import numpy as np

import pandas as pd

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

from sklearn.naive\_bayes import GaussianNB

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

df=pd.read\_csv('C:/Users/Aastha Kanaujia/Downloads/AIML\_Datasets/breast\_cancer.csv')

x=df.drop(columns=['diagnosis'])

y=df['diagnosis']

x\_train,x\_test,y\_train,y\_test=train\_test\_split(x,y,test\_size=0.2,random\_state=42)

baseline\_pred=['B']\*len(y\_train)

a=accuracy\_score(y\_train,baseline\_pred)

print(a)

nb=GaussianNB()

nb.fit(x\_train,y\_train)

print(nb.score(x\_train,y\_train))

print(nb.score(x\_test,y\_test))

print(confusion\_matrix(y\_train,nb.predict(x\_train)))

print(confusion\_matrix(y\_test,nb.predict(x\_test)))

print(classification\_report(y\_train,nb.predict(x\_train)))

print(classification\_report(y\_test,nb.predict(x\_test)))