Lab4

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

Open ∨	⊞		script.sh
			~/

```
1 #! /bin/bash
2
3 while true; do
4     ls /var/log >> /tmp/list.log
5     sleep 5
6 done
```

```
habiba@habiba-VirtualBox:~$ touch script.sh
habiba@habiba-VirtualBox:~$ nano script.sh
habiba@habiba-VirtualBox:~$ bash script.sh
```

script.sh	×	list.log

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

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

```
habiba@habiba-VirtualBox:~$ sudo cp script.sh /usr/local/bin
habiba@habiba-VirtualBox:~$ sudo cat /usr/local/bin/script.sh
#! /bin/bash

while true; do
    ls /var/log >> /tmp/list.log
    sleep 5
done
habiba@habiba-VirtualBox:~$ cd /usr/local/bin
habiba@habiba-VirtualBox:/usr/local/bin$ ls
script.sh
habiba@habiba-VirtualBox:/usr/local/bin$ sudo chmod +x script.sh
habiba@habiba-VirtualBox:/usr/local/bin$ ./script.sh

^Z
[1]+  Stopped                 ./script.sh
```

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

```
Open ∨    [+]                              lab4.service
                                              ~/

 1 [unit]
 2 Description=Keeping my sources fresher than Arch Linux
 3 After=multi-user.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
```
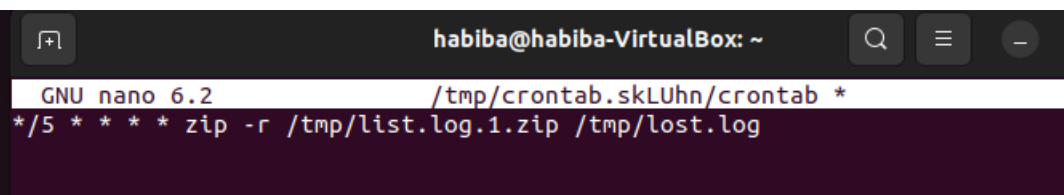
```
habiba@habiba-VirtualBox:~$ touch lab4.service
habiba@habiba-VirtualBox:~$ sudo cp lab4.service /etc/systemd/system/
[sudo] password for habiba:
habiba@habiba-VirtualBox:~$ cd /etc/systemd/system/
habiba@habiba-VirtualBox:/etc/systemd/system$ sudo systemctl daemon-reload
habiba@habiba-VirtualBox:/etc/systemd/system$ sudo service lab4 start
habiba@habiba-VirtualBox:/etc/systemd/system$ sudo service lab4 status
● lab4.service
     Loaded: loaded (/etc/systemd/system/lab4.service; disabled; vendor preset:>
     Active: active (running) since Wed 2023-03-01 04:42:47 EET; 26s ago
   Main PID: 6070 (script.sh)
      Tasks: 2 (limit: 9709)
     Memory: 556.0K
```

- 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

```
habiba@habiba-VirtualBox:~$ sudo apt-get update
[sudo] password for habiba:
Get:1 http://security.ubuntu.com/ubuntu jammy-security InF
Hit:2 http://eg.archive.ubuntu.com/ubuntu jammy InRelease
```

```
habiba@habiba-VirtualBox:~$ sudo apt-get install cron
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

```
habiba@habiba-VirtualBox:~$ crontab -e
no crontab for habiba - using an empty one
```

```
                        habiba@habiba-VirtualBox: ~              Q    ≡    —

  GNU nano 6.2                /tmp/crontab.skLUhn/crontab *
*/5 * * * * zip -r /tmp/list.log.1.zip /tmp/lost.log
```