**Chronic kidney disease-Prediction**

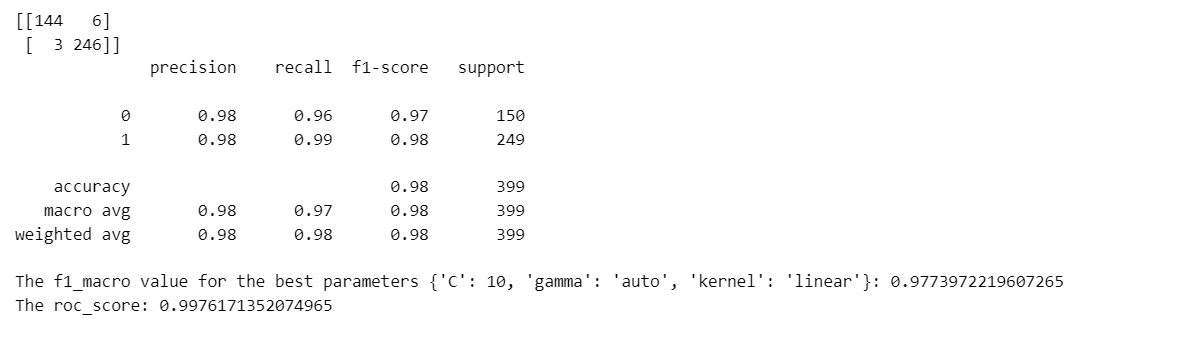
As a data scientist, the goal is to develop a predictive model that uses these parameters to accurately predict the Chronic kidney disease

Data set contain **399 rows × 28 columns** data.

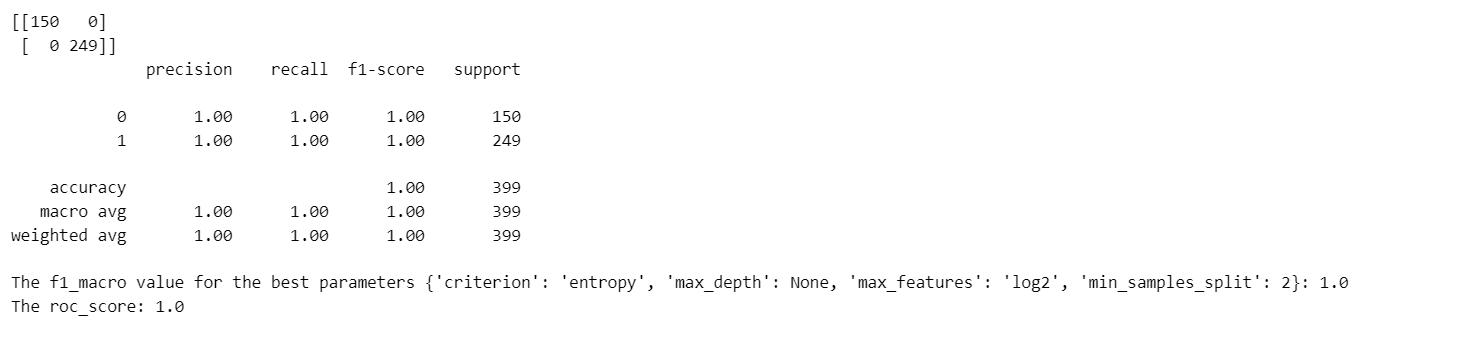
It have categorical data in multiple column so we need to convert it into **INT** by using **get\_dummies()** function from pandas.

With the use of GridSearchCV both Decision tree and Random forest predict with good accuracy.

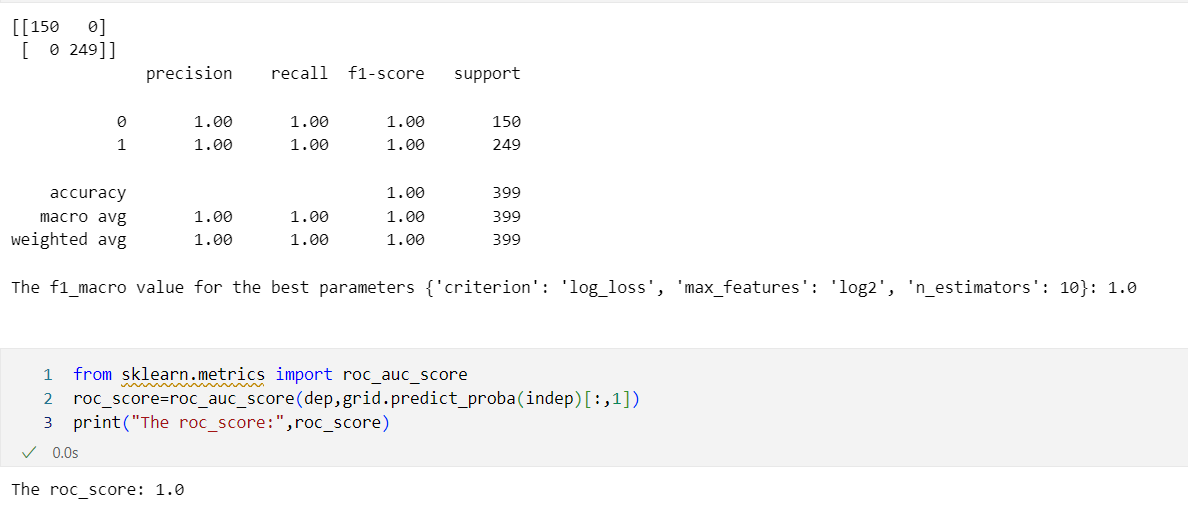
**SVM Sreenshot:**



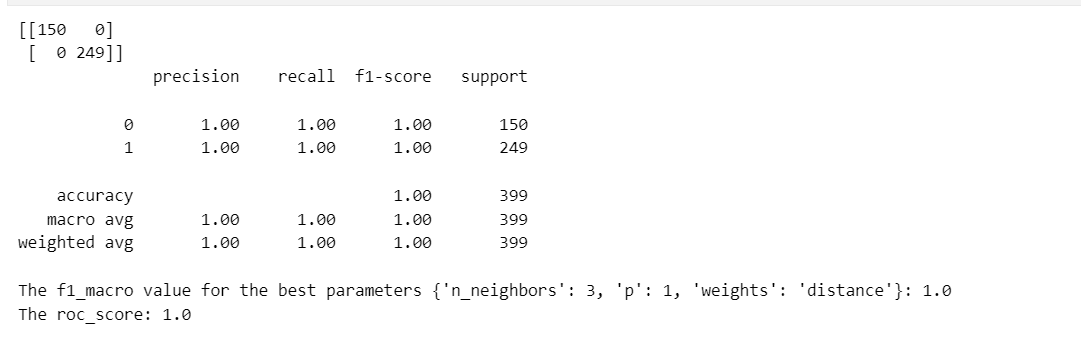
**Decision tree Screenshot:**



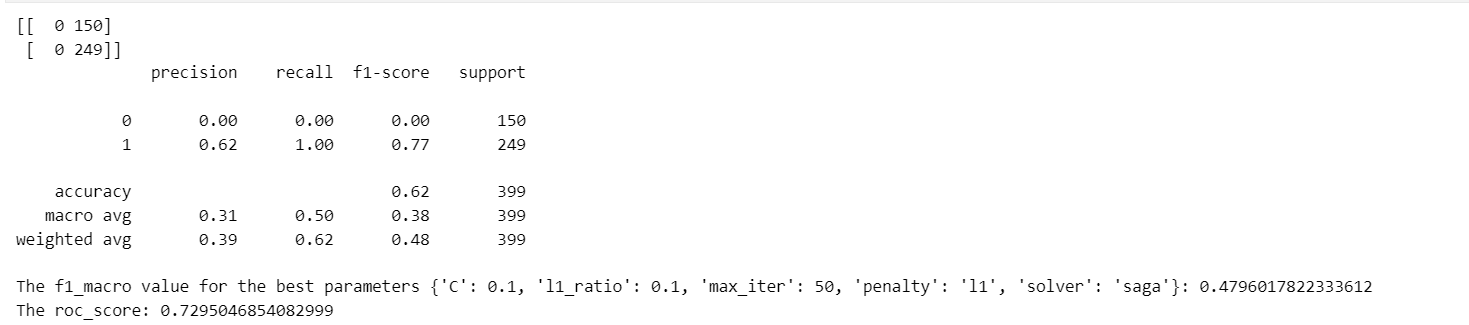
**Random Forest Screenshot:**



**KNN:**

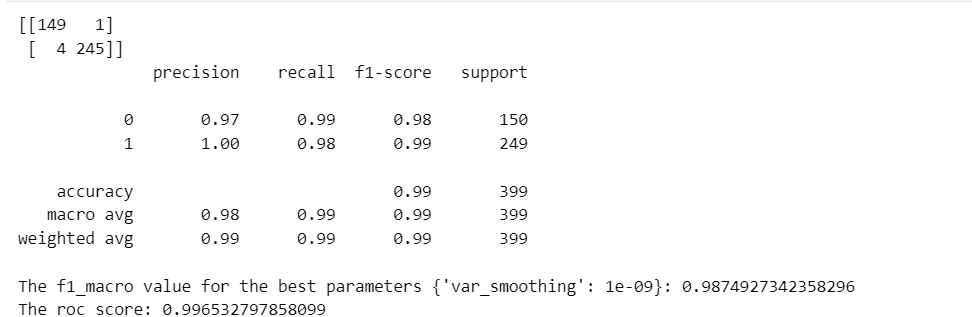


**LOGISTIC REGRESSION:**

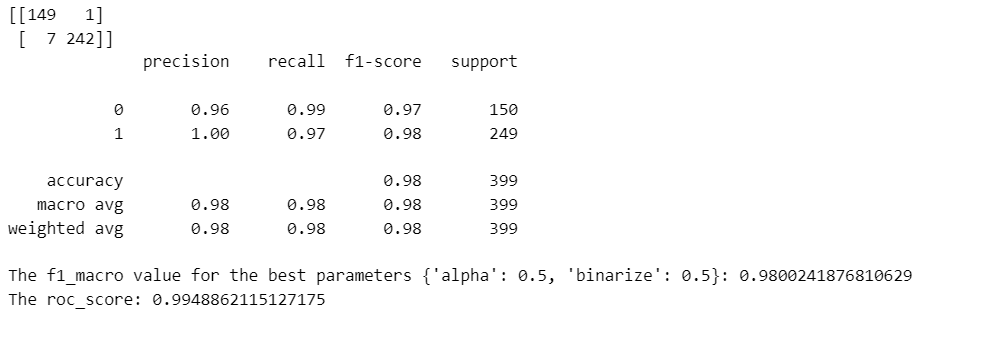
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**Naive\_bayes:**

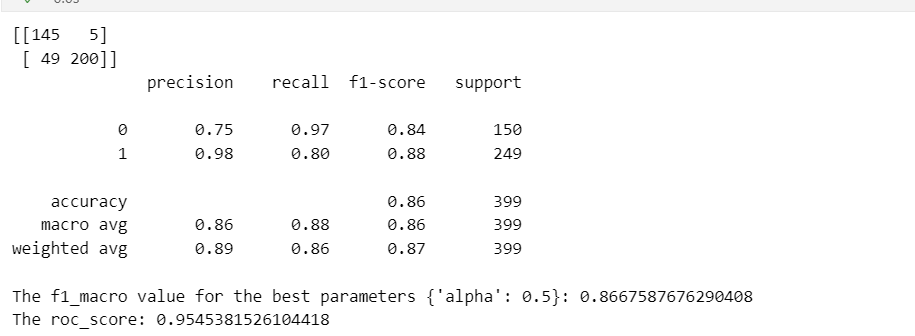
**GaussianNB**

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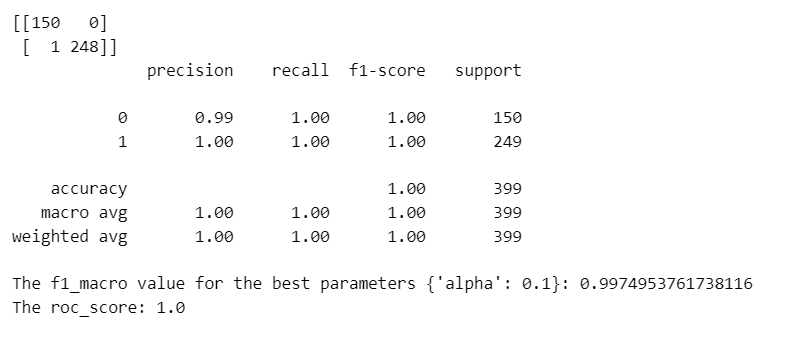
**BernoulliNB**

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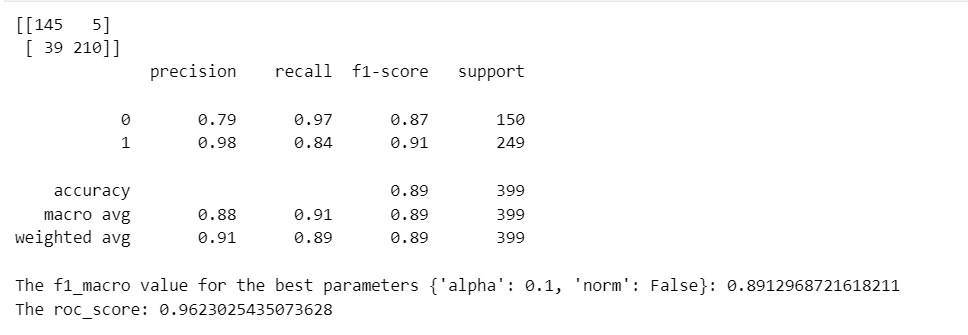
**MultinomialNB**

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**CategoricalNB**

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**ComplementNB**

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Both **DecisionTree,RandomForest** and **KNN** predict Chronic kidney disease with **100** percent accuracy and with **ROC\_SCORE** as **1**

**DecisionTree** :{'criterion': 'gini', 'max\_depth': 10, 'max\_features': 'sqrt', 'min\_samples\_split': 2}

**RandomForest :**{'criterion': 'log\_loss', 'max\_features': 'log2', 'n\_estimators': 100}

**KNN:**{'n\_neighbors': 3, 'p': 1, 'weights': 'distance'}