```
mariam@mariam: ~
 mariam@mariam:~$ sudo nano\ /etc/logrotate.d/temperature
 sudo: nano /etc/logrotate.d/temperature: command not found
 mariam@mariam:~$ sudo nano /etc/logrotate.d/temperature
 mariam@mariam:~$ sudo logrotate -f /etc/logrotate.d/temperature
mariam@mariam:~$ ls -lh /home/mariam/iot logger/logs/temperature.log*
  -rw-rw-r-- 2 mariam mariam 1.2M Sep 4 05:01 /home/mariam/iot logger/logs/temperature.log
  mariam@mariam:~$ sudo nano /etc/logrotate.d/temperature
  mariam@mariam:~$ sudo logrotate -f /etc/logrotate.d/temperature
  mariam@mariam:~$ ls -lh /home/mariam/iot logger/logs/temperature.log*
  -rw-rw-r-- 2 mariam mariam 1.2M Sep 4 05:05 /home/mariam/iot_logger/logs/temperature.log
  mariam@mariam:~$ sudo logrotate -f -v /etc/logrotate.d/temperature
                                                                                              or i
  reading config file /etc/logrotate.d/temperature
  Reading state from file: /var/lib/logrotate/status
                                                                                              san
  Allocating hash table for state file, size 64 entries
  Creating new state
  Creating new state
 Handling 1 logs
                                                                                             erv
  rotating pattern: /home/mariam/iot logger/logs/temperature.log forced from command line ( ber
 5 rotations)
                                                                                              :on
 empty log files are not rotated, old logs are removed
  switching euid from 0 to 1000 and egid from 0 to 1001 (pid 3012)
 considering log /home/mariam/iot logger/logs/temperature.log
   log /home/mariam/iot_logger/logs/temperature.log has multiple (2) hard links. Rotation o
  f files with multiple hard links is not allowed for /home/mariam/iot logger/logs/temperatu
 re.log -- skipping.
 switching euid from 1000 to 0 and egid from 1001 to 0 (pid 3012)
 mariam@mariam:~$ ls -lh /home/mariam/iot_logger/logs/temperature.log
```

```
mariam@mariam: ~
 switching euid from 1000 to 0 and egid from 1001 to 0 (pid 3012)
 mariam@mariam:~$ ls -lh /home/mariam/iot logger/logs/temperature.log
 -rw-rw-r-- 2 mariam mariam 1.2M Sep 4 05:05 /home/mariam/iot logger/logs/temperature.log
 mariam@mariam:~$ rm /home/mariam/iot logger/logs/hard link.log
emariam@mariam:~$ sudo logrotate -f -v /etc/logrotate.d/temperature
 reading config file /etc/logrotate.d/temperature
 Reading state from file: /var/lib/logrotate/status
 Allocating hash table for state file, size 64 entries
 Creating new state
 Creating new state
 Handling 1 logs
 rotating pattern: /home/mariam/iot_logger/logs/temperature.log forced from command line (
 5 rotations)
 empty log files are not rotated, old logs are removed
 switching euid from 0 to 1000 and egid from 0 to 1001 (pid 3030)
 considering log /home/mariam/iot logger/logs/temperature.log
   Now: 2025-09-04 05:09
   Last rotated at 2025-09-04 04:00
   log needs rotating
 rotating log /home/mariam/iot logger/logs/temperature.log, log->rotateCount is 5
 dateext suffix '-20250904'
 renaming /home/mariam/iot_logger/logs/temperature.log.5.gz to /home/mariam/iot logger/logs
 /temperature.log.6.gz (rotatecount 5, logstart 1, i 5),
 old log /home/mariam/iot_logger/logs/temperature.log.5.gz does not exist
 renaming /home/mariam/iot_logger/logs/temperature.log.4.gz to /home/mariam/iot_logger/logs
  /temperature.log.5.gz (rotatecount 5, logstart 1, i 4),
```

```
mariam@mariam: ~
  mariam@mariam:~$ ls -lh /home/mariam/iot logger/logs/temperature.log
  -rw-rw-r-- 1 mariam mariam 0 Sep 4 05:09 /home/mariam/iot logger/logs/temperature.log
  mariam@mariam:~$ crontab -e
  No modification made
♪ mariam@mariam:~$ crontab -l
 # Edit this file to introduce tasks to be run by cron.
  */5 * * * * /usr/bin/python3 /home/mariam/iot logger/logs/temperature.py >> /home/mariam/i
 ot logger/logs/temperature.log 2>&1
  # Each task to run has to be defined through a single line
                                                                                               or rsy
  # indicating with different fields when the task will be run
  # and what command to run for the task
                                                                                               same
  # 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').
                                                                                               erv 5
  # Notice that tasks will be started based on the cron's system
  # daemon's notion of time and timezones.
                                                                                               beratu
                                                                                               ontai
  # Output of the crontab jobs (including errors) is sent through
  # email to the user the crontab file belongs to (unless redirected).
                                                                                               ts (e.
  # For example, you can run a backup of all your user accounts
                                                                                               ms?
  # 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)
```

```
mariam@mariam: ~
# 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
mariam@mariam:~$ ls -lh /home/mariam/iot logger/logs/temperature.log
-rw-rw-r-- 1 mariam mariam 234 Sep 4 05:15 /home/mariam/iot logger/logs/temperature.log
mariam@mariam:~$ tar -czf /home/mariam/iot_logger/data/temperature_logs_$(date +%F).tar.gz
/home/mariam/iot_logger/logs/temperature.log*.gz
tar: Removing leading `/' from member names
mariam@mariam:~$ ls -lh /home/mariam/iot logger/data/
total 44K
-rw-rw-r-- 1 mariam mariam 8.0K Sep 3 23:35 hard link.log
-rw-r--r-- 1 mariam mariam 13K Aug 31 23:34 services
-rw-rw-r-- 1 mariam mariam 8.0K Sep 3 23:35 soft_link.log
-rw-rw-r-- 1 mariam mariam 0 Sep 3 23:35 temperature high.log
-rw-rw-r-- 1 mariam mariam 8.0K Sep 3 23:35 temperature.log
-rw-rw-r-- 1 mariam mariam 353 Sep 4 05:18 temperature_logs 2025-09-04.tar.gz
mariam@mariam:~$ mkdir -p /home/mariam/server
mariam@mariam:~$ cp /home/mariam/iot_logger/data/temperature_logs_*.tar.gz /home/mariam/se
rver/
mariam@mariam:~$ ls -lh /home/mariam/server/
total 4.0K
-rw-rw-r-- 1 mariam mariam 353 Sep 4 05:20 temperature logs 2025-09-04.tar.gz
mariam@mariam:~S
```