

```
nada@nada-Dell-G15-5515:~$ export SENSOR_TYPE=temperature
nada@nada-Dell-G15-5515:~$ echo $SENSOR_TYPE
temperature
nada@nada-Dell-G15-5515:~$ nano ~/iot_logger/scripts/sensor_script.py
nada@nada-Dell-G15-5515:~$ chmod +x ~/iot_logger/scripts/sensor_script.py
chmod: changing permissions of '/home/nada/iot_logger/scripts/sensor_script.py': Operation not permitted
nada@nada-Dell-G15-5515:~$ sudo chmod +x ~/iot_logger/scripts/sensor_script.py
[sudo] password for nada:
nada@nada-Dell-G15-5515:~$ ./scripts/sensor_script.py >> logs/temperature.log 2>&1 &
[1] 4521
nada@nada-Dell-G15-5515:~$ bash: logs/temperature.log: No such file or directory

[1]+  Exit 1                  ./scripts/sensor_script.py >> logs/temperature.log 2>&1
nada@nada-Dell-G15-5515:~$ tail -f logs/temperature.log
tail: cannot open 'logs/temperature.log' for reading: No such file or directory
tail: no files remaining
nada@nada-Dell-G15-5515:~$ ^C
nada@nada-Dell-G15-5515:~$ cd ~/iot_logger
nada@nada-Dell-G15-5515:~/iot_logger$ mkdir -p logs scripts data
nada@nada-Dell-G15-5515:~/iot_logger$ ./scripts/sensor_script.py >> logs/temperature.log 2>&1 &
[1] 4543
nada@nada-Dell-G15-5515:~/iot_logger$ tail -f logs/temperature.log
Temperature: 23 °C at 02 2025, EEST 11:12:02 م
./scripts/sensor_script.py: line 1: import: command not found
./scripts/sensor_script.py: line 3: syntax error near unexpected token `('
./scripts/sensor_script.py: line 3: `sensor_type = os.getenv("SENSOR_TYPE", "generic")'
./scripts/sensor_script.py: line 1: import: command not found
./scripts/sensor_script.py: line 3: syntax error near unexpected token `('
./scripts/sensor_script.py: line 3: `sensor_type = os.getenv("SENSOR_TYPE", "generic")'
./scripts/sensor_script.py: line 1: import: command not found
./scripts/sensor_script.py: line 3: syntax error near unexpected token `('
./scripts/sensor_script.py: line 3: `sensor_type = os.getenv("SENSOR_TYPE", "generic")'
^C
nada@nada-Dell-G15-5515:~/iot_logger$ nano ~/iot_logger/scripts/sensor_script.py
nada@nada-Dell-G15-5515:~/iot_logger$ chmod +x scripts/sensor_script.py
chmod: changing permissions of 'scripts/sensor_script.py': Operation not permitted
nada@nada-Dell-G15-5515:~/iot_logger$ sudo chmod +x scripts/sensor_script.py
nada@nada-Dell-G15-5515:~/iot_logger$ ./scripts/sensor_script.py
2025-09-03 23:40:25 | SENSOR_TYPE=temperature | value=23.80
2025-09-03 23:40:27 | SENSOR_TYPE=temperature | value=21.33
2025-09-03 23:40:29 | SENSOR_TYPE=temperature | value=24.34
2025-09-03 23:40:31 | SENSOR_TYPE=temperature | value=28.92
2025-09-03 23:40:33 | SENSOR_TYPE=temperature | value=25.72
2025-09-03 23:40:35 | SENSOR_TYPE=temperature | value=29.20
2025-09-03 23:40:37 | SENSOR_TYPE=temperature | value=26.20
2025-09-03 23:40:39 | SENSOR_TYPE=temperature | value=22.71
2025-09-03 23:40:41 | SENSOR_TYPE=temperature | value=20.63
2025-09-03 23:40:43 | SENSOR_TYPE=temperature | value=24.10
2025-09-03 23:40:45 | SENSOR_TYPE=temperature | value=23.83
2025-09-03 23:40:47 | SENSOR_TYPE=temperature | value=26.77
2025-09-03 23:40:49 | SENSOR_TYPE=temperature | value=28.67
2025-09-03 23:40:51 | SENSOR_TYPE=temperature | value=23.65
2025-09-03 23:40:53 | SENSOR_TYPE=temperature | value=23.45
2025-09-03 23:40:55 | SENSOR_TYPE=temperature | value=20.18
2025-09-03 23:40:57 | SENSOR_TYPE=temperature | value=29.73
2025-09-03 23:40:59 | SENSOR_TYPE=temperature | value=26.58
```

```
Activities Terminal 23:56 3 سبت nada@nada-Dell-G15-
^Z
[2]+ Stopped ./scripts/sensor_script.py
nada@nada-Dell-G15-5515:~/lot_logger$ ./scripts/sensor_script.py >> logs/temperature.log 2>&1 &
[3] 4585
nada@nada-Dell-G15-5515:~/lot_logger$ tail -f logs/temperature.log
Temperature: 23 °C at 02 2025 , سبت EEST 11:12:02 م
./scripts/sensor_script.py: line 1: import: command not found
./scripts/sensor_script.py: line 3: syntax error near unexpected token `('
./scripts/sensor_script.py: line 3: `sensor_type = os.getenv("SENSOR_TYPE", "generic")'
./scripts/sensor_script.py: line 1: import: command not found
./scripts/sensor_script.py: line 3: syntax error near unexpected token `('
./scripts/sensor_script.py: line 3: `sensor_type = os.getenv("SENSOR_TYPE", "generic")'
./scripts/sensor_script.py: line 1: import: command not found
./scripts/sensor_script.py: line 3: syntax error near unexpected token `('
./scripts/sensor_script.py: line 3: `sensor_type = os.getenv("SENSOR_TYPE", "generic")'
ps aux | grep s^C
nada@nada-Dell-G15-5515:~/lot_logger$ ps aux | grep sensor_script.py | grep -v grep
nada 4543 0.0 0.0 18248 9260 pts/0 S 23:38 0:00 python3 ./scripts/sensor_script.py
nada 4560 0.0 0.0 18244 9212 pts/0 T 23:40 0:00 python3 ./scripts/sensor_script.py
nada 4585 0.0 0.0 18248 9360 pts/0 S 23:41 0:00 python3 ./scripts/sensor_script.py
nada@nada-Dell-G15-5515:~/lot_logger$ ls -l /proc/4585/fd
total 0
lrwx----- 1 nada nada 64 0 23:42 3 سبت -> /dev/pts/0
l-wx----- 1 nada nada 64 1 23:42 3 سبت -> /home/nada/lot_logger/logs/temperature.log
l-wx----- 1 nada nada 64 2 23:42 3 سبت -> /home/nada/lot_logger/logs/temperature.log
nada@nada-Dell-G15-5515:~/lot_logger$ grep "25" logs/temperature.log > logs/filtered.log
nada@nada-Dell-G15-5515:~/lot_logger$ grep "2" logs/temperature.log > logs/filtered.log
nada@nada-Dell-G15-5515:~/lot_logger$ tail logs/temperature.log
2025-09-03 23:45:38 | SENSOR_TYPE=temperature | value=20.23
2025-09-03 23:45:40 | SENSOR_TYPE=temperature | value=26.35
2025-09-03 23:45:42 | SENSOR_TYPE=temperature | value=20.54
2025-09-03 23:45:44 | SENSOR_TYPE=temperature | value=20.97
2025-09-03 23:45:46 | SENSOR_TYPE=temperature | value=27.93
2025-09-03 23:45:48 | SENSOR_TYPE=temperature | value=29.18
2025-09-03 23:45:50 | SENSOR_TYPE=temperature | value=26.62
2025-09-03 23:45:52 | SENSOR_TYPE=temperature | value=24.26
2025-09-03 23:45:54 | SENSOR_TYPE=temperature | value=28.72
2025-09-03 23:45:56 | SENSOR_TYPE=temperature | value=25.36
nada@nada-Dell-G15-5515:~/lot_logger$ grep "20" logs/temperature.log > logs/filtered.log
nada@nada-Dell-G15-5515:~/lot_logger$ grep "20.23" logs/temperature.log > logs/filtered.log
nada@nada-Dell-G15-5515:~/lot_logger$ grep "[20.23]" logs/temperature.log > logs/filtered.log
nada@nada-Dell-G15-5515:~/lot_logger$ cat filtered.log
cat: filtered.log: No such file or directory
nada@nada-Dell-G15-5515:~/lot_logger$ cat logs/filtered.log
Temperature: 22 °C at 02 2025 , سبت EEST 10:57:43 م
Temperature: 29 °C at 02 2025 , سبت EEST 10:57:45 م
Temperature: 21 °C at 02 2025 , سبت EEST 10:57:47 م
Temperature: 22 °C at 02 2025 , سبت EEST 10:57:49 م
Temperature: 26 °C at 02 2025 , سبت EEST 10:57:51 م
Temperature: 23 °C at 02 2025 , سبت EEST 10:57:53 م
Temperature: 27 °C at 02 2025 , سبت EEST 10:57:55 م
Temperature: 23 °C at 02 2025 , سبت EEST 10:57:57 م
Temperature: 28 °C at 02 2025 , سبت EEST 10:57:59 م
Temperature: 27 °C at 02 2025 , سبت EEST 10:58:01 م
Temperature: 23 °C at 02 2025 , سبت EEST 10:58:03 م
Temperature: 26 °C at 02 2025 , سبت EEST 10:58:06 م
```




cat: filtered.log: No such file or directory

nada@nada-Dell-G15-5515:~/lot_logger\$ cat logs/filtered.log

Temperature: 22 °C at 02 2025 , ساعت EEST 10:57:43 م

Temperature: 29 °C at 02 2025 , ساعت EEST 10:57:45 م

Temperature: 21 °C at 02 2025 , ساعت EEST 10:57:47 م

Temperature: 22 °C at 02 2025 , ساعت EEST 10:57:49 م

Temperature: 26 °C at 02 2025 , ساعت EEST 10:57:51 م

Temperature: 23 °C at 02 2025 , ساعت EEST 10:57:53 م

Temperature: 27 °C at 02 2025 , ساعت EEST 10:57:55 م

Temperature: 23 °C at 02 2025 , ساعت EEST 10:57:57 م

Temperature: 28 °C at 02 2025 , ساعت EEST 10:57:59 م

Temperature: 27 °C at 02 2025 , ساعت EEST 10:58:01 م

Temperature: 23 °C at 02 2025 , ساعت EEST 10:58:03 م

Temperature: 26 °C at 02 2025 , ساعت EEST 10:58:06 م

Temperature: 22 °C at 02 2025 , ساعت EEST 10:58:08 م

Temperature: 22 °C at 02 2025 , ساعت EEST 10:58:10 م

Temperature: 25 °C at 02 2025 , ساعت EEST 10:58:12 م

Temperature: 23 °C at 02 2025 , ساعت EEST 10:58:14 م

Temperature: 28 °C at 02 2025 , ساعت EEST 10:58:16 م

Temperature: 25 °C at 02 2025 , ساعت EEST 10:58:18 م

Temperature: 26 °C at 02 2025 , ساعت EEST 10:58:20 م

Temperature: 25 °C at 02 2025 , ساعت EEST 10:58:22 م

Temperature: 25 °C at 02 2025 , ساعت EEST 10:58:24 م

Temperature: 23 °C at 02 2025 , ساعت EEST 10:58:26 م

Temperature: 29 °C at 02 2025 , ساعت EEST 10:58:28 م

Temperature: 23 °C at 02 2025 , ساعت EEST 10:58:30 م

Temperature: 23 °C at 02 2025 , ساعت EEST 10:58:32 م

Temperature: 20 °C at 02 2025 , ساعت EEST 10:58:34 م

Temperature: 24 °C at 02 2025 , ساعت EEST 10:58:36 م

Temperature: 22 °C at 02 2025 , ساعت EEST 10:58:38 م

Temperature: 28 °C at 02 2025 , ساعت EEST 10:58:40 م

Temperature: 28 °C at 02 2025 , ساعت EEST 10:58:42 م

Temperature: 21 °C at 02 2025 , ساعت EEST 10:58:44 م

Temperature: 25 °C at 02 2025 , ساعت EEST 10:58:46 م

Temperature: 21 °C at 02 2025 , ساعت EEST 10:58:48 م

Temperature: 21 °C at 02 2025 , ساعت EEST 10:58:50 م

Temperature: 24 °C at 02 2025 , ساعت EEST 10:58:52 م

Temperature: 26 °C at 02 2025 , ساعت EEST 10:58:54 م

Temperature: 25 °C at 02 2025 , ساعت EEST 10:58:56 م

Temperature: 21 °C at 02 2025 , ساعت EEST 10:58:58 م

Temperature: 23 °C at 02 2025 , ساعت EEST 10:59:00 م

Temperature: 27 °C at 02 2025 , ساعت EEST 10:59:02 م

Temperature: 25 °C at 02 2025 , ساعت EEST 10:59:04 م

Temperature: 26 °C at 02 2025 , ساعت EEST 10:59:06 م

Temperature: 22 °C at 02 2025 , ساعت EEST 10:59:08 م

Temperature: 29 °C at 02 2025 , ساعت EEST 10:59:10 م

Temperature: 22 °C at 02 2025 , ساعت EEST 10:59:12 م

Temperature: 24 °C at 02 2025 , ساعت EEST 10:59:14 م

Temperature: 27 °C at 02 2025 , ساعت EEST 10:59:16 م

Temperature: 27 °C at 02 2025 , ساعت EEST 10:59:18 م

Temperature: 21 °C at 02 2025 , ساعت EEST 10:59:20 م

Temperature: 29 °C at 02 2025 , ساعت EEST 10:59:22 م

Temperature: 25 °C at 02 2025 , ساعت EEST 10:59:24 م

Temperature: 26 °C at 02 2025 , ساعت EEST 10:59:26 م

Temperature: 27 °C at 02 2025 , ساعت EEST 10:59:28 م

Temperature: 26 °C at 02 2025 , ساعت EEST 10:59:30 م



```
Activities Terminal 23:5
nada@nada-

2025-09-03 23:45:46 | SENSOR_TYPE=temperature | value=27.93
2025-09-03 23:45:48 | SENSOR_TYPE=temperature | value=29.18
2025-09-03 23:45:50 | SENSOR_TYPE=temperature | value=26.62
2025-09-03 23:45:52 | SENSOR_TYPE=temperature | value=24.26
2025-09-03 23:45:54 | SENSOR_TYPE=temperature | value=28.72
2025-09-03 23:45:56 | SENSOR_TYPE=temperature | value=25.36
nada@nada-Dell-G15-5515:~/lot_logger$ cp logs/*.log data/
nada@nada-Dell-G15-5515:~/lot_logger$ ls -l data/
total 88
-rw-rw-r-- 1 nada nada 33346 23:49 3 سبيت filtered.log
-rw-r--r-- 1 1001 iot_team 14464 21:51 31 لشف services
-rwxrwx--- 1 nada nada 33346 23:49 3 سبيت temperature.log
-rw-rw-r-- 1 nada nada 0 23:49 3 سبيت test.log
nada@nada-Dell-G15-5515:~/lot_logger$ unset SENSOR_TYPE
nada@nada-Dell-G15-5515:~/lot_logger$ cd
nada@nada-Dell-G15-5515:~$ (ls -l; sleep 10) | grep .py
nada@nada-Dell-G15-5515:~$ ps aux | grep grep | grep .py
nada 4734 0.0 0.0 9048 716 pts/0 S+ 23:52 0:00 grep --color=auto .py
nada@nada-Dell-G15-5515:~$ ls -l /proc/<4734>/fd
bash: syntax error near unexpected token `4734'
nada@nada-Dell-G15-5515:~$ ls -l /proc/4734/fd
ls: cannot access '/proc/4734/fd': No such file or directory
nada@nada-Dell-G15-5515:~$ ps aux | grep grep | grep .py
nada 4743 0.0 0.0 9048 720 pts/0 S+ 23:52 0:00 grep --color=auto .py
nada@nada-Dell-G15-5515:~$ (ls -l; sleep 10) | grep .py
^Z
[4]+ Stopped (ls --color=auto -l; sleep 10) | grep --color=auto .py
nada@nada-Dell-G15-5515:~$ ps aux | grep grep | grep .py
nada 4749 0.0 0.0 9048 716 pts/0 T 23:52 0:00 grep --color=auto .py
nada 4756 0.0 0.0 9048 716 pts/0 S+ 23:53 0:00 grep --color=auto .py
nada@nada-Dell-G15-5515:~$ (ls -l; sleep 10) | grep .py
^Z
[5]+ Stopped (ls --color=auto -l; sleep 10) | grep --color=auto .py
nada@nada-Dell-G15-5515:~$ ps aux | grep grep | grep .py
nada 4749 0.0 0.0 9048 716 pts/0 T 23:52 0:00 grep --color=auto .py
nada 4766 0.0 0.0 9048 716 pts/0 T 23:53 0:00 grep --color=auto .py
nada 4771 0.0 0.0 9048 720 pts/0 S+ 23:53 0:00 grep --color=auto .py
nada@nada-Dell-G15-5515:~$ ls -l /proc/4771/fd
ls: cannot access '/proc/4771/fd': No such file or directory
nada@nada-Dell-G15-5515:~$ (ls -l; sleep 20) | grep .py
^Z
[6]+ Stopped (ls --color=auto -l; sleep 20) | grep --color=auto .py
nada@nada-Dell-G15-5515:~$ ps aux | grep grep | grep .py
nada 4749 0.0 0.0 9048 716 pts/0 T 23:52 0:00 grep --color=auto .py
nada 4766 0.0 0.0 9048 716 pts/0 T 23:53 0:00 grep --color=auto .py
nada 4787 0.0 0.0 9048 720 pts/0 T 23:55 0:00 grep --color=auto .py
nada 4793 0.0 0.0 9048 720 pts/0 S+ 23:55 0:00 grep --color=auto .py
nada@nada-Dell-G15-5515:~$ ls -l /proc/4787/fd
total 0
lr-x----- 1 nada nada 64 0 23:55 3 سبيت -> pipe:[70645]
lrwx----- 1 nada nada 64 1 23:55 3 سبيت -> /dev/pts/0
lrwx----- 1 nada nada 64 2 23:55 3 سبيت -> /dev/pts/0
nada@nada-Dell-G15-5515:~$ ls -l /proc/4793/fd
ls: cannot access '/proc/4793/fd': No such file or directory
nada@nada-Dell-G15-5515:~$
```