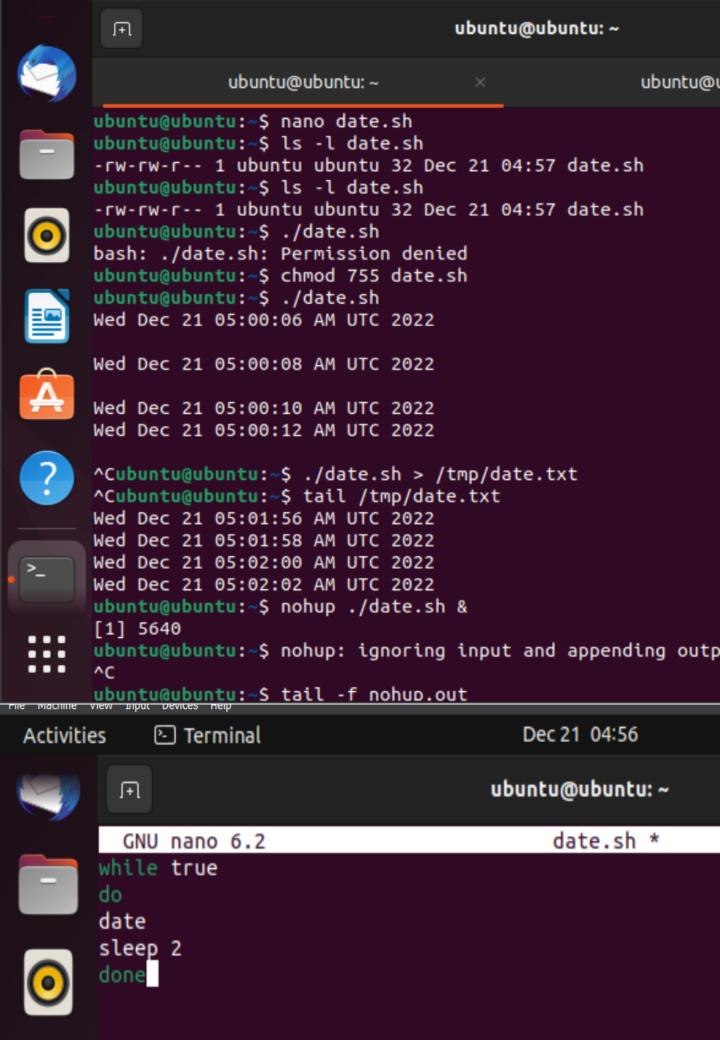# Redhat: Lab03

Steps:

1) `Nano time.sh`

      will open new page (write in it)

```
While true
do
date
sleep 2
done
```

          then click (ctrl+x)--> (y //to save)--> (enter //to name it)

2) `ls -l time.sh`

3) `chmod 755 time.sh`   **//to make permission undenied**

4) `./time.sh`

5) `./time.sh > /tmp/time.txt`

6) `tail /tmp/time.txt`   **//to see it's output**

7) `nohup ./time.sh &`

8) `click(ctrl+c)`   **//to get out (exit)**

9) `tail -f nohup.out`

10) `cat /lib/systemd/sytem/cron.service` **then** `copy this output`

11) `nano cron.service` **//to open it then paste your copy here**

12) `sytemctl daemon-reload`

13) `sytemctl enable cron.service`

14) `sytemctl start cron`

15) `sytemctl status cron.service`

To kill the process:

1) `ps -ef | grep time.sh`

2) `Kill (the output number)`

3) `ps -l`

```
ubuntu@ubuntu:~$ nano date.sh
ubuntu@ubuntu:~$ ls -l date.sh
-rw-rw-r-- 1 ubuntu ubuntu 32 Dec 21 04:57 date.sh
ubuntu@ubuntu:~$ ls -l date.sh
-rw-rw-r-- 1 ubuntu ubuntu 32 Dec 21 04:57 date.sh
ubuntu@ubuntu:~$ ./date.sh
bash: ./date.sh: Permission denied
ubuntu@ubuntu:~$ chmod 755 date.sh
ubuntu@ubuntu:~$ ./date.sh
Wed Dec 21 05:00:06 AM UTC 2022

Wed Dec 21 05:00:08 AM UTC 2022

Wed Dec 21 05:00:10 AM UTC 2022
Wed Dec 21 05:00:12 AM UTC 2022

^Cubuntu@ubuntu:~$ ./date.sh > /tmp/date.txt
^Cubuntu@ubuntu:~$ tail /tmp/date.txt
Wed Dec 21 05:01:56 AM UTC 2022
Wed Dec 21 05:01:58 AM UTC 2022
Wed Dec 21 05:02:00 AM UTC 2022
Wed Dec 21 05:02:02 AM UTC 2022
ubuntu@ubuntu:~$ nohup ./date.sh &
[1] 5640
ubuntu@ubuntu:~$ nohup: ignoring input and appending outp
^C
ubuntu@ubuntu:~$ tail -f nohup.out
```

File   Machine   View   Input   Devices   Help

```
  GNU nano 6.2                        date.sh *
while true
do
date
sleep 2
done
```

```
ubuntu@ubuntu:~$ tail -f nohup.out
Wed Dec 21 05:04:06 AM UTC 2022
Wed Dec 21 05:04:08 AM UTC 2022
Wed Dec 21 05:04:10 AM UTC 2022
Wed Dec 21 05:04:12 AM UTC 2022
Wed Dec 21 05:04:14 AM UTC 2022
Wed Dec 21 05:04:16 AM UTC 2022
Wed Dec 21 05:04:18 AM UTC 2022
Wed Dec 21 05:04:20 AM UTC 2022
Wed Dec 21 05:04:22 AM UTC 2022
Wed Dec 21 05:04:24 AM UTC 2022
Wed Dec 21 05:04:27 AM UTC 2022
Wed Dec 21 05:04:29 AM UTC 2022
^C
ubuntu@ubuntu:~$ cat /lib/systemd/system/cron.service
[Unit]
Description=Regular background program processing daemon
Documentation=man:cron(8)
After=remote-fs.target nss-user-lookup.target

[Service]
EnvironmentFile=-/etc/default/cron
ExecStart=/usr/sbin/cron -f -P $EXTRA_OPTS
IgnoreSIGPIPE=false
KillMode=process
Restart=on-failure

[Install]
WantedBy=multi-user.target
 ubuntu@ubuntu:~$ nano cron.service
 ubuntu@ubuntu:~$ /etc/systemd/system/
 bash: /etc/systemd/system/: Is a directory
 ubuntu@ubuntu:~$
 ubuntu@ubuntu:~$ systemctl daemon-reload
 ubuntu@ubuntu:~$ systemctl enable cron.service
 Synchronizing state of cron.service with SysV service script with /
 systemd-sysv-install.
 Executing: /lib/systemd/systemd-sysv-install enable cron
 ubuntu@ubuntu:~$ systemctl start cron
 ubuntu@ubuntu:~$ systemctl status cron.service
 ● cron.service - Regular background program processing daemon
      Loaded: loaded (/lib/systemd/system/cron.service; enabled; ver
      Active: active (running) since Wed 2022-12-21 04:53:20 UTC; 1h
        Docs: man:cron(8)
    Main PID: 1425 (cron)
       Tasks: 1 (limit: 3512)
      Memory: 480.0K
```

```
        Tasks: 1 (limit: 3512)
       Memory: 480.0K
          CPU: 35ms
       CGroup: /system.slice/cron.service
               └─1425 /usr/sbin/cron -f -P

Dec 21 04:53:20 ubuntu systemd[1]: Started Regular background program processi>
Dec 21 04:53:20 ubuntu cron[1425]: (CRON) INFO (pidfile fd = 3)
Dec 21 04:53:20 ubuntu cron[1425]: (CRON) INFO (Running @reboot jobs)
Dec 21 05:17:01 ubuntu CRON[7146]: pam_unix(cron:session): session opened for >
Dec 21 05:17:01 ubuntu CRON[7147]: (root) CMD (   cd / && run-parts --report />
Dec 21 05:17:01 ubuntu CRON[7146]: pam_unix(cron:session): session closed for >

ubuntu@ubuntu:~$
```

```
  GNU nano 6.2                         cron.service
[Unit]
Description=Regular background program processing daemon
Documentation=man:cron(8)
After=remote-fs.target nss-user-lookup.target

[Service]
EnvironmentFile=-/etc/default/cron
ExecStart=/usr/sbin/cron -f -P $EXTRA_OPTS
IgnoreSIGPIPE=false
KillMode=process
Restart=on-failure

[Install]
WantedBy=multi-user.target




                             [ Read 14 lines ]
^G Help        ^O Write Out   ^W Where Is    ^K Cut         ^T Execute
^X Exit        ^R Read File   ^\ Replace     ^U Paste       ^J Justify
```

```
ubuntu@ubuntu:~$ ps -ef | grep date.sh
ubuntu      5640    5523  0 05:03 pts/0    00:00:00 /bin/sh ./date.sh
ubuntu      9652    9507  0 05:39 pts/1    00:00:00 grep --color=auto date.sh
ubuntu@ubuntu:~$ kill 5640
ubuntu@ubuntu:~$ ps -l
F S   UID     PID    PPID  C PRI  NI ADDR SZ WCHAN  TTY          TIME CMD
4 S   999    9507    5503  0  80   0 -  4916 do_wai pts/1    00:00:00 bash
0 R   999    9694    9507  0  80   0 -  5331 -      pts/1    00:00:00 ps
ubuntu@ubuntu:~$
```

END of Lab 03
Mahmoud Mohamed Ahmed Saad