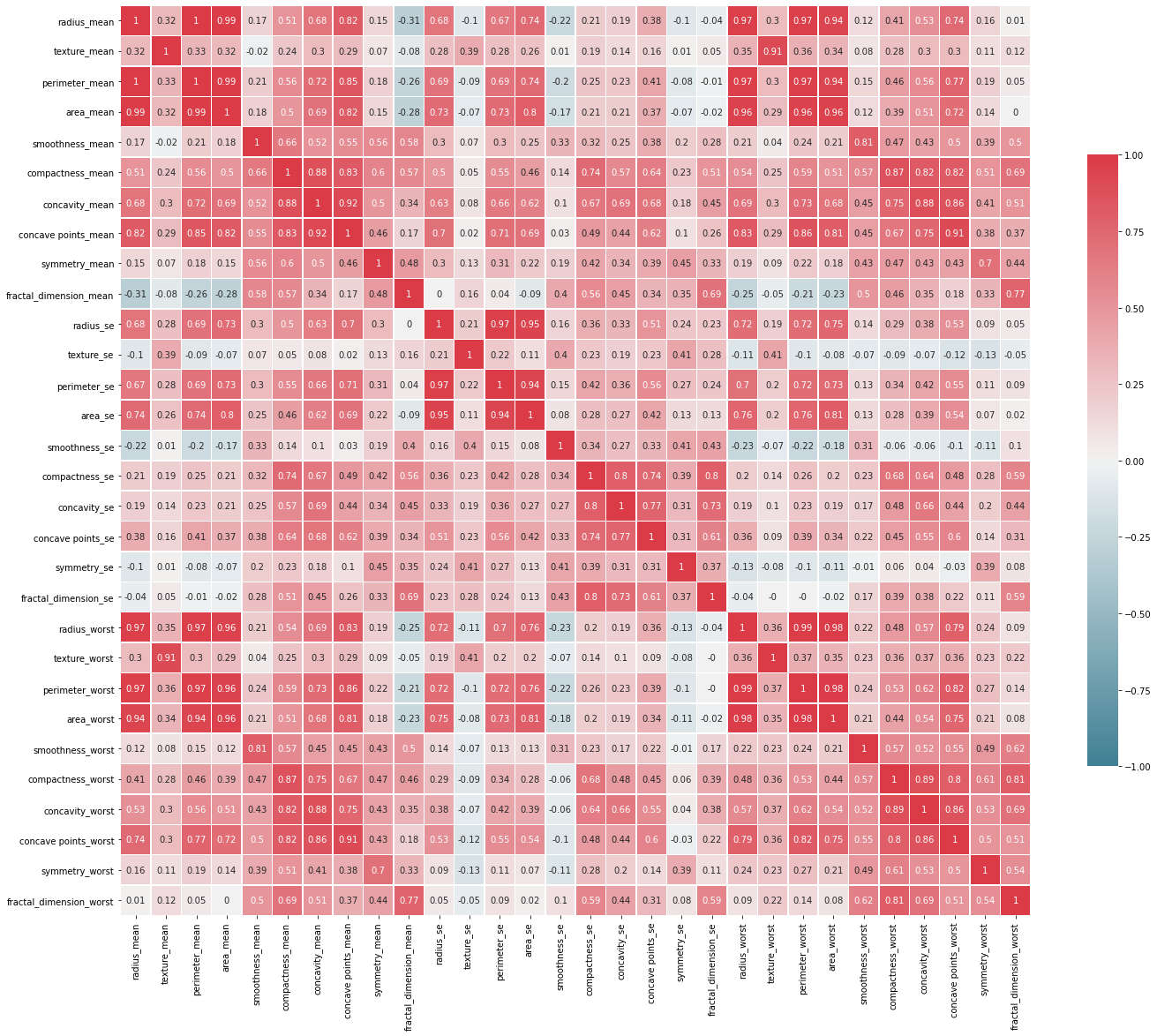


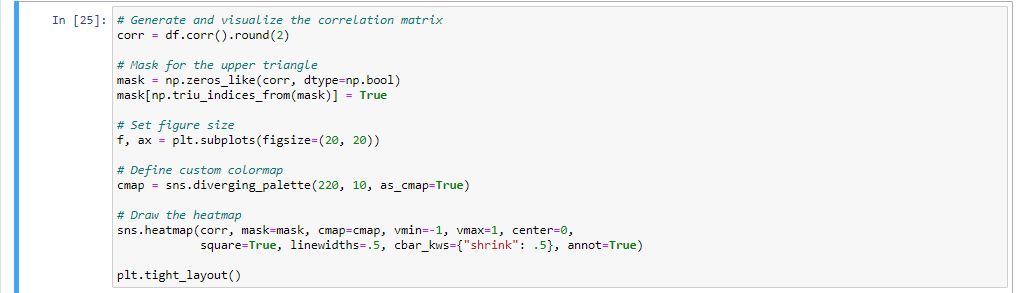


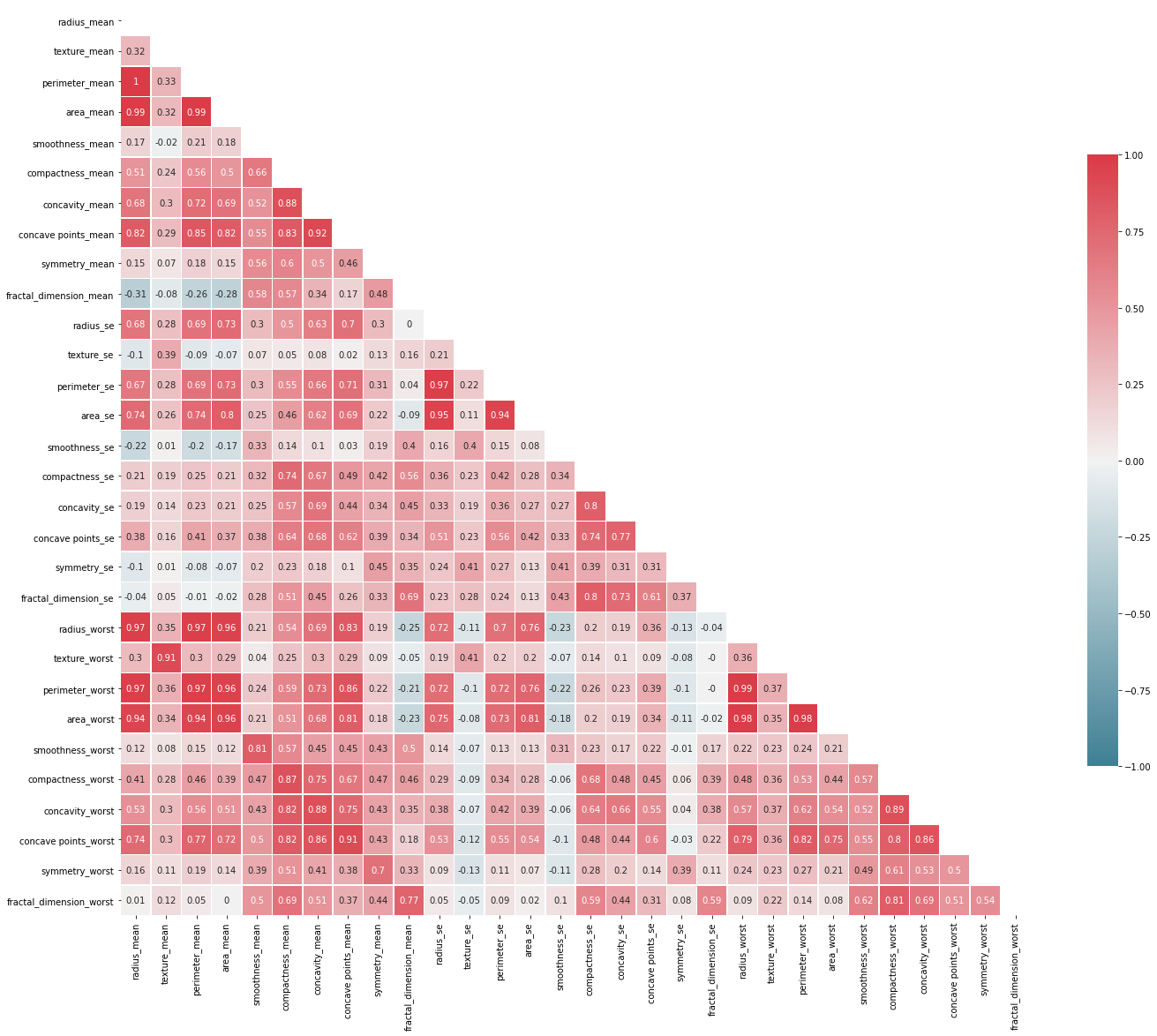


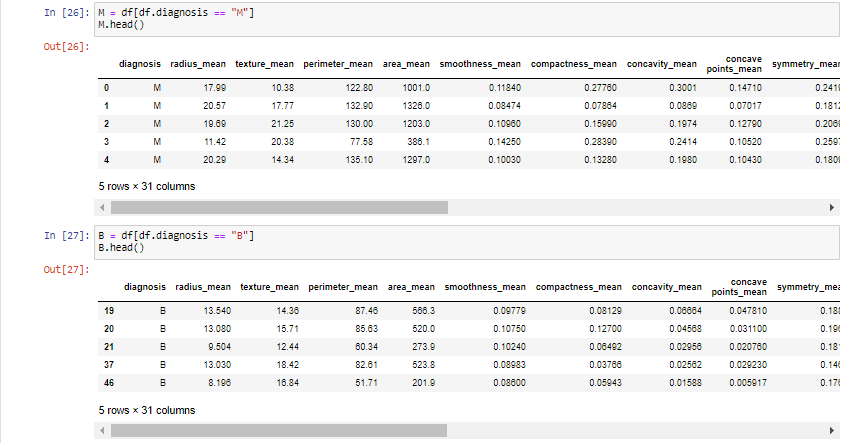


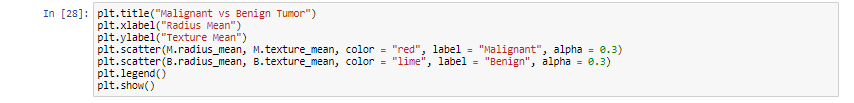


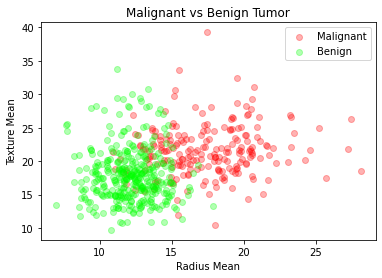




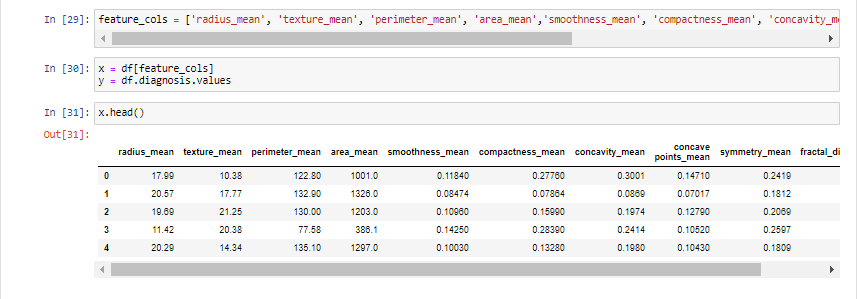


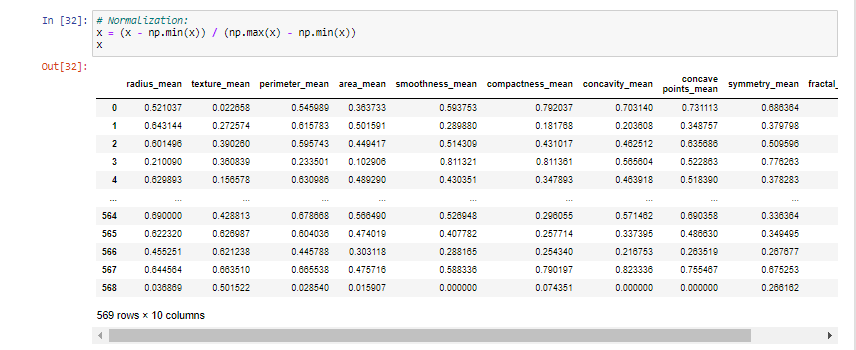


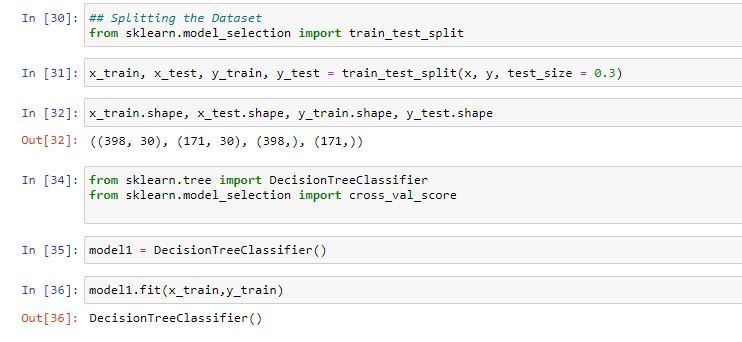


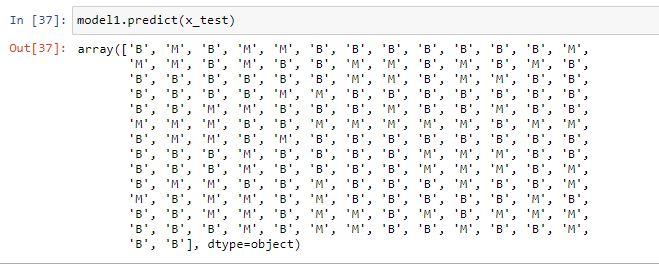


## ML ALGORITHM IMPLEMENTATION:

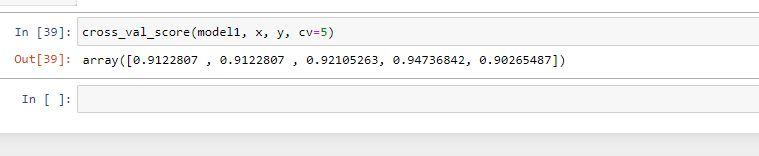








## FINAL RESULT:



# GITHUB LINK:

<https://github.com/MANI14011998/ML_Python/tree/master/Experiment_3>