EXPERIMENT 6(A) :

Aim :

Finding the accuracyvalue of iris data set using KNN algorithm

Program :

import numpy as np

import pandas as pd

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

from sklearn.datasets import load\_iris

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

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size = 0.20, random\_state = 42)

from sklearn.neighbors import KNeighborsClassifier

classifier = KNeighborsClassifier(n\_neighbors = 5, metric = 'minkowski', p = 2)

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 :

[[10 0 0]

[ 0 9 0]

[ 0 0 11]]

1.0