EXPERIMENT 6(B) :

Aim :

Finding accuracy value of iris data set using Naïve Bayes algorithm.

Program :

import numpy as np

import pandas as pd

from sklearn.datasets import load\_iris

X,y=load\_iris(return\_X\_y=True)

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

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size = 0.25, random\_state = 0)

from sklearn.naive\_bayes import GaussianNB

classifier = GaussianNB()

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

from sklearn.metrics import confusion\_matrix, accuracy\_score

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

cm = confusion\_matrix(y\_test, y\_pred)

print(cm)

accuracy=accuracy\_score(y\_test, y\_pred)

print(accuracy)

Output :

[[13 0 0]

[ 0 16 0]

[ 0 0 9]]

1.0