**Naivy Bay’s Classification Demo 2**

import numpy as np

import matplotlib.pyplot as plt

import pandas as pd

import sklearn

dataset = pd.read\_csv('Social\_Network\_Ads.csv')

X = dataset.iloc[:, [1, 2, 3]].values

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

X

y

from sklearn.preprocessing import LabelEncoder

le = LabelEncoder()

X[:,0] = le.fit\_transform(X[:,0])

X

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

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size = 0.20, random\_state = 0)

from sklearn.preprocessing import StandardScaler

sc = StandardScaler()

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

X\_test = sc.transform(X\_test)

X\_train

from sklearn.naive\_bayes import GaussianNB

classifier = GaussianNB()

classifier.fit(X\_train, y\_train)

y\_pred = classifier.predict(X\_test)

y\_pred

y\_test

# Making the Confusion Matrix

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

ac = accuracy\_score(y\_test,y\_pred)

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

ac

cm