Name: Abdul Moiz Asif

CMS: 263802

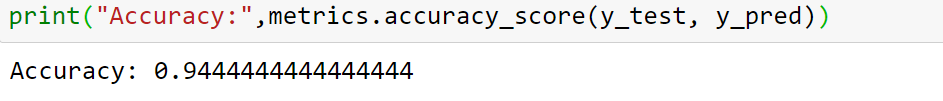
**AI lab 7**

**Code:**

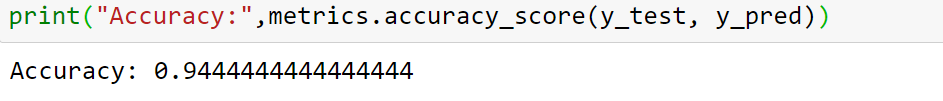
import pandas as pd  
from sklearn.model\_selection import train\_test\_split  
from sklearn.ensemble import RandomForestClassifier  
from sklearn import metrics  
  
  
  
  
df = pd.read\_csv('TrainingSet.csv')  
X = df.iloc[:, 1:4]  
Y=df["plant"]  
X\_train,X\_test,y\_train,y\_test=train\_test\_split(X,Y,test\_size=0.3)  
  
clf=RandomForestClassifier(n\_estimators=500)  
clf.fit(X\_train,y\_train)  
y\_pred=clf.predict(X\_test)  
  
  
print("Accuracy:",metrics.accuracy\_score(y\_test, y\_pred))  
  
  
# In[ ]:

**Output:**

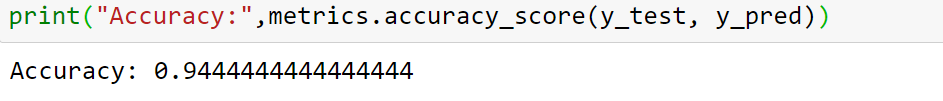
**When treeSize=100:**



**When treeSize=300:**



**When treeSie=500:**



**Conclusion:**

No change in the accuracy of the results by changing the number of trees.