

Lab4 Objectives:

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

- command:

- touch script.sh
- nano script.sh
- bash script.sh

- screen shot:

```
mariam@mariam-VirtualBox:~/Documents/sys-admin-labs/lab4$ touch script.sh
mariam@mariam-VirtualBox:~/Documents/sys-admin-labs/lab4$ nano script.sh
```

```
mariam@mariam-VirtualBox:~/Documents/sys-admin-labs/lab4$ cat script.sh
#!/bin/bash

while true; do
    ls /var/log >> /tmp/list.log
    sleep 5;
done
```

```
mariam@mariam-VirtualBox:~/Documents/sys-admin-labs/lab4$ bash script.sh
```

```
mariam@mariam-VirtualBox:~/tmp$ cat list.log
alternatives.log
apache2
appport.log
appport.log.1
appport.log.2.gz
apt
auth.log
auth.log.1
auth.log.2.gz
boot.log
boot.log.1
boot.log.2
boot.log.3
boot.log.4
boot.log.5
boot.log.6
boot.log.7
bootstrap.log
btmpt
cups
dist-upgrade
dmesg
dmesg.0
dmesg.1.gz
dmesg.2.gz
dmesg.3.gz
dmesg.4.gz
dpkg.log
faillog
fontconfig.log
gdm3
gpu-manager.log
hp
installer
journal
```

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

- commands:

- sudo cp script.sh /usr/local/bin
- cd /usr/local/bin
- sudo chmod +x script.sh
- sudo cat script.sh
- ./script.sh

- screen shot:

```

mariam@mariam-VirtualBox:~/Documents/sys-admin-labs/lab4$ sudo cp script.sh /usr/local/b
[sudo] password for mariam:
mariam@mariam-VirtualBox:~/Documents/sys-admin-labs/lab4$ cd /usr/local/bin
mariam@mariam-VirtualBox:/usr/local/bin$ ls
script.sh
mariam@mariam-VirtualBox:/usr/local/bin$ sudo chmod +x script.sh
mariam@mariam-VirtualBox:/usr/local/bin$ sudo cat script.sh
#!/bin/bash

while true; do
    ls /var/log >> /tmp/list.log
    sleep 5;
done
mariam@mariam-VirtualBox:/usr/local/bin$ ./script.sh

```

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

- commands:
 - sudo touch myBg_process.service
 - sudo vim myBg_process.service
 - sudo systemctl daemon-reload
 - sudo systemctl enable myBg_process.service
 - sudo systemctl is-enabled myBg_process.service
 - sudo systemctl start myBg_process.service
 - sudo systemctl status myBg_process.service

- screen shot:

```

mariam@mariam-VirtualBox:/etc/systemd/system$ sudo touch myBg_process.service
mariam@mariam-VirtualBox:/etc/systemd/system$ sudo vim myBg_process.service
mariam@mariam-VirtualBox:/etc/systemd/system$ sudo systemctl daemon-reload
mariam@mariam-VirtualBox:/etc/systemd/system$ sudo systemctl enable myBg_process.service
Created symlink /etc/systemd/system/multi-user.target.wants/myBg_process.service → /etc/systemd/system/myBg_process.service
mariam@mariam-VirtualBox:/etc/systemd/system$ sudo systemctl is-enabled myBg_process.service
enabled
mariam@mariam-VirtualBox:/etc/systemd/system$ sudo systemctl start myBg_process.service
mariam@mariam-VirtualBox:/etc/systemd/system$ sudo systemctl status myBg_process.service
● myBg_process.service - my backGround process
   Loaded: loaded (/etc/systemd/system/myBg_process.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2023-02-25 02:17:07 EET; 24s ago
     Main PID: 20635 (script.sh)
       Tasks: 2 (limit: 9437)
      Memory: 552.0K
         CPU: 35ms
    CGroup: /system.slice/myBg_process.service
            └─20635 /bin/bash /usr/local/bin/script.sh
              └─20645 sleep 5

02:17:07 25 فبراير 2023 mariam-VirtualBox systemd[1]: Started my backGround process.

```

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

- commands:
 - crontab -e
- screen shot:

```

*/5 * * * * zip -r /tmp/list.log.1.zip /tmp/list.log

```