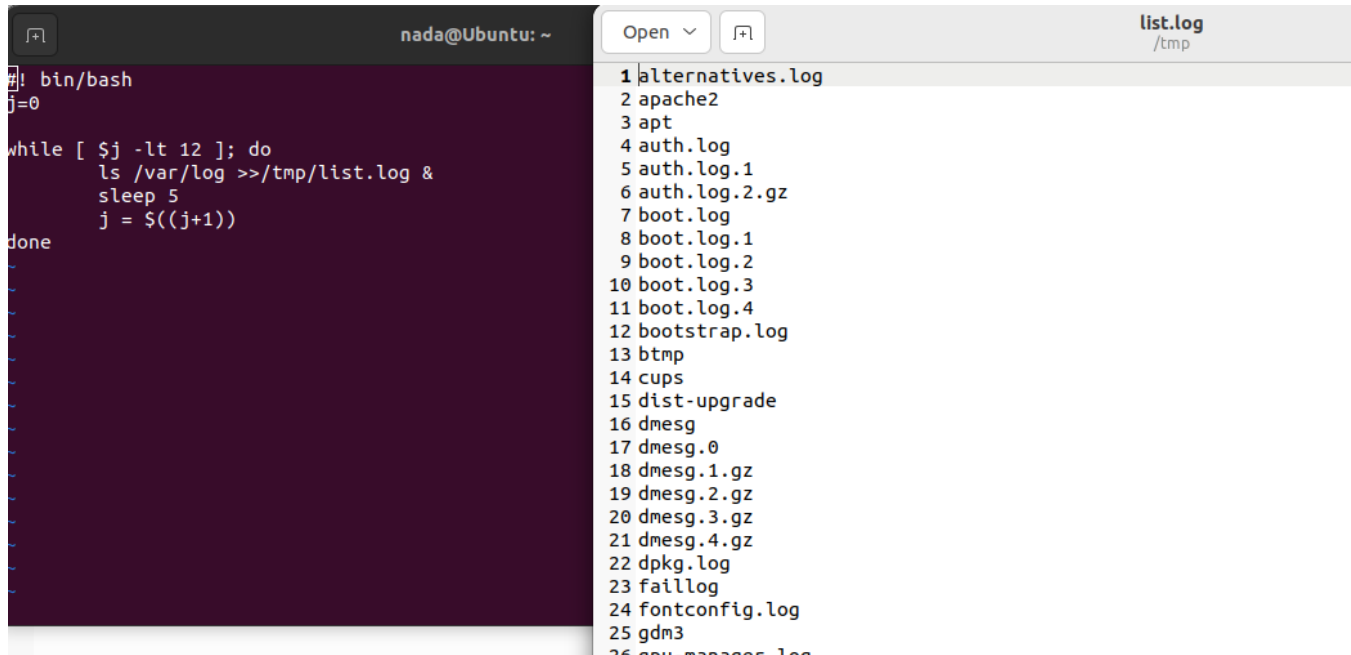


Lab4

- 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 on the left and a file viewer on the right. The terminal window, titled 'nada@Ubuntu: ~', shows a script being executed. The script is a while loop that runs for 12 iterations, listing the contents of `/var/log` and appending the output to `/tmp/list.log` every 5 seconds. The file viewer, titled 'list.log /tmp', shows the output of the script, which is a list of files in `/var/log`.

```
nada@Ubuntu: ~  
#! bin/bash  
j=0  
  
while [ $j -lt 12 ]; do  
    ls /var/log >>/tmp/list.log &  
    sleep 5  
    j = $((j+1))  
done
```

```
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 btmap  
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-messages.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
```

- 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

```
nada@Ubuntu:/etc/systemd/system$ sudo service ser status
● ser.service
   Loaded: loaded (/etc/systemd/system/ser.service; disabled; vendor preset: >
   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
```