

PYTHON LAB TASK

Visual Studio Code

Name:Riya Parikh
Reg No:22MID0356

About VS Code:

Visual Studio Code (VS Code) is a free, open-source code editor developed by Microsoft. It can be installed by downloading it from the official website <https://code.visualstudio.com>. VS Code works on Windows, macOS, and Linux systems. It supports many programming languages like Python, C++, Java, and JavaScript. We can enhance it using extensions for themes, language support, and productivity. It has a built-in terminal, so we can run our code without leaving the app. Visual Studio Code supports GitHub Copilot.

Task1: Sentiment Analysis using TextBlob

This program uses the TextBlob library to find the sentiment of a sentence you enter. It checks whether the text is positive, negative, or neutral based on its polarity score.

The screenshot shows a Visual Studio Code interface. On the left, there's a code editor window containing a Python script named 't1.py'. The script imports the TextBlob library, prompts the user for a sentence, creates a TextBlob object, and prints the polarity and subjectivity. It then checks the polarity to determine if the sentiment is positive, negative, or neutral. The code is as follows:

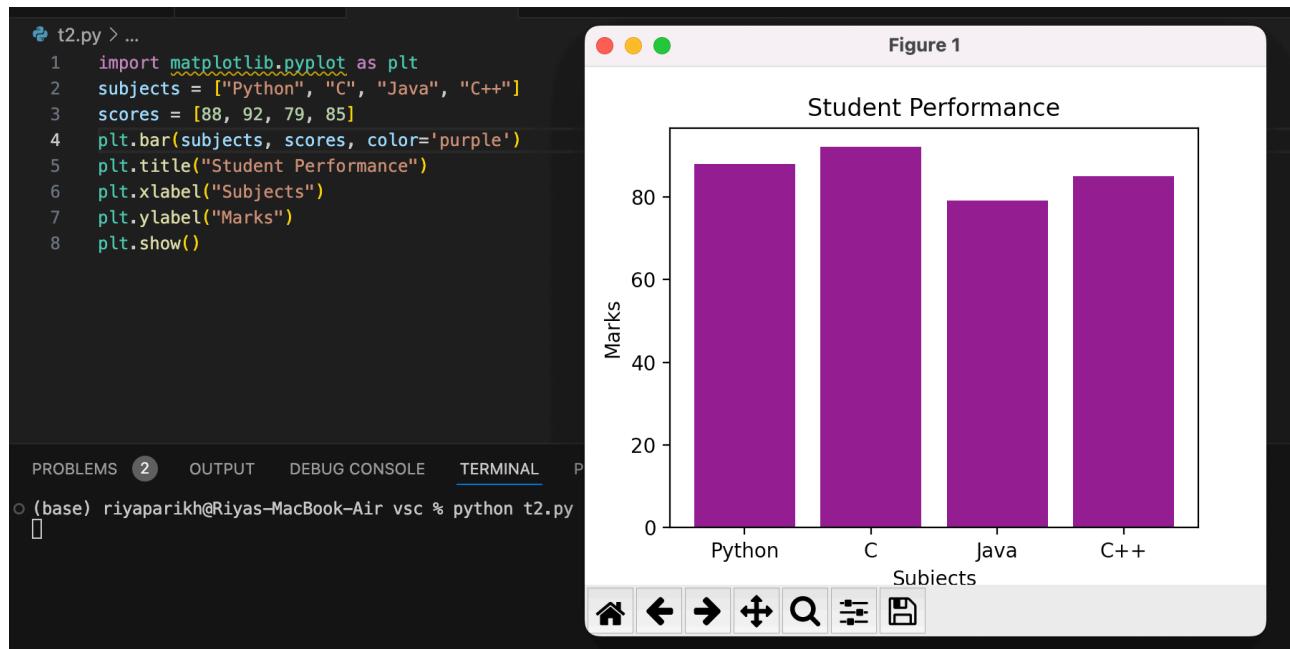
```
t1.py > ...
1  from textblob import TextBlob
2  text = input("Enter a sentence: ")
3  blob = TextBlob(text)
4  print("Polarity:", blob.sentiment.polarity)
5  print("Subjectivity:", blob.sentiment.subjectivity)
6  if blob.sentiment.polarity > 0:
7      print("Sentiment: Positive")
8  elif blob.sentiment.polarity < 0:
9      print("Sentiment: Negative")
10 else:
11     print("Sentiment: Neutral")
```

At the bottom, the terminal window shows the execution of the script and its output. The terminal tabs are labeled: PROBLEMS (2), OUTPUT, DEBUG CONSOLE, TERMINAL (underlined), and PORTS. The terminal output is:

```
python -u "/Users/riyaparikh/Documents/vsc/t1.py"
(base) riyaparikh@Riyas-MacBook-Air vsc % python -u "/Users/riyaparikh/Documents/vsc/t1.py"
Enter a sentence: good morning! my name is Riya
Polarity: 0.875
Subjectivity: 0.6000000000000001
Sentiment: Positive
```

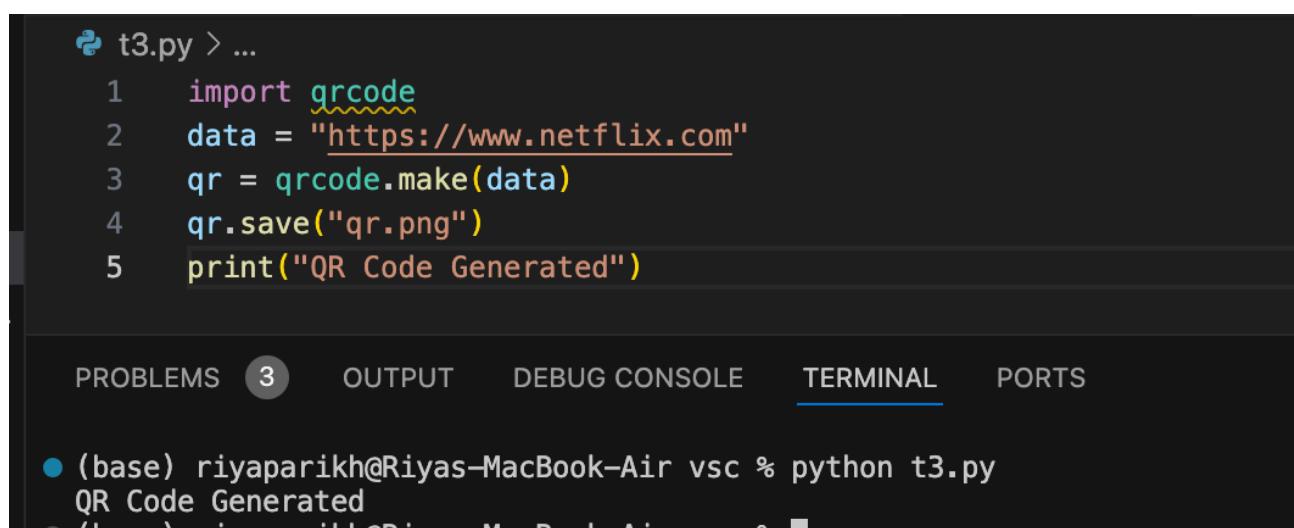
Task2: Bar Chart using Matplotlib

This program creates a bar chart showing a student's marks in different subjects using matplotlib. It displays the subjects on the x-axis and their corresponding scores on the y-axis.



Task3: QR code generation

This program creates a QR code for the Netflix website using the qrcode library. It saves the generated QR code image as qr.png on your computer.



THE QR CODE GENERATED IS SHOWN BELOW:

