**implement the naïve Baysian Classifier.**

import numpy as np

import matplotlib.pyplot as plt

import pandas as pd

from sklearn.datasets import load\_iris

data\_i = load\_iris()

df=pd.DataFrame(data\_i.data,columns=data\_i.feature\_names)

df['target'] = data\_i.target

print(df)

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

X=df[data\_i.feature\_names]

y=df['target']

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size = 0.2)

from sklearn.preprocessing import StandardScaler

sc = StandardScaler()

X\_train = sc.fit\_transform(X\_train)

X\_test = sc.transform(X\_test)

## naive bayes claassifier using Gaussian Function

from sklearn.naive\_bayes import GaussianNB

classifier = GaussianNB()

classifier.fit(X\_train, y\_train)

y\_pred = classifier.predict(X\_test)

y\_pred

from sklearn.metrics import confusion\_matrix

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

from sklearn.metrics import accuracy\_score

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

print(cm)

df = pd.DataFrame({'Real Values':y\_test, 'Predicted Values':y\_pred})

print(df)