**4/16/2021**

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**Registration Number** 20MAI0082

Classification Algorithms

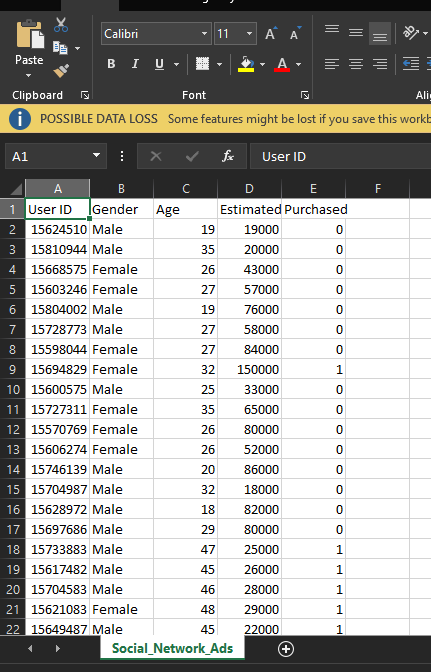
ASSIGNMENT-3

**GitHub Link :-** https://github.com/rishabh5197/Data-Mining/tree/main/Assignment-3

**Dataset Link :-** https://www.kaggle.com/rakeshrau/social-network-ads

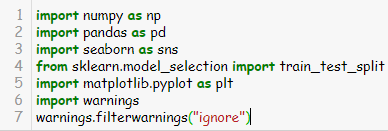
**Description About dataset**

* There are 400 rows and 5 columns present in our dataset from which user\_id is unique and the rest 3 columns are going to be independent data and the last one is going to be the dependent data which is purchased.

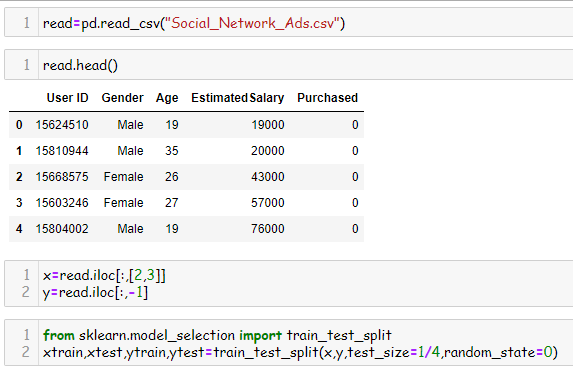


**Python Program Implementation**

* Importing necessary libraries

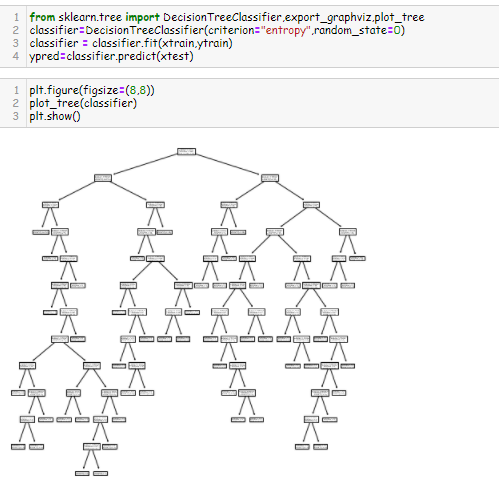


* Reading dataset and selecting the features that are needed. Selecting Independent variable as x and dependent variable as y and dividing the dataset using train\_test\_split.

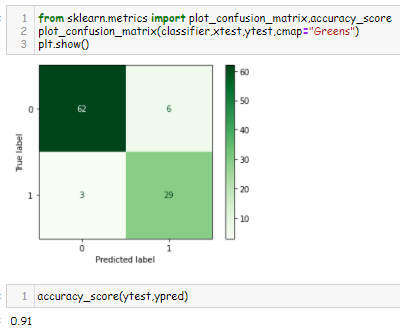


**Firstly, implementing Decision Tree**

* Using Sklearn package to import decision tree and plotting it using plot\_tree.

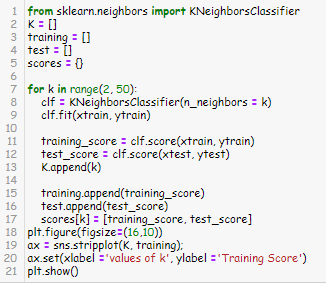


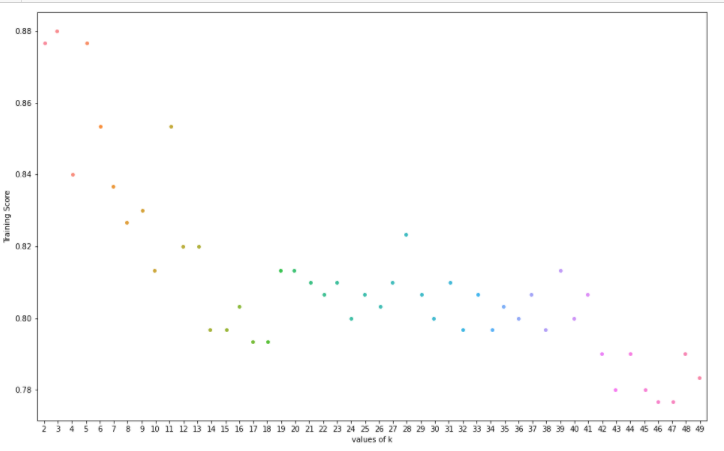
* Getting evaluation of the model using confusion matrix and accuracy score.

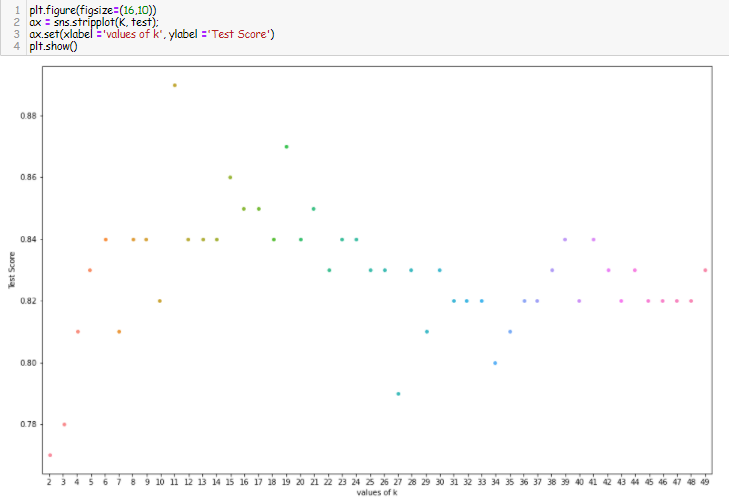


**Implementing KNN**

* Using sklearn package to import KNN classifier.







* Getting evaluation of the model using confusion matrix and accuracy score.

