EXPERIMENT 6(D) :

Aim :

Finding accuracy value of iris data set using Decision Tree algorithm.

Program :

import numpy as np

import pandas as pd

dataset = pd.read\_csv("D:\\Desktop\\Bhavadharani-studies\\Fundamental of machine learning\\breastcancer.csv")

X = dataset.iloc[:, :-1].values

y = dataset.iloc[:, -1].values

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, random\_state = 2)

from sklearn.tree import DecisionTreeClassifier

classifier = DecisionTreeClassifier(random\_state = 0)

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 :

[[114 11]

[ 11 69]]

0.8926829268292683