2024

IoT Chapter 4 Task CPU_USAGE

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TASK CH4

Write a Python script that covers the following points:

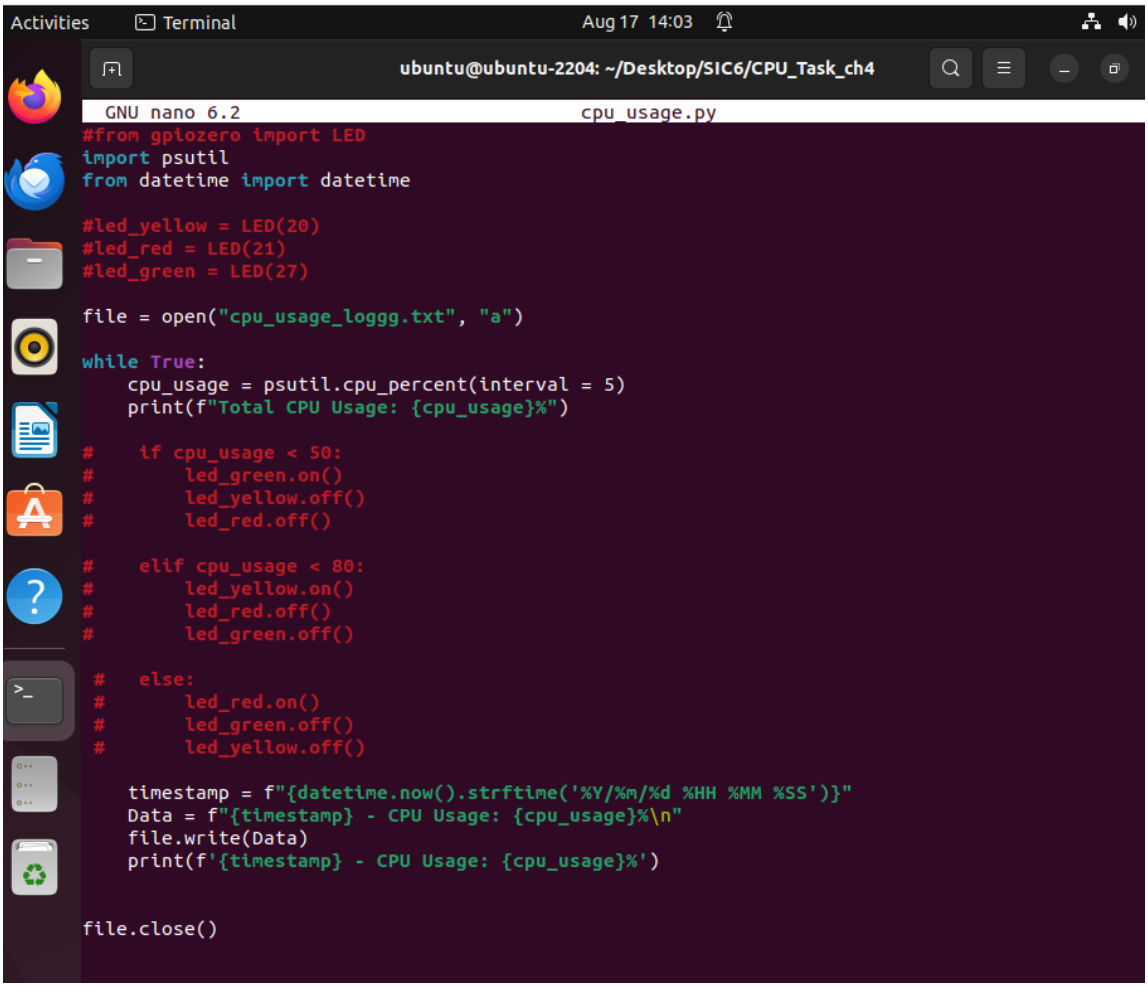
- Reads total CPU usage.

- Appends the usage to a log file with a timestamp every 5 seconds.

- Lights a green LED when the percentage is less than 50%, lights a yellow LED when the percentage is less than 80%, and finally lights a red LED when the percentage is above or equal to 80%.

Step 1:

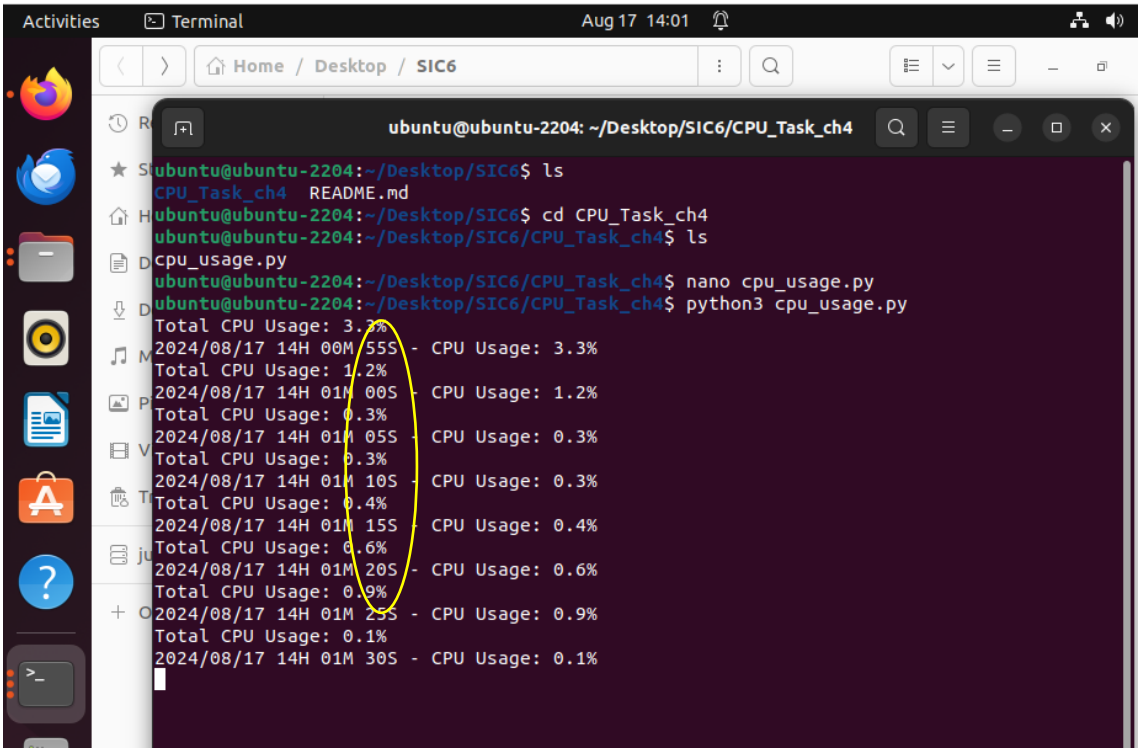
Python script:



Step 2:

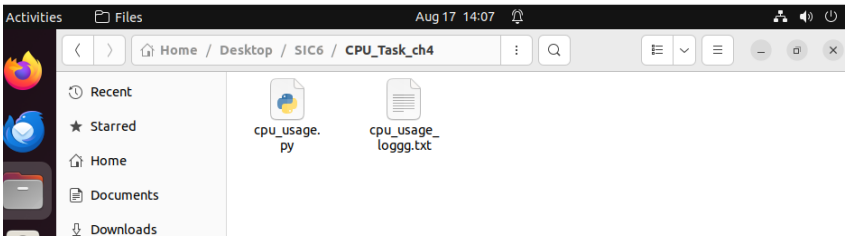
Run cpu_usage.py

Total CPU_Usage output is printed in the terminal, with timestamp every 5 seconds between readings.



Step3:

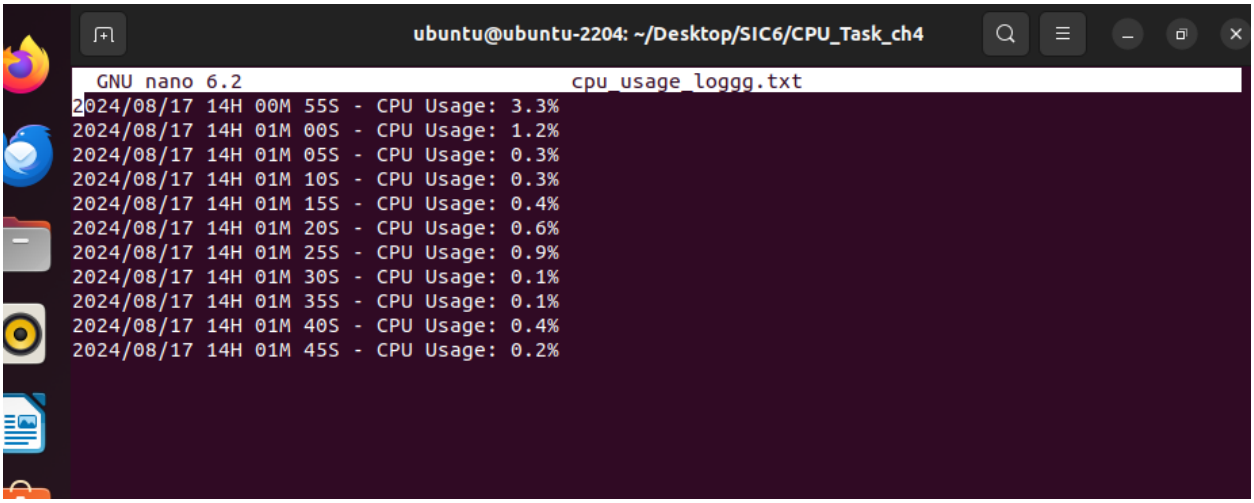
Access Log file we ‘ve created and appended the data to it-> which is cpu_usage_loggg.txt



Using Cat command -> To access content of the file in the terminal

```
ubuntu@ubuntu-2204:~/Desktop/SIC6/CPU_Task_ch4$ nano cpu_usage.py
ubuntu@ubuntu-2204:~/Desktop/SIC6/CPU_Task_ch4$ cat cpu_usage_loggg.txt
2024/08/17 14H 00M 55S - CPU Usage: 3.3%
2024/08/17 14H 01M 00S - CPU Usage: 1.2%
2024/08/17 14H 01M 05S - CPU Usage: 0.3%
2024/08/17 14H 01M 10S - CPU Usage: 0.3%
2024/08/17 14H 01M 15S - CPU Usage: 0.4%
2024/08/17 14H 01M 20S - CPU Usage: 0.6%
2024/08/17 14H 01M 25S - CPU Usage: 0.9%
2024/08/17 14H 01M 30S - CPU Usage: 0.1%
2024/08/17 14H 01M 35S - CPU Usage: 0.1%
2024/08/17 14H 01M 40S - CPU Usage: 0.4%
2024/08/17 14H 01M 45S - CPU Usage: 0.2%
ubuntu@ubuntu-2204:~/Desktop/SIC6/CPU_Task_ch4$
```

& Using Nano command -> To access File itself to edit or ..etc.



Step4:

A Repo is Created remotely using ssh & git commands to push folder successfully to the repo.