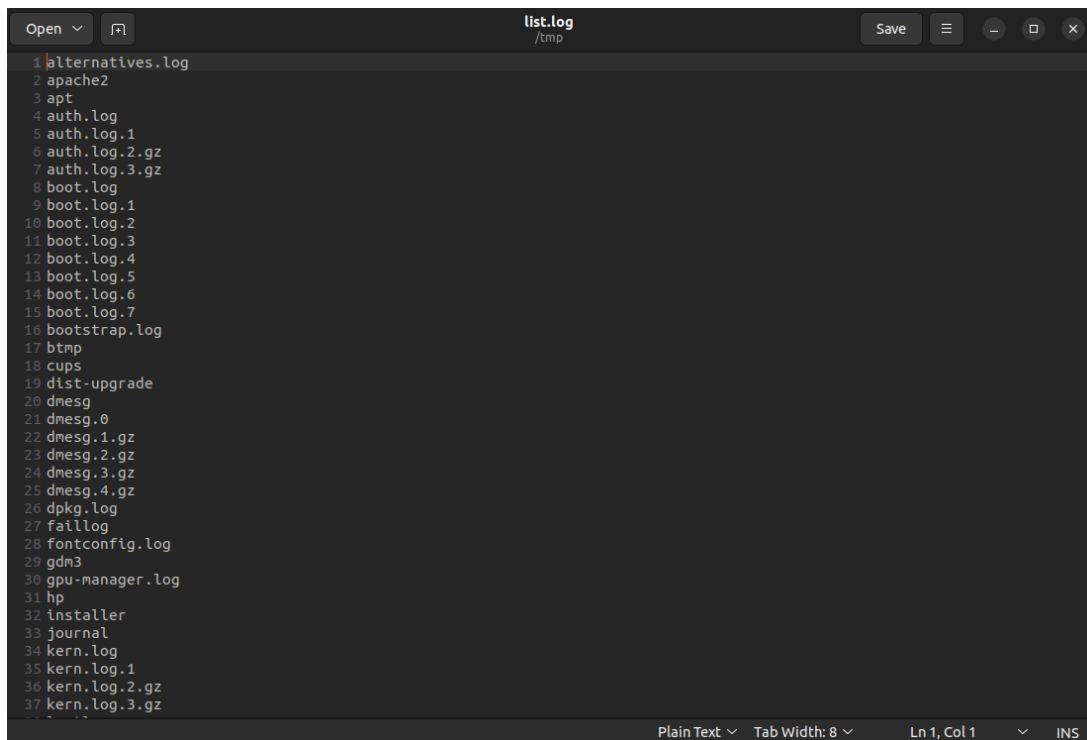1- create script to list all files in `/var/log` every 5 seconds and append the list to `/tmp/list.log` file

```
tahoun@tahoun-VirtualBox:~$ touch myScript.sh
tahoun@tahoun-VirtualBox:~$ ls
 Clockalarm.conf    Documents    Music                      Pictures    Templates
'commands lec 1'    Downloads    myScript.sh                Public      Videos
 Desktop            iti-0        os_team_workspace          snap
tahoun@tahoun-VirtualBox:~$ nano myScript.sh
```

```
  GNU nano 6.2                              myScript.sh
#! /bin/sh
while true
do
        ls /var/log >> /tmp/list.log
        sleep 5
done




                              [ Read 6 lines ]
^G Help         ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit         ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^/ Go To Line
```
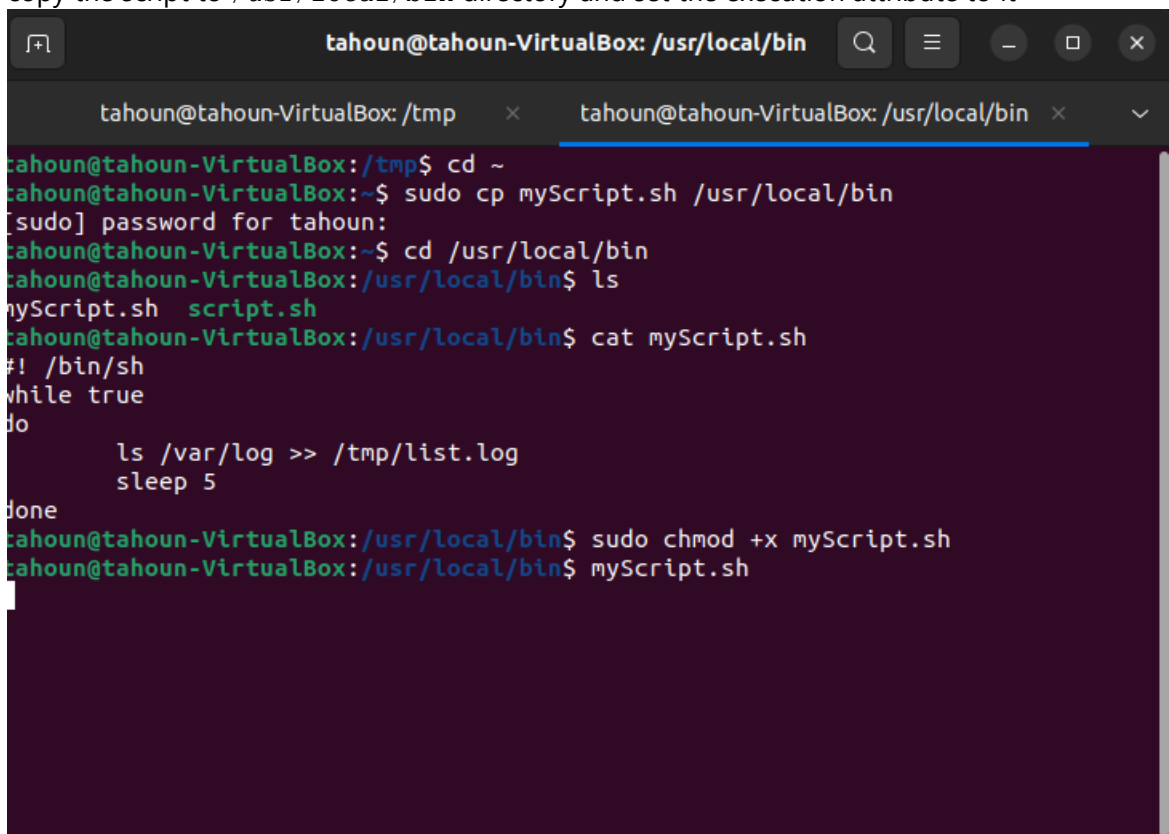
```
tahoun@tahoun-VirtualBox:~$ cd /tmp
tahoun@tahoun-VirtualBox:/tmp$ touch list.log
tahoun@tahoun-VirtualBox:/tmp$ cd ~
tahoun@tahoun-VirtualBox:~$ bash myScript.sh
^C
```

```
list.log
/tmp
```

```
1 alternatives.log
2 apache2
3 apt
4 auth.log
5 auth.log.1
6 auth.log.2.gz
7 auth.log.3.gz
8 boot.log
9 boot.log.1
10 boot.log.2
11 boot.log.3
12 boot.log.4
13 boot.log.5
14 boot.log.6
15 boot.log.7
16 bootstrap.log
17 btmp
18 cups
19 dist-upgrade
20 dmesg
21 dmesg.0
22 dmesg.1.gz
23 dmesg.2.gz
24 dmesg.3.gz
25 dmesg.4.gz
26 dpkg.log
27 faillog
28 fontconfig.log
29 gdm3
30 gpu-manager.log
31 hp
32 installer
33 journal
34 kern.log
35 kern.log.1
36 kern.log.2.gz
37 kern.log.3.gz
```

2- copy the script to `/usr/local/bin` directory and set the execution attribute to it

```
tahoun@tahoun-VirtualBox:/tmp$ cd ~
tahoun@tahoun-VirtualBox:~$ sudo cp myScript.sh /usr/local/bin
[sudo] password for tahoun:
tahoun@tahoun-VirtualBox:~$ cd /usr/local/bin
tahoun@tahoun-VirtualBox:/usr/local/bin$ ls
myScript.sh  script.sh
tahoun@tahoun-VirtualBox:/usr/local/bin$ cat myScript.sh
#! /bin/sh
while true
do
        ls /var/log >> /tmp/list.log
        sleep 5
done
tahoun@tahoun-VirtualBox:/usr/local/bin$ sudo chmod +x myScript.sh
tahoun@tahoun-VirtualBox:/usr/local/bin$ myScript.sh
```
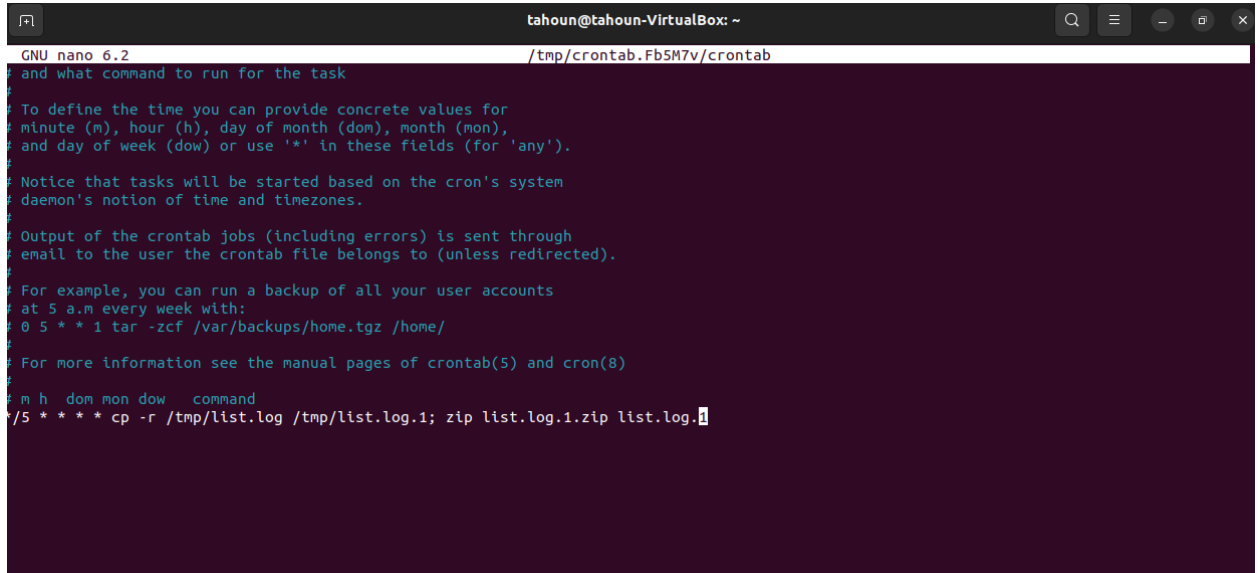
3- create systemd service file to execute the the script as background service

```
tahoun@tahoun-VirtualBox:~$ nano newService.service
tahoun@tahoun-VirtualBox:~$ sudo cp newService.service /etc/systemd/system/
[sudo] password for tahoun:
tahoun@tahoun-VirtualBox:~$ cd /etc/systemd/system
tahoun@tahoun-VirtualBox:/etc/systemd/system$ sudo service newService start
tahoun@tahoun-VirtualBox:/etc/systemd/system$ sudo service newService status
● newService.service - myScript service
     Loaded: loaded (/etc/systemd/system/newService.service; disabled; vendor p▶
     Active: active (running) since Mon 2023-02-27 21:34:52 EET; 37s ago
   Main PID: 17973 (bash)
      Tasks: 2 (limit: 5189)
     Memory: 564.0K
        CPU: 20ms
     CGroup: /system.slice/newService.service
             ├─17973 /bin/bash /usr/local/bin/script.sh
             └─17991 sleep 5

21:34:52 27 فبر tahoun-VirtualBox systemd[1]: Started myScript service.
21:34:52 27 فبر tahoun-VirtualBox bash[17974]: /usr/local/bin/script.sh: line 4▶
21:34:57 27 فبر tahoun-VirtualBox bash[17976]: /usr/local/bin/script.sh: line 4▶
21:35:02 27 فبر tahoun-VirtualBox bash[17980]: /usr/local/bin/script.sh: line 4▶
21:35:07 27 فبر tahoun-VirtualBox bash[17982]: /usr/local/bin/script.sh: line 4▶
21:35:12 27 فبر tahoun-VirtualBox bash[17984]: /usr/local/bin/script.sh: line 4▶
21:35:17 27 فبر tahoun-VirtualBox bash[17986]: /usr/local/bin/script.sh: line 4▶
```

4- using `cron`, schedule a job every 5 minutes to copy `/tmp/list.log` file to `/tmp/list.log.1` and compress the file using `zip` command

```
tahoun@tahoun-VirtualBox:~$ crontab -e
no crontab for tahoun - using an empty one
crontab: installing new crontab
```

```
                                    tahoun@tahoun-VirtualBox: ~
  GNU nano 6.2                              /tmp/crontab.Fb5M7v/crontab
# 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/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h  dom mon dow   command
*/5 * * * * cp -r /tmp/list.log /tmp/list.log.1; zip list.log.1.zip list.log.1
```