2019103555 PRANAVA RAMAN B M S 29/11/2021 CS6301

MACHINE LEARNING - LAB - 13 - EXECUTION - ENSEMBLE CLASSIFIERS:-

1. ADABOOST CLASSIFIER

CODE:-

import pandas as pd

from sklearn.ensemble import AdaBoostClassifier

from sklearn.model\_selection import train\_test\_split

df = pd.read\_csv("Iris.csv")

array = df.values

X = df.iloc[:, :-1]

y = df.iloc[:, -1]

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size=0.35)

seed = 10

num\_trees = 15

print("Using Ada Boost Classifiers, with no. of trees = ", num\_trees)

model = AdaBoostClassifier(n\_estimators=num\_trees, random\_state=seed)

model.fit(X\_train, y\_train)

y\_pred = model.predict(X\_test)

from sklearn.metrics import confusion\_matrix

from sklearn.metrics import classification\_report

from sklearn.metrics import accuracy\_score

print("Accuracy = ", accuracy\_score(y\_pred, y\_test))

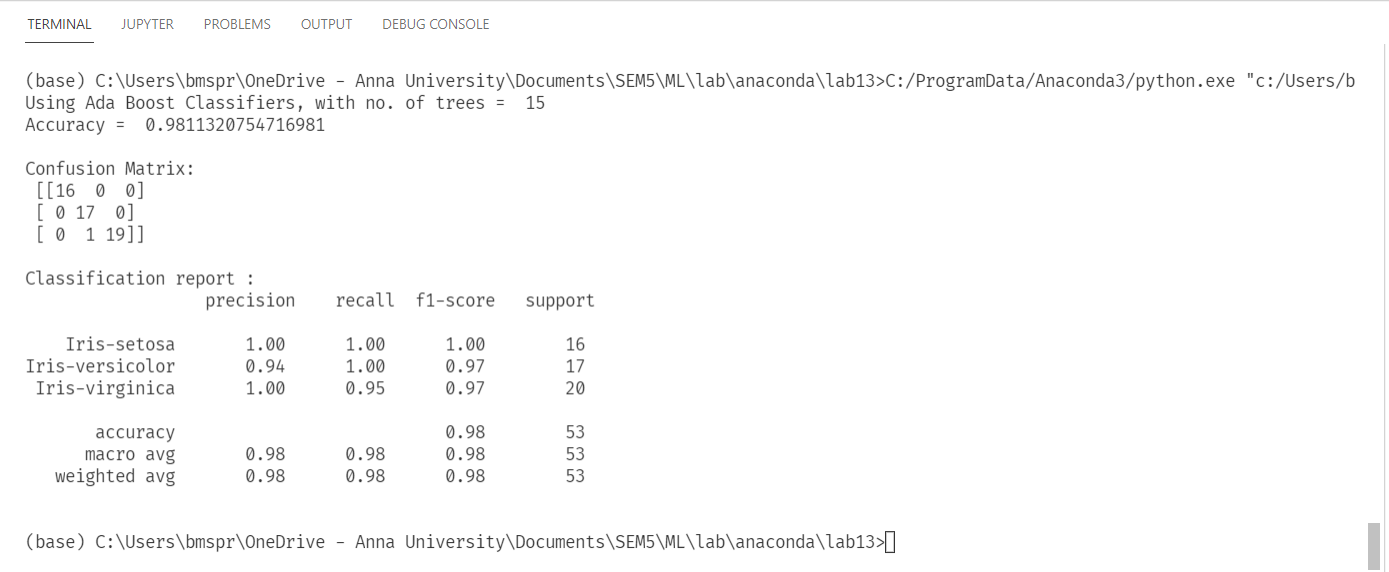
y\_true = y\_test

print("\nConfusion Matrix: \n", confusion\_matrix(y\_true, y\_pred))

matrix = classification\_report(y\_true, y\_pred)

print("\nClassification report : \n", matrix)

OUTPUT:-



1. BAGGING CLASSIFIER

CODE:-





