

1,2.

```
Activities Terminal 23:07 4
nada@nada-Dell-G15:~$ sudo nano /etc/logrotate.d/lot_logger
nada@nada-Dell-G15:~$ sudo nano /etc/logrotate.d/lot_logger
nada@nada-Dell-G15:~$ sudo logrotate -f /etc/logrotate.d/lot_logger
error: stat of /home/nada/lot_logger/logs/temperature.log failed: Permission denied
nada@nada-Dell-G15:~$ sudo logrotate -f /etc/logrotate.d/lot_logger
error: error creating output file /home/nada/lot_logger/logs/temperature.log.1: Permission denied
nada@nada-Dell-G15:~$ ^C
nada@nada-Dell-G15:~$ sudo chnod 777 /home/nada/lot_logger/logs
chnod: changing permissions of '/home/nada/lot_logger/logs': Operation not permitted
nada@nada-Dell-G15:~$ sudo chnod 755 /home/nada/lot_logger/logs
nada@nada-Dell-G15:~$ sudo logrotate -f /etc/logrotate.d/lot_logger
error: error creating output file /home/nada/lot_logger/logs/temperature.log.1: Permission denied
nada@nada-Dell-G15:~$ ls -l /home/nada/lot_logger/logs
total 48
-rw-rw-r-- 1 nada nada 33346 23:47 3 filtered.log
-rwxrwxrwx 2 nada nada 0 22:40 4 temperature.log
-rwxrwxrwx 1 nada nada 10677 00:08 4 temperature.log.1.gz
-rwxrwxrwx 2 nada nada 0 22:40 4 temp_hardlink
lrwxrwxrwx 1 1001 lot_team 42 22:02 31 temp_symlink -> /home/nada/lot_logger/logs/temperature.log
-rw-rw-r-- 1 1001 1002 0 23:17 1 test.log
```

3,4.

```
nada@nada-Dell-G15:~$ crontab -e
no crontab for nada - using an empty one

Select an editor. To change later, run 'select-editor'.
 1. /bin/nano <---- easiest
 2. /usr/bin/vim.tiny
 3. /bin/ed

Choose 1-3 [1]: */5 * * * * /home/<your-username>/lot_logger/scripts/sensor_poll.sh
Choose 1-3 [1]: 1
crontab: installing new crontab
nada@nada-Dell-G15:~$ crontab -l
*/5 * * * * /home/nada/lot_logger/scripts/sensor_poll.sh
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
```

```

Choose 1-3 [1]: 1
crontab: installing new crontab
nada@nada-Dell-G15-5515:~$ crontab -l
*/5 * * * * /home/nada/iot_logger/scripts/sensor_poll.sh
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
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# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow   command
nada@nada-Dell-G15-5515:~$ tail ~/iot_logger/logs/temperature.log
Temperature: 25 °C at 04 2025 , سبت EEST 10:59:12 م
Temperature: 28 °C at 04 2025 , سبت EEST 10:59:13 م
Temperature: 23 °C at 04 2025 , سبت EEST 10:59:14 م
Temperature: 21 °C at 04 2025 , سبت EEST 10:59:14 م
Temperature: 26 °C at 04 2025 , سبت EEST 10:59:15 م
Temperature: 26 °C at 04 2025 , سبت EEST 10:59:16 م
Temperature: 21 °C at 04 2025 , سبت EEST 10:59:16 م
Temperature: 20 °C at 04 2025 , سبت EEST 10:59:17 م
Temperature: 23 °C at 04 2025 , سبت EEST 10:59:18 م
Temperature: 27 °C at 04 2025 , سبت EEST 10:59:18 م

```

5.

```

nada@nada-Dell-G15-5515:~$ cd ~/iot_logger/data
nada@nada-Dell-G15-5515:~/iot_logger/data$ tar -czvf old_logs_$(date +%F).tar.gz ../logs/temperature.log.*
tar: Removing leading `../' from member names
../logs/temperature.log.1.gz
nada@nada-Dell-G15-5515:~/iot_logger/data$ ^C
nada@nada-Dell-G15-5515:~/iot_logger/data$ ls
filtered.log  old_logs_2025-09-04.tar.gz  services  temperature.log  test.log

```

6.

```

nada@nada-Dell-G15-5515:~$ mkdir -p ~/server
nada@nada-Dell-G15-5515:~$
nada@nada-Dell-G15-5515:~$ cp old_logs_*.tar.gz ~/server/
cp: cannot stat 'old_logs_*.tar.gz': No such file or directory
nada@nada-Dell-G15-5515:~$ cp old_logs_2025-09-04.r.gz ~/server/
cp: cannot stat 'old_logs_2025-09-04.r.gz': No such file or directory
nada@nada-Dell-G15-5515:~$ cp old_logs_2025-09-04.tar.gz ~/server/
cp: cannot stat 'old_logs_2025-09-04.tar.gz': No such file or directory
nada@nada-Dell-G15-5515:~$ cd ~/iot_logger/data
nada@nada-Dell-G15-5515:~/iot_logger/data$ cp old_logs_2025-09-04.tar.gz ~/server/

```