Program No:5

Aim:Program to implement naïve bayes algorithm using any standard dataset available in the public domain and find the accuracy of the algorithm.

Program:

```
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
#importing the data set
dataset = pd.read_csv('Social_Network_Ads.csv')
x = dataset.iloc[:, [2, 3]].values
y = dataset.iloc[:, -1].values

#splitting the dataset into training set and test data set
from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test = train_test_split (x,y,test_size=0.30)

from sklearn.preprocessing import StandardScaler
sc = StandardScaler()
x_train = sc.fit_transform(x_train)
x_test = sc.transform(x_test)
print(x_train)
print(x_test)
from sklearn.naive_bayes  import GaussianNB
classifier = GaussianNB()
classifier.fit(x_train, y_train)

y_pred = classifier.predict(x_test)
print(y_pred)
from sklearn.metrics import confusion_matrix, accuracy_score
ac = accuracy_score(y_test,y_pred)
print(ac)
```

Output:

```
C:\Users\ajcemca\AppData\Local\Programs\Python\Python39\python.exe C:/Users/ajcemca/PycharmProjects/naivebaised/naivebaisedq1.py
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