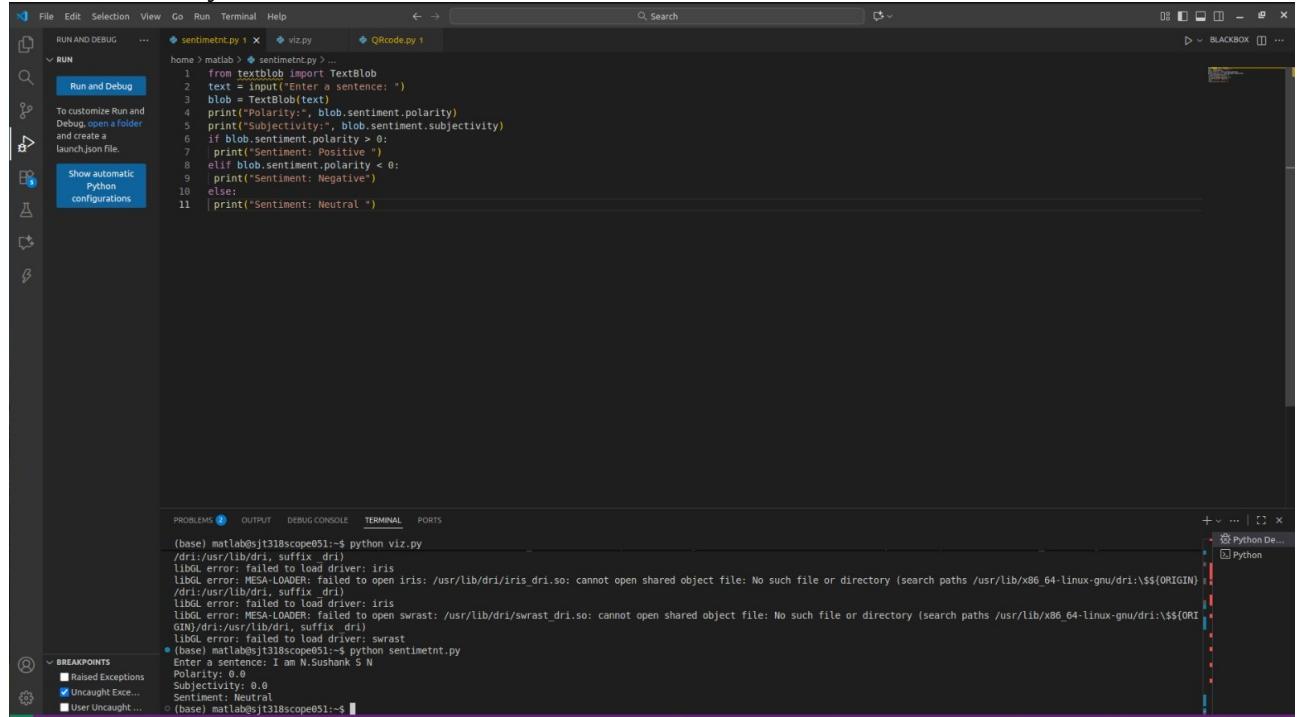


CSI3003:Advance Python Programming

VSCode:

- >We can use extensions and can use Google collab and many with help of extension.
- > We can use Code Runner to run all type of programming language codes in the same place

Sentiment Analysis Code:



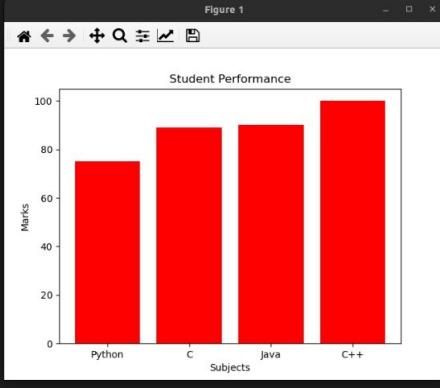
The screenshot shows the VSCode interface with a dark theme. The left sidebar has a 'RUN AND DEBUG' section with a 'Run and Debug' button highlighted. Below it, there's a note: 'To customize Run and Debug, open a folder and create a launch.json file.' A 'Show automatic Python configurations' button is also visible. The main editor area contains a Python script named 'sentimentnt.py':

```
home > matlab > sentinelnt.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")
```

The terminal tab at the bottom shows the output of running the script:

```
(base) matlab0@j318scope051:~$ python viz.py
/lib:/usr/lib/dri, suffix: dri
libEGL: error: failed to load driver: iris
libEGL: error: MESA-LOADER: failed to open: /usr/lib/dri/iris_dri.so: cannot open shared object file: No such file or directory (search paths /usr/lib/x86_64-linux-gnu/dri:$ORIGIN/dri:/usr/lib/dri, suffix: dri)
libEGL: error: failed to load driver: iris
libEGL: error: MESA-LOADER: failed to open swrast: /usr/lib/dri/swrast_dri.so: cannot open shared object file: No such file or directory (search paths /usr/lib/x86_64-linux-gnu/dri:$ORIGIN/dri:/usr/lib/dri, suffix: dri)
libEGL: error: failed to load driver: swrast
(base) matlab0@j318scope051:~$ python sentinelnt.py
Enter a sentence: I am N.Sushank S N
Polarity: 0.0
Subjectivity: 0.0
Sentiment: Neutral
(base) matlab0@j318scope051:~$
```

Using Matplotlib:



A screenshot of the Visual Studio Code (VS Code) interface. The left sidebar shows a 'RUN AND DEBUG' section with a 'Run and Debug' button highlighted. Below it, there's a note: 'To customize Run and Debug, open a folder and create a launch.json file.' A 'Show automatic Python configurations' button is also present. The main editor area has three files: 'sentimentnt.py', 'viz.py', and 'QRcode.py'. The 'viz.py' file contains the following code:

```
1 import matplotlib.pyplot as plt
2 subjects = ["Python", "C", "Java", "C++"]
3 scores = [75, 90, 90, 100]
4 plt.bar(subjects, scores, color='red')
5 plt.title("Student Performance")
6 plt.xlabel("Subjects")
7 plt.ylabel("Marks")
8 plt.show()
```

The terminal window at the bottom shows the output of running 'viz.py':

```
(base) matlab@jt318scope051:~$ python viz.py
libGL error: MESA-LOADER: failed to open iris: /usr/lib/dri/iris_dri.so: cannot open shared object file: No such file or directory (search paths /usr/lib/x86_64-linux-gnu/dri:$ORIGIN/dri:/usr/lib/dri, suffix .dri)
libGL error: failed to load driver: iris
libGL error: MESA-LOADER: failed to open swrast: /usr/lib/dri/swrast_dri.so: cannot open shared object file: No such file or directory (search paths /usr/lib/x86_64-linux-gnu/dri:$ORIGIN/dri:/usr/lib/dri, suffix .dri)
libGL error: failed to load driver: swrast
```

Generating QR Code



A screenshot of the Visual Studio Code (VS Code) interface. The left sidebar shows a 'RUN AND DEBUG' section with a 'Run and Debug' button highlighted. Below it, there's a note: 'To customize Run and Debug, open a folder and create a launch.json file.' A 'Show automatic Python configurations' button is also present. The main editor area has three files: 'sentimentnt.py', 'viz.py', and 'QRcode.py'. The 'QRcode.py' file contains the following code:

```
1 import qrcode
2 data = "https://vtop.vit.ac.in/vtop/login"
3 qr = qrcode.QRCode(data)
4 qr.save("Vtop.png")
5 print("QR Code Has Been Generated")
```

The terminal window at the bottom shows the output of running 'QRcode.py':

```
(base) matlab@jt318scope051:~$ python viz.py
File "/home/matlab/vit.py", line 8, in <module>
    plt.show()
File "/home/software/software/lib/python3.12/site-packages/matplotlib/pyplot.py", line 1
    return _get_backend_mod().show(*args, **kwargs)
File "/home/software/software/lib/python3.12/site-packages/matplotlib/backend_bases
File "mainloop"
File "/home/software/software/lib/python3.12/site-packages/matplotlib/backends/back
with _maybe_allow_interrupt(qapp):
File "/home/software/software/lib/python3.12/contextlib.py", line 144, in _exit_
    next(self.gen)
File "/home/software/software/lib/python3.12/site-packages/matplotlib/backends/qt_compat.py", line 230, in _maybe_allow_interrupt
    old_sighup_handler(handler_args)
KeyboardInterrupt
(base) matlab@jt318scope051:~$ pip install qrcode
Collecting qrcode
  Downloading qrcode-0.2-py3-none-any.whl.metadata (17 kB)
  Downloading qrcode-0.2-py3-none-any.whl (45 kB) 46.0/46.0 KB 5.2 MB/s eta 0:00:00
Installing collected packages: qrcode
Successfully installed qrcode-0.2
(base) matlab@jt318scope051:~$ python QRcode.py
QR Code Has Been Generated
(base) matlab@jt318scope051:~$ python QRcode.py
QR Code Has Been Generated
(base) matlab@jt318scope051:~$ python QRcode.py
QR Code Has Been Generated
(base) matlab@jt318scope051:~$
```