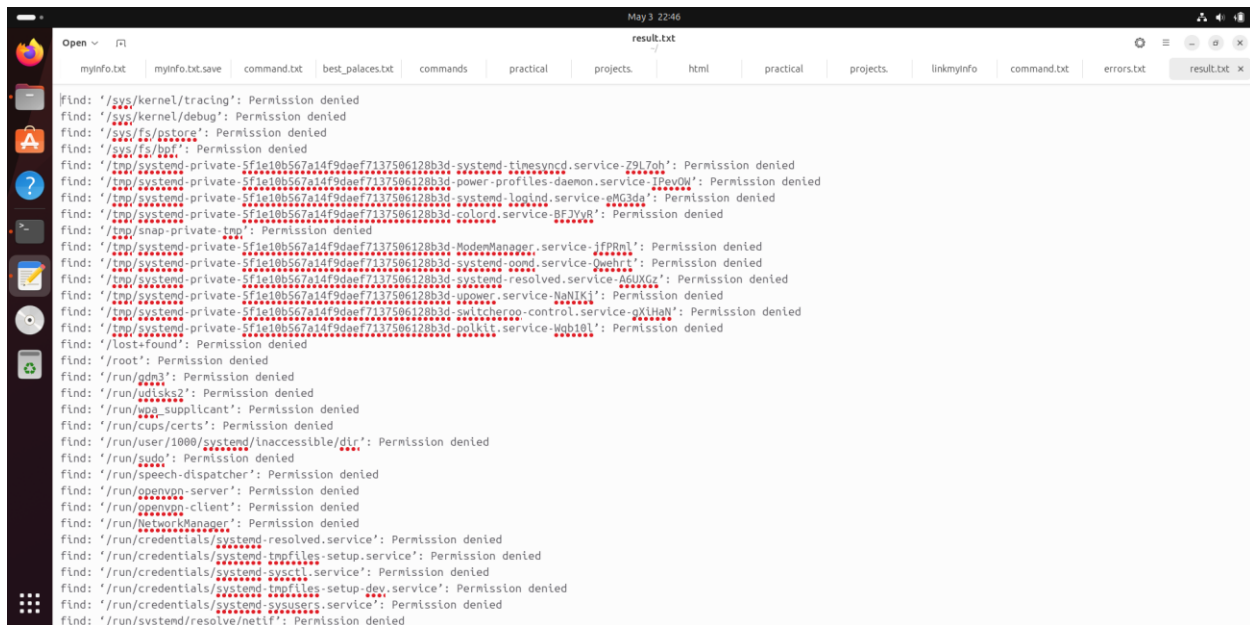


Question1_image

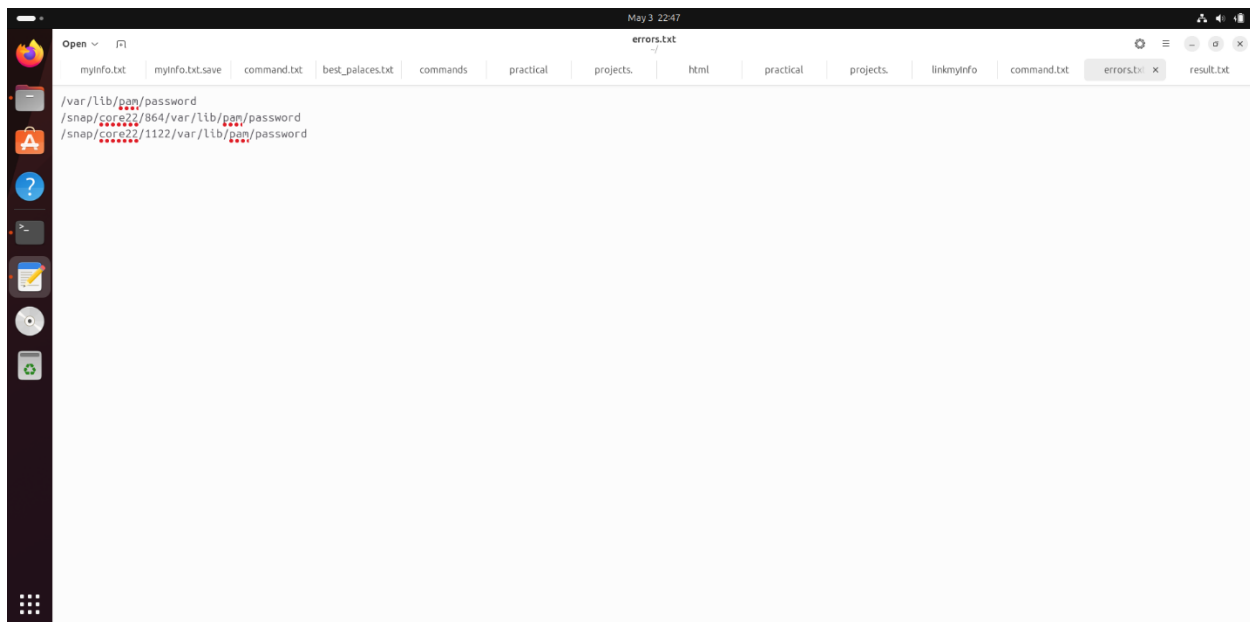
Q1: result.txt image:



```
May 3 22:46
result.txt
myinfo.txt myinfo.txt.save command.txt best_palaces.txt commands practical projects html practical projects linkmyinfo command.txt errors.txt result.txt x

find: '/sys/kernel/tracing': Permission denied
find: '/sys/kernel/debug': Permission denied
find: '/sys/fs/pstore': Permission denied
find: '/sys/fs/bpf': Permission denied
find: '/tmp/systemd-private-5f1e10b567a14f9dae7137506128b3d-systemd-timesyncd.service-29l7oh': Permission denied
find: '/tmp/systemd-private-5f1e10b567a14f9dae7137506128b3d-power-profiles-daemon.service-IPevQM': Permission denied
find: '/tmp/systemd-private-5f1e10b567a14f9dae7137506128b3d-systemd-logind.service-eMG3da': Permission denied
find: '/tmp/systemd-private-5f1e10b567a14f9dae7137506128b3d-colord.service-BFJYyR': Permission denied
find: '/tmp/snap-private-tnp': Permission denied
find: '/tmp/systemd-private-5f1e10b567a14f9dae7137506128b3d-ModemManager.service-jfPRmI': Permission denied
find: '/tmp/systemd-private-5f1e10b567a14f9dae7137506128b3d-systemd-cond.service-QwHrI': Permission denied
find: '/tmp/systemd-private-5f1e10b567a14f9dae7137506128b3d-systemd-resolved.service-6uIXGz': Permission denied
find: '/tmp/systemd-private-5f1e10b567a14f9dae7137506128b3d-upower.service-NaNIKI': Permission denied
find: '/tmp/systemd-private-5f1e10b567a14f9dae7137506128b3d-switcheroo-control.service-gXlHaN': Permission denied
find: '/tmp/systemd-private-5f1e10b567a14f9dae7137506128b3d-polkit.service-Wab10l': Permission denied
find: '/lost+found': Permission denied
find: '/root': Permission denied
find: '/run/gdm3': Permission denied
find: '/run/udisks2': Permission denied
find: '/run/cups/supplcanc': Permission denied
find: '/run/cups/certs': Permission denied
find: '/run/user/1000/systemd/inaccessble/dir': Permission denied
find: '/run/sudo': Permission denied
find: '/run/speech-dispatcher': Permission denied
find: '/run/openvpn-server': Permission denied
find: '/run/openvpn-client': Permission denied
find: '/run/NetworkManager': Permission denied
find: '/run/credentials/systemd-resolved.service': Permission denied
find: '/run/credentials/systemd-tpmfiles-setup.service': Permission denied
find: '/run/credentials/systemd-sysctl.service': Permission denied
find: '/run/credentials/systemd-tpmfiles-setup-dev.service': Permission denied
find: '/run/credentials/systemd-sysusers.service': Permission denied
find: '/run/systemd/resolve/polit': Permission denied
```

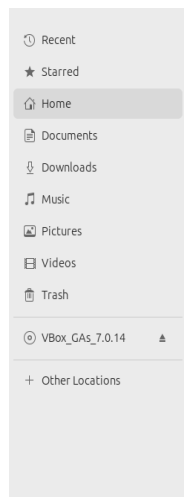
Errors.txt image:



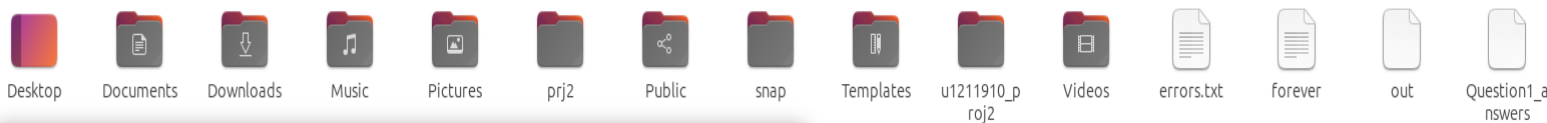
```
May 3 22:47
errors.txt
myinfo.txt myinfo.txt.save command.txt best_palaces.txt commands practical projects html practical projects linkmyinfo command.txt errors.txt result.txt x

/var/lib/pan/password
/snap/core22/864/var/lib/pan/password
/snap/core22/1122/var/lib/pan/password
```

Show this file in home:

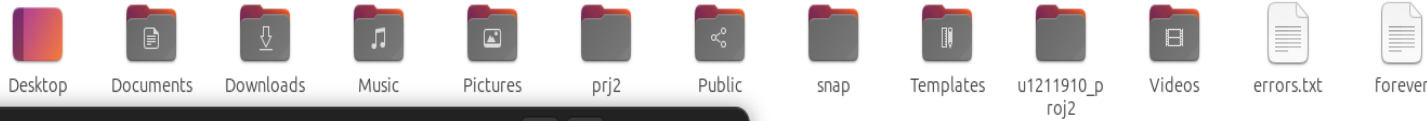


Q3



```
alaa@alaa-1-2: ~  
alaa@alaa-1-2:~$ cat forever  
while true  
do echo hi comp311 students> out  
done  
alaa@alaa-1-2:~$ chmod +x forever  
alaa@alaa-1-2:~$ PATH=$PATH:.  
alaa@alaa-1-2:~$ forever& forever&  
[1] 3977  
[2] 3978  
alaa@alaa-1-2:~$ jobs  
[1]-  Running                forever &  
[2]+  Running                forever &  
alaa@alaa-1-2:~$
```

Q4)



```
alaa@alaa-1-2: ~  
[1]-  Running                forever &  
[2]+  Running                forever &  
alaa@alaa-1-2:~$ forever  
^Z  
[3]+  Stopped                forever  
alaa@alaa-1-2:~$ bg %3  
[3]+  forever &  
alaa@alaa-1-2:~$ forever  
^Z  
[4]+  Stopped                forever  
alaa@alaa-1-2:~$ bg %4  
[4]+  forever &  
alaa@alaa-1-2:~$ kill %3  
alaa@alaa-1-2:~$ fg %4  
forever  
^Z[3]  Terminated          forever  
[4]+  Stopped                forever  
alaa@alaa-1-2:~$ jobs> jobfile.txt  
alaa@alaa-1-2:~$ more jobfile.txt  
[1]  Running                forever &  
[2]-  Running                forever &  
[4]+  Stopped                forever  
alaa@alaa-1-2:~$
```

Q5)

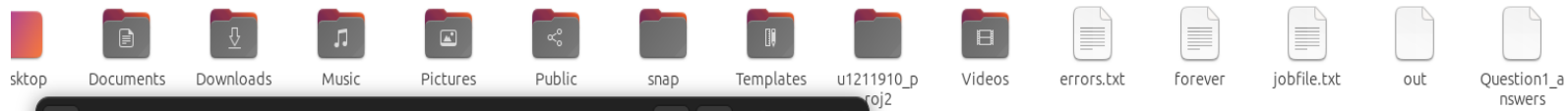
```
Desktop Documents Downloads Music Pictures prj2 Public
alaa@alaa-1-2: ~
alaa@alaa-1-2:~$ forever& forever& forever& forever& forever& forever&
[5] 4401
[6] 4402
[7] 4403
[8] 4404
[9] 4405
[10] 4406
alaa@alaa-1-2:~$ ps -l
F S UID PID PPID C PRI NI ADDR SZ WCHAN TTY TIME CMD
0 S 1000 4341 3868 0 80 0 - 2746 do_wai pts/1 00:00:00 bash
1 R 1000 4351 4341 26 80 0 - 2746 - pts/1 00:01:21 bash
1 D 1000 4352 4341 26 80 0 - 2746 do_tru pts/1 00:01:21 bash
1 T 1000 4375 4341 2 80 0 - 2746 do_sig pts/1 00:00:07 bash
1 D 1000 4401 4341 12 80 0 - 2746 ext4_b pts/1 00:00:05 bash
1 D 1000 4402 4341 9 80 0 - 2746 ext4_b pts/1 00:00:04 bash
1 D 1000 4403 4341 12 80 0 - 2746 do_tru pts/1 00:00:05 bash
1 D 1000 4404 4341 13 80 0 - 2746 do_tru pts/1 00:00:06 bash
1 D 1000 4405 4341 9 80 0 - 2746 ext4_b pts/1 00:00:04 bash
1 D 1000 4406 4341 9 80 0 - 2746 do_tru pts/1 00:00:04 bash
0 R 1000 4422 4341 99 80 0 - 3503 - pts/1 00:00:00 ps
alaa@alaa-1-2:~$ kill -15 4401
alaa@alaa-1-2:~$ kill -15 4402
[5] Terminated forever
alaa@alaa-1-2:~$ kill -15 4403
```

```
Desktop Documents Downloads Music Pictures prj2 Public
alaa@alaa-1-2: ~
1 D 1000 4401 4341 12 80 0 - 2746 ext4_b pts/1 00:00:05 bash
1 D 1000 4402 4341 9 80 0 - 2746 ext4_b pts/1 00:00:04 bash
1 D 1000 4403 4341 12 80 0 - 2746 do_tru pts/1 00:00:05 bash
1 D 1000 4404 4341 13 80 0 - 2746 do_tru pts/1 00:00:06 bash
1 D 1000 4405 4341 9 80 0 - 2746 ext4_b pts/1 00:00:04 bash
1 D 1000 4406 4341 9 80 0 - 2746 do_tru pts/1 00:00:04 bash
0 R 1000 4422 4341 99 80 0 - 3503 - pts/1 00:00:00 ps
alaa@alaa-1-2:~$ kill -15 4401
alaa@alaa-1-2:~$ kill -15 4402
[5] Terminated forever
alaa@alaa-1-2:~$ kill -15 4403
[6] Terminated forever
alaa@alaa-1-2:~$ kill -15 4404
alaa@alaa-1-2:~$ kill -15 4405
[7] Terminated forever
[8] Terminated forever
alaa@alaa-1-2:~$ kill -15 4406
[9] Terminated forever
```

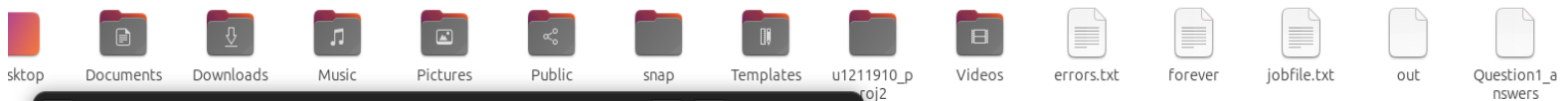
Q6&7)

```
Desktop Documents Downloads Music Pictures prj2 Public
alaa@alaa-1-2: ~
alaa@alaa-1-2:~$ forever&
[5] 4489
alaa@alaa-1-2:~$ kill -SIGSTOP %5
alaa@alaa-1-2:~$ bg %5
[5]+ forever &
alaa@alaa-1-2:~$ jobs
[1] Running forever &
[2] Running forever &
[4]+ Stopped forever
[5]- Running forever &
alaa@alaa-1-2:~$ kill $(jobs -p)
alaa@alaa-1-2:~$ jobs
[1] Terminated forever
[2] Terminated forever
[4]+ Stopped forever
[5]- Terminated forever
alaa@alaa-1-2:~$
```

Q8)

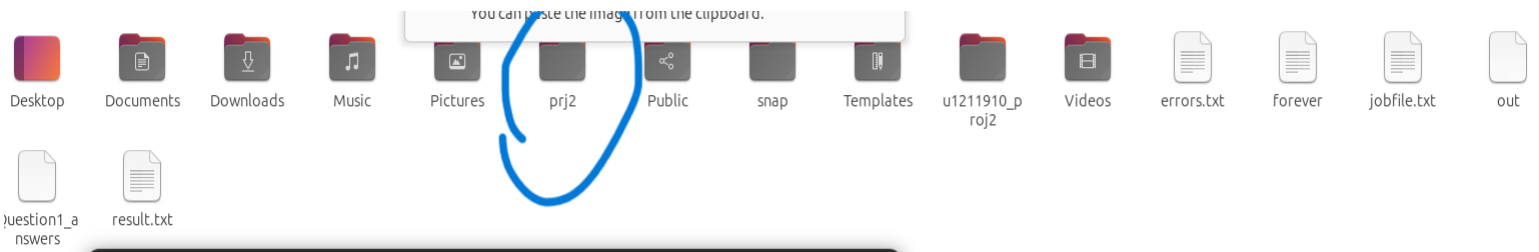


```
alaa@alaa-1-2: ~  
alaa@alaa-1-2:~$ myprj2var=project  
alaa@alaa-1-2:~$ export myprj2var  
alaa@alaa-1-2:~$ csh  
Command 'csh' not found, but can be installed with:  
sudo apt install csh # version 20110502-7, or  
sudo apt install tcsh # version 6.24.10-2  
alaa@alaa-1-2:~$ sudo apt install csh  
[sudo] password for alaa:  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following NEW packages will be installed:  
  csh  
0 upgraded, 1 newly installed, 0 to remove and 73 not upgraded.  
Need to get 245 kB of archives.  
After this operation, 358 kB of additional disk space will be used.  
Get:1 http://il.archive.ubuntu.com/ubuntu mantic/universe amd64 csh amd64 20110502-7 [245 kB]  
Fetched 245 kB in 2s (111 kB/s)  
Selecting previously unselected package csh.  
(Reading database ... 179393 files and directories currently installed.)  
Preparing to unpack .../csh_20110502-7_amd64.deb ...  
Unpacking csh (20110502-7) ...  
Setting up csh (20110502-7) ...
```



```
alaa@alaa-1-2: ~  
[sudo] password for alaa:  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following NEW packages will be installed:  
  csh  
0 upgraded, 1 newly installed, 0 to remove and 73 not upgraded.  
Need to get 245 kB of archives.  
After this operation, 358 kB of additional disk space will be used.  
Get:1 http://il.archive.ubuntu.com/ubuntu mantic/universe amd64 csh amd64 20110502-7 [245 kB]  
Fetched 245 kB in 2s (111 kB/s)  
Selecting previously unselected package csh.  
(Reading database ... 179393 files and directories currently installed.)  
Preparing to unpack .../csh_20110502-7_amd64.deb ...  
Unpacking csh (20110502-7) ...  
Setting up csh (20110502-7) ...  
update-alternatives: using /bin/bsd-csh to provide /bin/csh (csh) in auto mode  
Processing triggers for man-db (2.11.2-3) ...  
alaa@alaa-1-2:~$ csh  
% echo $myprj2var  
project  
%
```

Q9)



```
alaa@alaa-1-2: ~  
alaa@alaa-1-2:~$ mkdir ~/prj2  
alaa@alaa-1-2:~$ export PATH=$PATH:~/prj2  
alaa@alaa-1-2:~$ echo $PATH  
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/snap/bin:/home/alaa/prj2  
alaa@alaa-1-2:~$
```