**✅ Simple Python Script for Spam Mail Detection (for Practical Exam)**

python

# spam\_detector\_simple.py

from sklearn.feature\_extraction.text import CountVectorizer

from sklearn.naive\_bayes import MultinomialNB

# Sample data for demonstration (you can expand it)

messages = [

"Win money now!", # Spam

"Hello, how are you?", # Not spam

"Claim your free prize!!!", # Spam

"Let's meet for lunch tomorrow", # Not spam

"Congratulations! You've won!" # Spam

]

labels = [1, 0, 1, 0, 1] # 1 = spam, 0 = not spam

# Vectorizing the text data

vectorizer = CountVectorizer()

features = vectorizer.fit\_transform(messages)

# Training a simple Naive Bayes model

model = MultinomialNB()

model.fit(features, labels)

# Test the model with user input

test\_msg = input("Enter a message to check if it's spam: ")

test\_vector = vectorizer.transform([test\_msg])

prediction = model.predict(test\_vector)

print("Spam" if prediction[0] == 1 else "Not Spam")

**🧠 What this script does:**

* Trains a **Naive Bayes classifier** on a few sample spam and non-spam messages.
* Takes user input and predicts if the message is **spam** or **not spam**.
* Uses only built-in dataset and works offline — great for practicals.

**🛠 Prerequisites:**

Run this with:

Bash

$ pip install scikit-learn