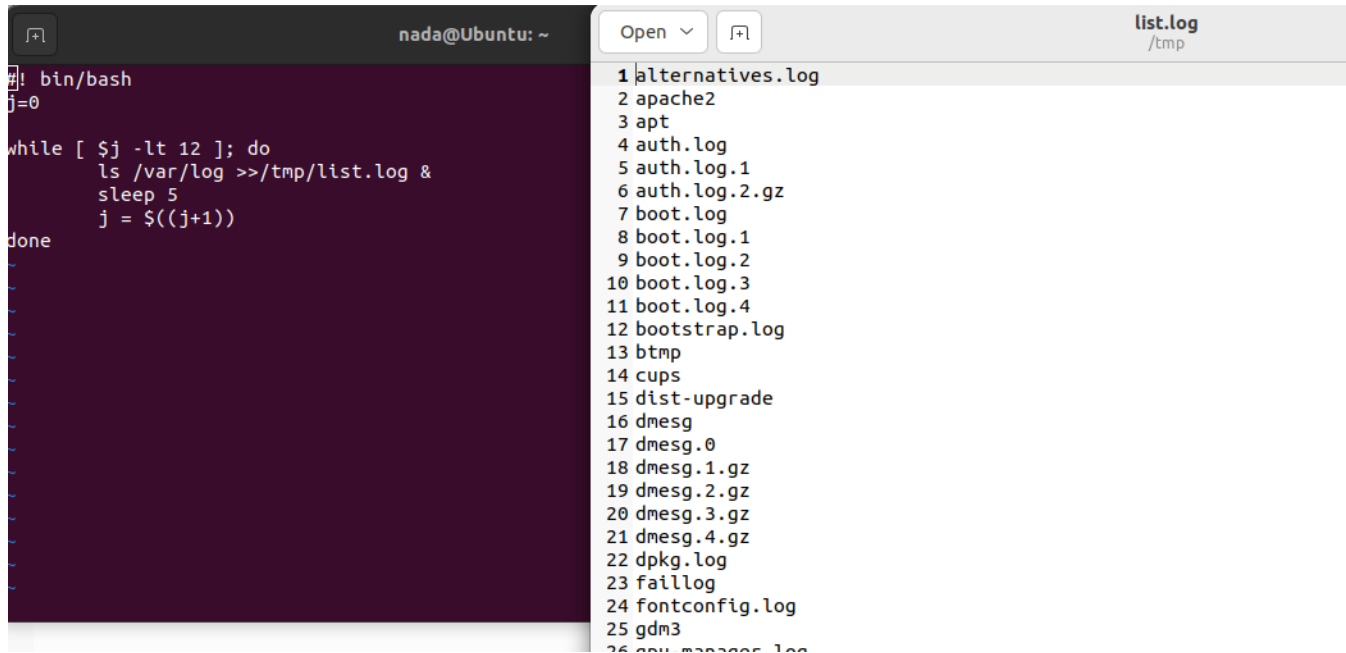


# Lab4

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



The screenshot shows a terminal window with a dark purple background. The prompt is `nada@Ubuntu: ~`. The script being executed is as follows:

```
#!/bin/bash
j=0

while [ $j -lt 12 ]; do
    ls /var/log >>/tmp/list.log &
    sleep 5
    j = $((j+1))
done
```

To the right of the terminal, a file explorer window titled `list.log /tmp` displays the contents of the file. The list is numbered 1 through 26 and includes the following files:

- 1 alternatives.log
- 2 apache2
- 3 apt
- 4 auth.log
- 5 auth.log.1
- 6 auth.log.2.gz
- 7 boot.log
- 8 boot.log.1
- 9 boot.log.2
- 10 boot.log.3
- 11 boot.log.4
- 12 bootstrap.log
- 13 btmp
- 14 cups
- 15 dist-upgrade
- 16 dmesg
- 17 dmesg.0
- 18 dmesg.1.gz
- 19 dmesg.2.gz
- 20 dmesg.3.gz
- 21 dmesg.4.gz
- 22 dpkg.log
- 23 faillog
- 24 fontconfig.log
- 25 gdm3
- 26 gdm3-session.log

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

```
nada@Ubuntu:/usr/local/bin$ sudo chmod +x script.sh
nada@Ubuntu:/usr/local/bin$ ./script.sh
```

- create systemd service file to execute the the script as background service.

```
nada@Ubuntu:~$ sudo apt install vim
[sudo] password for nada:
E: dpkg was interrupted, you must manually run 'sudo dpkg --configure -a' to correct the problem.
nada@Ubuntu:~$ ^C
nada@Ubuntu:~$ sudo dpkg --configure -a
Setting up initramfs-tools (0.140ubuntu13) ...
update-initramfs: deferring update (trigger activated)
Processing triggers for initramfs-tools (0.140ubuntu13) ...
update-initramfs: Generating /boot/initrd.img-5.15.0-58-generic
nada@Ubuntu:~$ touch ser.service
nada@Ubuntu:~$ sudo cp ser.service /etc/systemd/system/
nada@Ubuntu:~$ cd /etc/systemd/system/
nada@Ubuntu:/etc/systemd/system$ sudo systemctl daemon-reload
Unknown command verb daemon-reload.
nada@Ubuntu:/etc/systemd/system$ sudo systemctl daemon-reload
nada@Ubuntu:/etc/systemd/system$ sudo service ser start
```

```
nada@Ubuntu:/etc/systemd/system$ sudo service ser status
● ser.service
   Loaded: loaded (/etc/systemd/system/ser.service; disabled; vendor preset: enabled)
   Active: active (running) since Wed 2023-02-22 15:24:48 EET; 24s ago
 Main PID: 10998 (script.sh)
    Tasks: 2 (limit: 2288)
   Memory: 880.0K
      CPU: 69ms
   CGroup: /system.slice/ser.service
           └─10998 bin/bash /usr/local/bin/script.sh
             └─11009 sleep 5

Feb 22 15:24:48 Ubuntu systemd[1]: Started ser.service.
Feb 22 15:24:53 Ubuntu script.sh[11004]: /usr/local/bin/script.sh: line 7: j: c>
Feb 22 15:24:58 Ubuntu script.sh[11007]: /usr/local/bin/script.sh: line 7: j: c>
Feb 22 15:25:13 Ubuntu systemd[1]: /etc/systemd/system/ser.service:1: Unknown s>
lines 1-15/15 (END)
```

```
Open  ▾  [+]
```

ser.service  
~/

```
1 [Unit]
2 Description: bgprocess
3 After=syslog.target.network.target
4
5 [Service]
6 Type=simple
7 User=root
8 ExecStart=/usr/local/bin/script.sh
9 Restart=on-abort
10
11 [Install]
12 WantedBy=multi-user.target
```

- 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

```
#
# m h dom mon dow  command
*/5 * * * * zip -r /tmp/list.log.1.zip /tmp/list.log
```