#naive Basesian Classfier  
# for dataset  
import numpy as np  
import pandas as pd  
import matplotlib.pyplot as plt  
from sklearn.model\_selection import train\_test\_split  
from sklearn import datasets  
from sklearn.naive\_bayes import GaussianNB  
from sklearn.metrics import confusion\_matrix  
iris=datasets.load\_iris()  
x=iris.data  
y=iris.target  
print("Features:",iris['feature\_names'])  
  
#Accuracy Confusion Matrix  
  
x\_train,x\_test,y\_train,y\_test=train\_test\_split(x,y,test\_size=0.25,random\_state=0)  
NB=GaussianNB()  
NB.fit(x\_train,y\_train)  
y\_pred=NB.predict(x\_test)  
cm=confusion\_matrix(y\_test,y\_pred)  
print("Confusion Matrix")  
print(cm)