

Classify the email using the binary classification method. Email Spam detection has two states:

a) Normal State – Not Spam b) Abnormal State – Spam. Use Support Vector Machine for classification. Analyze their performance.

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In [ ]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
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In [ ]: df = pd.read_csv("emails.csv")
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In [ ]: df.head()
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In [ ]: df.info()
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In [ ]: df.isnull().sum()
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In [ ]: x = df.iloc[:, 1:-1].values
y = df.iloc[:, -1].values
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In [ ]: from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test = train_test_split(x,y,test_size = 0.3,r
```

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In [ ]: from sklearn.preprocessing import StandardScaler
sc_X = StandardScaler()
x_train = sc_X.fit_transform(x_train)
x_test = sc_X.fit_transform(x_test)
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In [ ]: from sklearn.svm import SVC
sc = SVC()
sc.fit(x_train, y_train)
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In [ ]: y_pred2 = sc.predict(x_test)
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In [ ]: from sklearn.metrics import accuracy_score, classification_report, confus
print(classification_report(y_test, y_pred2))
```