Q1. Python Scripting

Step 1: Creating the Log File.

```
COLU nano 4.8

2025-04-08 22:01:15,223 - INFO - Application started successfully.

2025-04-08 22:01:15,567 - DEBUG - Initializing database connection.

2025-04-08 22:01:15,567 - DEBUG - Initializing database connection.

2025-04-08 22:01:17,909 - ERROR - Falled to connect to external service. Retrying in 5 seconds. Error: Connection refused.

2025-04-08 22:01:22,956 - WARNING - High CPU usage detected: 95%.

2025-04-08 22:01:22,956 - BEROR - Falled becomes the users' not found.

2025-04-08 22:01:23,979 - INFO - User Bob' logged in.

2025-04-08 22:01:31,360 - DEBUG - Processing request for resource '/data'.

2025-04-08 22:01:33,501 - ERROR - File not found. Path: /tmp/Important_file.txt.

2025-04-08 22:01:33,912 - ERROR - File not found. Path: /tmp/Important_file.txt.

2025-04-08 22:01:33,605 - WARNING - Unsawed data might be lost.

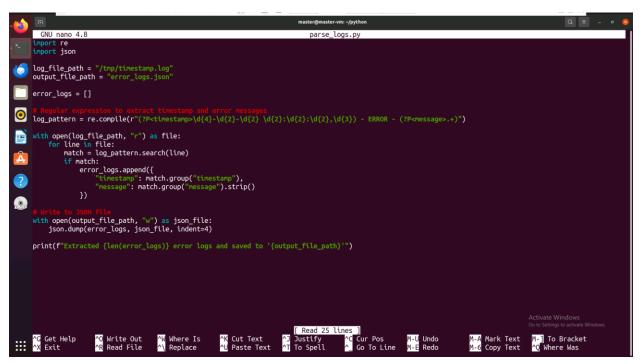
2025-04-08 22:01:33,607 - ERROR - Exception during shutdown. Error: 'NoneType' object has no attribute 'close'.

I

Activate Windows Go to semegate to missed Windows.

2025-04-04 22:01:39,607 - Write Out Reference on the process of the proces
```

Step 2: Creating the Python Script file to see the timestamp and log errors.



Step 3: After Creating the file providing the necessary permissions with chmod a+x and Running the Script.

- It then generates a log file- parse_logs.py in Json format.

```
master@master-vm:~/python$ nano parse_logs.py
master@master-vm:~/python$ chmod a+x parse_logs.py
master@master-vm:~/python$ python3 parse_logs.py
Extracted 4 error logs and saved to 'error_logs.json'
master@master-vm:~/python$ ls
error_logs.json parse_logs.py
```

Step 4: Viewing the Log files.