

آزمایشگاه سیستم عامل

آزمایش اول

علیرضا ابره فروش

۹۸۱۶۶۰۳

گروه ۳

١. سوال

ctrl + alt + t

cd /

ls -l

```
alireza@alireza-VirtualBox:/$ ls -l
total 1190428
lrwxrwxrwx    1 root root          7 Oct 18  2021 bin -> usr/bin
drwxr-xr-x    4 root root      4096 Jan 16  2022 boot
drwxrwxr-x    2 root root      4096 Oct 18  2021 cdrom
drwxr-xr-x   20 root root     4280 Oct  4 14:31 dev
drwxr-xr-x  130 root root    12288 Jan 16  2022 etc
drwxr-xr-x    3 root root      4096 Oct 18  2021 home
lrwxrwxrwx    1 root root          7 Oct 18  2021 lib -> usr/lib
lrwxrwxrwx    1 root root          9 Oct 18  2021 lib32 -> usr/lib32
lrwxrwxrwx    1 root root          9 Oct 18  2021 lib64 -> usr/lib64
lrwxrwxrwx    1 root root         10 Oct 18  2021 libx32 -> usr/libx32
drwx-----   2 root root    16384 Oct 18  2021 lost+found
drwxr-xr-x    3 root root      4096 Jan 16  2022 media
drwxr-xr-x    2 root root      4096 Aug 19  2021 mnt
drwxr-xr-x    3 root root      4096 Jan 16  2022 opt
dr-xr-xr-x  261 root root         0 Oct  4 14:23 proc
drwx-----   4 root root      4096 Oct 18  2021 root
drwxr-xr-x   32 root root       900 Oct  4 14:37 run
lrwxrwxrwx    1 root root          8 Oct 18  2021/sbin -> usr/sbin
drwxr-xr-x   13 root root      4096 Jan 19  2022 snap
drwxr-xr-x    2 root root      4096 Aug 19  2021 srv
-rw-----   1 root root 1218913280 Oct 18  2021 swapfile
dr-xr-xr-x   13 root root         0 Oct  4 14:23 sys
drwxrwxrwt   20 root root      4096 Oct  4 14:44 tmp
drwxr-xr-x   14 root root      4096 Aug 19  2021 usr
drwxr-xr-x   14 root root      4096 Aug 19  2021 var
```

proc sys

cd ~

touch oslab1_3

ls -l

```
alireza@alireza-VirtualBox:~$ ls -l
total 36
drwxr-xr-x 2 alireza alireza 4096 Jan 19 2022 Desktop
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Documents
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Downloads
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Music
-rw-rw-r-- 1 alireza alireza 0 Oct 4 15:04 oslab1_3
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Pictures
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Public
drwx----- 4 alireza alireza 4096 Jan 19 2022 snap
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Templates
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Videos
```

15:04

vim oslab1_3

i

Alireza

Abrehforoush

9816603

Esc

:wq

ls -l

```
alireza@alireza-VirtualBox:~$ ls -l
total 40
drwxr-xr-x 2 alireza alireza 4096 Jan 19 2022 Desktop
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Documents
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Downloads
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Music
-rw-rw-r-- 1 alireza alireza 29 Oct 4 15:31 oslab1_3
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Pictures
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Public
drwx----- 4 alireza alireza 4096 Jan 19 2022 snap
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Templates
drwxr-xr-x 2 alireza alireza 4096 Oct 18 2021 Videos
```

15:31

```
sudo cp oslab1_3 /root/
sudo su
cd /root/
chmod -w oslab1_3
```

۲. سوال

```
ifconfig
ping 172.27.74.177
ssh user_name@host(IP/Domain_name)
scp oslab1_3 yourusername@yourserver:/home/yourusername/
```

۳. سوال

top

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1639	alireza	20	0	3780188	386428	135364	S	1.7	9.6	0:48.52	gnome-shell
3919	alireza	20	0	20628	3832	3072	R	1.0	0.1	0:00.11	top
1424	alireza	20	0	583940	100768	53892	S	0.7	2.5	0:13.77	Xorg
3629	alireza	20	0	822820	51248	39120	S	0.7	1.3	0:02.93	gnome-terminal-
84	root	20	0	0	0	0	I	0.3	0.0	0:02.73	kworker/0:2-events
1561	alireza	20	0	163996	2732	2364	S	0.3	0.1	0:07.68	VBoxClient
2044	alireza	20	0	353644	26912	20708	S	0.3	0.7	0:00.21	xdg-desktop-por
1	root	20	0	167672	11548	8368	S	0.0	0.3	0:03.18	systemd
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kthreadd
3	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_gp
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_par_gp
5	root	20	0	0	0	0	I	0.0	0.0	0:01.04	kworker/0:0-cgroup_destroy
6	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/0:0H-events_highpri
9	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	mm_percpu_wq
10	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_tasks_rude_
11	root	20	0	0	0	0	S	0.0	0.0	0:00.00	rcu_tasks_trace
12	root	20	0	0	0	0	S	0.0	0.0	0:00.40	ksoftirqd/0
13	root	20	0	0	0	0	I	0.0	0.0	0:01.72	rcu_sched
14	root	rt	0	0	0	0	S	0.0	0.0	0:00.06	migration/0
15	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	idle_inject/0
16	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/0
17	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kdevtmpfs
18	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	netns
19	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	inet_frag_wq
20	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kauditd
21	root	20	0	0	0	0	S	0.0	0.0	0:00.00	khungtaskd
22	root	20	0	0	0	0	S	0.0	0.0	0:00.00	oom_reaper
23	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	writeback
24	root	20	0	0	0	0	S	0.0	0.0	0:00.34	kcompactd0
25	root	25	5	0	0	0	S	0.0	0.0	0:00.00	ksmd

```
gnome-shell, Xorg, gnome-terminal-  
ps aux | grep -i migration
```

۴. سوال

```
sudo apt install linux-source  
cd ../../usr/src/  
sudo tar -xf linux-source-5.4.0.tar.bz2  
find . -name syscall.tbl  
sudo grep -l "write" syscall.tbl > ~/oslab1_3
```

۷ تا مربوط به write است.

```
sudo grep -l "write" syscall.tbl > ~/oslab1_3 > 9816603_oslab1_q2
```