**#ml2 emails**

**import pandas as pd**

**import numpy as np**

**import seaborn as sns**

**import matplotlib.pyplot as plt**

**df = pd.read\_csv("emails.csv")**

**df.head()**

**df.info()**

**df.isnull().sum()**

**X = df.iloc[:, 1:-1].values**

**y = df.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=101)**

**from sklearn.preprocessing import StandardScaler**

**sc\_X = StandardScaler()**

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

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

**from sklearn.neighbors import KNeighborsClassifier**

**classifier = KNeighborsClassifier(n\_neighbors=5)**

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

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

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

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

**cm**

**from sklearn.metrics import classification\_report**

**cl\_report=classification\_report(y\_test,y\_pred)**

**print(cl\_report)**

**print("Accuracy Score for KNN : ", accuracy\_score(y\_pred,y\_test))**

**from sklearn.svm import SVC**

**from sklearn.metrics import accuracy\_score**

**svc = SVC(C=1.0,kernel='rbf',gamma='auto')**

**svc.fit(X\_train,y\_train)**

**y\_pred2 = svc.predict(X\_test)**

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

**#generating a confusion matrix for the predictions made by the Support Vector Classifier (SVC**

**cm = confusion\_matrix(y\_test, y\_pred2)**

**#Creating the Confusion Matrix**

**print("Accuracy Score for SVC : ", accuracy\_score(y\_pred2,y\_test))**

**from sklearn.metrics import classification\_report**

**cl\_report=classification\_report(y\_test,y\_pred2)**

**print(cl\_report)**

**#generating a classi**