

Es. Familiarizziamo con la shell Linux

In questo esercizio abbiamo controllato i processi attivi sulla macchina Linux tramite il comando /top.

```
top - 18:16:05 up 1:36, 1 user, load average: 0.25, 0.17, 0.11
Tasks: 173 total, 1 running, 172 sleeping, 0 stopped, 0 zombie
Cpu(s): 3.9 us, 2.2 sy, 0.0 ni, 93.9 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
Mem Mem : 1967.1 total, 807.4 free, 876.0 used, 445.4 buff/cache
Mem Swap: 1024.0 total, 1024.0 free, 0.0 used, 1091.0 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
754	root	20	0	488996	164428	66980	S	4.0	8.2	1:03.86	Xorg
1438	kali	20	0	457816	114632	90476	S	2.6	5.7	0:40.78	qterminal
1063	kali	20	0	1020500	108084	77408	S	1.0	5.4	0:19.50	xfwm4
1131	kali	20	0	426100	38196	22828	S	1.0	1.9	0:20.93	panel-13-cpugra
35	root	20	0	0	0	0	S	0.3	0.0	0:00.21	kcompactd0
935	kali	20	0	341112	28956	17536	S	0.3	1.4	0:01.55	xfce4-session
1001	kali	20	0	217452	2944	2560	S	0.3	0.1	0:04.00	VBoxClient
1008	kali	20	0	217968	3072	2688	S	0.3	0.2	0:10.77	VBoxClient
1112	kali	20	0	541408	46296	35024	S	0.3	2.3	0:03.04	xfce4-panel
1123	kali	20	0	591032	104872	43516	S	0.3	5.2	0:02.49	xfdesktop
1133	kali	20	0	423680	30364	21024	S	0.3	1.5	0:18.37	panel-15-genmon
1544	kali	20	0	11744	5376	3200	R	0.3	0.3	0:23.85	top
1	root	20	0	20728	12520	9320	S	0.0	0.6	0:01.18	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	0	-20	0	0	0	I	0.0	0.0	0:00.00	slub_flushwq
6	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	netns
8	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/u4:0-events_highpri
9	root	20	0	0	0	0	I	0.0	0.0	0:00.28	kworker/u4:0-events_unbound
10	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	mm_percpu_wq
11	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_kthread
12	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_rude_kthread
13	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_trace_kthread
14	root	20	0	0	0	0	S	0.0	0.0	0:00.36	ksoftirqd/0
15	root	20	0	0	0	0	I	0.0	0.0	0:02.02	rcu_preempt
16	root	rt	0	0	0	0	S	0.0	0.0	0:00.03	migration/0
17	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	idle_inject/0
19	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/0
20	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/1
21	root	-51	0	0	0	0	S	0.0	0.0	0:00.00	idle_inject/1
22	root	rt	0	0	0	0	S	0.0	0.0	0:00.18	migration/1
23	root	20	0	0	0	0	S	0.0	0.0	0:00.40	ksoftirqd/1
27	root	20	0	0	0	0	I	0.0	0.0	0:00.93	kworker/u4:1-events_unbound
28	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kdevtmpfs
29	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	inet_frag_wq
30	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kauditd
31	root	20	0	0	0	0	S	0.0	0.0	0:00.00	khungtaskd
32	root	20	0	0	0	0	S	0.0	0.0	0:00.00	oom_reaper
34	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	writeback
36	root	25	5	0	0	0	S	0.0	0.0	0:00.00	ksmd
37	root	39	19	0	0	0	S	0.0	0.0	0:00.18	khugepaged
38	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kintegrityd
39	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	khugepd

Poi abbiamo creato una nuova directory (Epicode_Lab) e ci siamo spostati in quella directory.

```
(kali@kali)-[~]
$ mkdir Epicode_Lab

(kali@kali)-[~]
$ cd Epicode_Lab
```

Abbiamo creato il file Esercizio.txt e modificato con il comando /nano e il comando /cat per visualizzarlo.

```
(kali@kali)-[~/Epicode_Lab]
$ nano

(kali@kali)-[~/Epicode_Lab]
$ cat Esercizio.txt
Hello,i'm Tomodachi
do you wanna play with me?
```

Dopodiché abbiamo controllato i permessi del file utilizzando il comando `/ls -la`, subito dopo abbiamo modificato i privilegi del file che l'utente aveva tutti i privilegi, il gruppo solo lettura e scrittura mentre per gli altri utente solo lettura.

```
(kali㉿kali)-[~]
$ cd Epicode_Lab

(kali㉿kali)-[~/Epicode_Lab]
$ ls -la
total 12
drwxr-xr-x  2 kali kali 4096 Oct  3 08:54 .
drwx----- 17 kali kali 4096 Oct  3 09:06 ..
-rwxr--r--  1 kali kali  48 Oct  3 08:54 Esercizio.txt

(kali㉿kali)-[~/Epicode_Lab]
$ chmod g+w Esercizio.txt

(kali㉿kali)-[~/Epicode_Lab]
$ ls -la
total 12
drwxr-xr-x  2 kali kali 4096 Oct  3 08:54 .
drwx----- 17 kali kali 4096 Oct  3 09:06 ..
-rwxrw-r--  1 kali kali  48 Oct  3 08:54 Esercizio.txt

(kali㉿kali)-[~/Epicode_Lab]
$
```

L'esercizio chiedeva anche di creare un utente nuovo tramite il comando `/useradd` e la password con `/passwd`.

```
(kali㉿kali)-[~]
$ su Tomodachi
Password:
Tomodachi@kali:/home/kali$ nano Esercizio.txt
Unable to create directory /home/Tomodachi/.local/share/nano/: No such file or directory
It is required for saving/loading search history or cursor positions.

Tomodachi@kali:/home/kali$
```

Infine chiedeva di aprire il file dell'account nuovo e vedere che errore si riceveva. nel mio caso non avevo i permessi.

```
[ Path '.': Permission denied ] ...
on M-U Undo M-A Set Mark
```