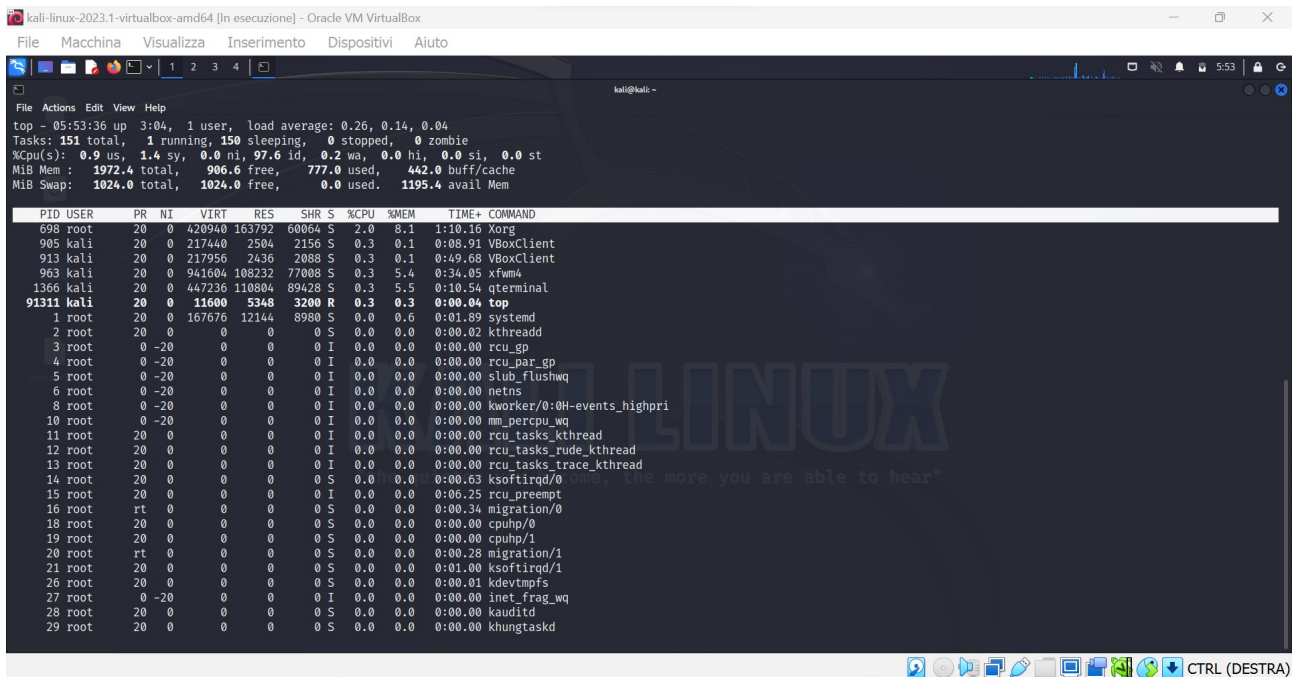


ESERCIZIO SHELL DI LINUX

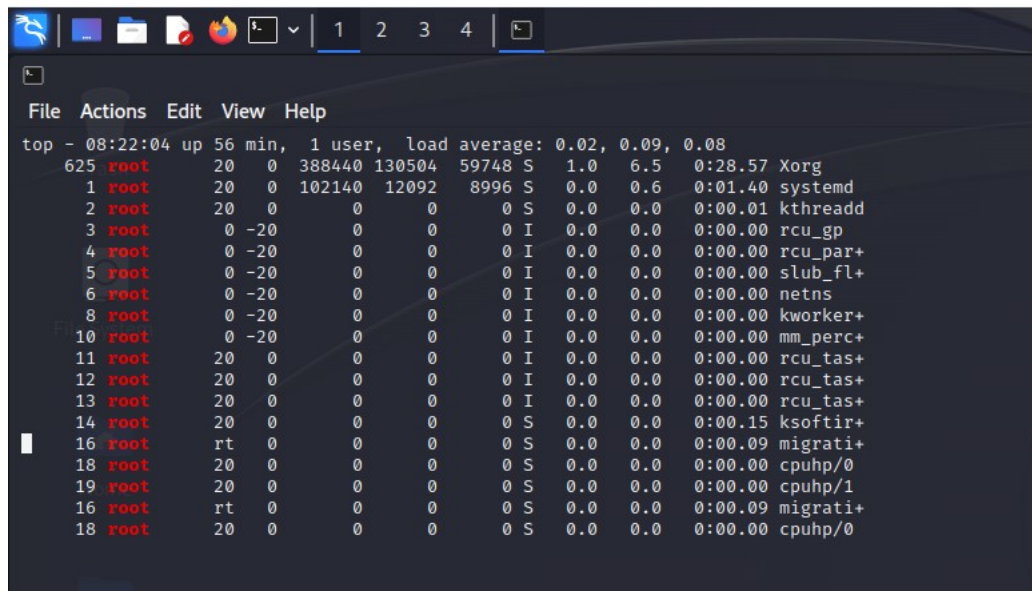
- Visualizzazione processi con top dove il PID è il "process IDENTifier" identificativo di un processo in esecuzione, USER è l'utente a cui appartiene il processo e COMMAND è il comando che ha generato il processo.



```
top - 05:53:36 up 3:04, 1 user, load average: 0.26, 0.14, 0.04
Tasks: 151 total, 1 running, 150 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.9 us, 1.4 sy, 0.0 ni, 97.6 id, 0.2 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 1972.4 total, 906.6 free, 777.0 used, 442.0 buff/cache
MiB Swap: 1024.0 total, 1024.0 free, 0.0 used, 1195.4 avail Mem

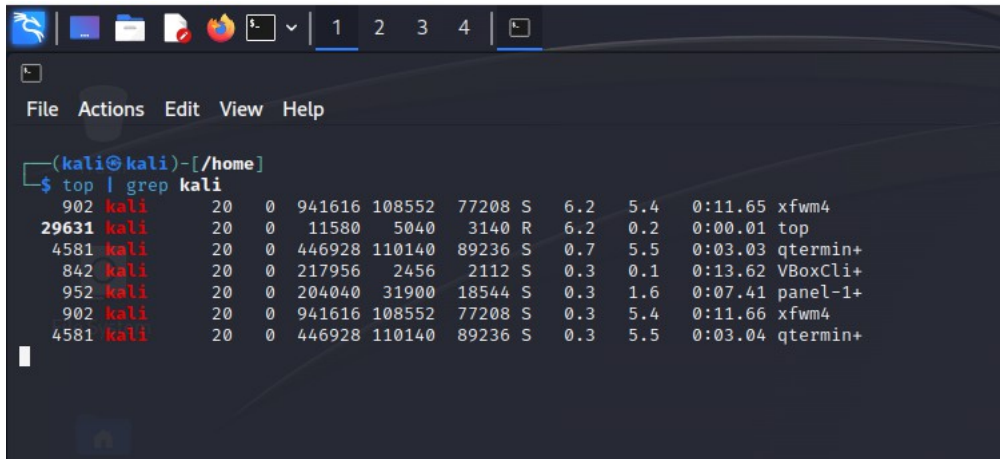
  PID USER      PR  NI   VIRT   RES   SHR  %CPU  %MEM    TIME+ COMMAND
 698 root        20   0 420940 163792 60064 S    2.0   8.1   1:10.16 Xorg
 905 kali        20   0 217440 2504   2156 S    0.3   0.1   0:08.91 VBoxClient
 913 kali        20   0 217956 2436   2088 S    0.3   0.1   0:49.68 VBoxClient
 963 kali        20   0 941604 108232 77008 S    0.3   5.4   0:34.05 xfwm4
1366 kali        20   0 447236 110804 89428 S    0.3   5.5   0:10.54 qterminal
91311 kali        20   0 11600   5348   3200 R    0.3   0.3   0:00.04 top
   1 root        20   0 167676 12144   8980 S    0.0   0.6   0:01.89 systemd
   2 root        20   0      0      0      0 S    0.0   0.0   0:00.02 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/0:0H-events_highpri
  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   0:00.63 ksoftirqd/0
  15 root        20   0      0      0      0 I    0.0   0.0   0:06.25 rcu_preempt
  16 root        rt    0      0      0      0 S    0.0   0.0   0:00.34 migration/0
  18 root        20   0      0      0      0 S    0.0   0.0   0:00.00 cpuhp/0
  19 root        20   0      0      0      0 S    0.0   0.0   0:00.00 cpuhp/1
  20 root        rt    0      0      0      0 S    0.0   0.0   0:00.28 migration/1
  21 root        20   0      0      0      0 S    0.0   0.0   0:01.00 ksoftirqd/1
  26 root        20   0      0      0      0 S    0.0   0.0   0:00.01 kdevtmpfs
  27 root        0 -20      0      0      0 I    0.0   0.0   0:00.00 inet_frag_wq
  28 root        20   0      0      0      0 S    0.0   0.0   0:00.00 kauditd
  29 root        20   0      0      0      0 S    0.0   0.0   0:00.00 khungtaskd
```

- Processi in esecuzione per l'utente root



```
top - 08:22:04 up 56 min, 1 user, load average: 0.02, 0.09, 0.08
 625 root        20   0 388440 130504 59748 S    1.0   6.5   0:28.57 Xorg
   1 root        20   0 102140 12092   8996 S    0.0   0.6   0:01.40 systemd
   2 root        20   0      0      0      0 S    0.0   0.0   0:00.01 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+
   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+
  10 root        0 -20      0      0      0 I    0.0   0.0   0:00.00 mm_perc+
  11 root        20   0      0      0      0 I    0.0   0.0   0:00.00 rcu_tasks+
  12 root        20   0      0      0      0 I    0.0   0.0   0:00.00 rcu_tasks+
  13 root        20   0      0      0      0 I    0.0   0.0   0:00.00 rcu_tasks+
  14 root        20   0      0      0      0 S    0.0   0.0   0:00.15 ksoftir+
  16 root        rt    0      0      0      0 S    0.0   0.0   0:00.09 migrati+
  18 root        20   0      0      0      0 S    0.0   0.0   0:00.00 cpuhp/0
  19 root        20   0      0      0      0 S    0.0   0.0   0:00.00 cpuhp/1
  16 root        rt    0      0      0      0 S    0.0   0.0   0:00.09 migrati+
  18 root        20   0      0      0      0 S    0.0   0.0   0:00.00 cpuhp/0
```

- Processi in esecuzione per l'utente kali

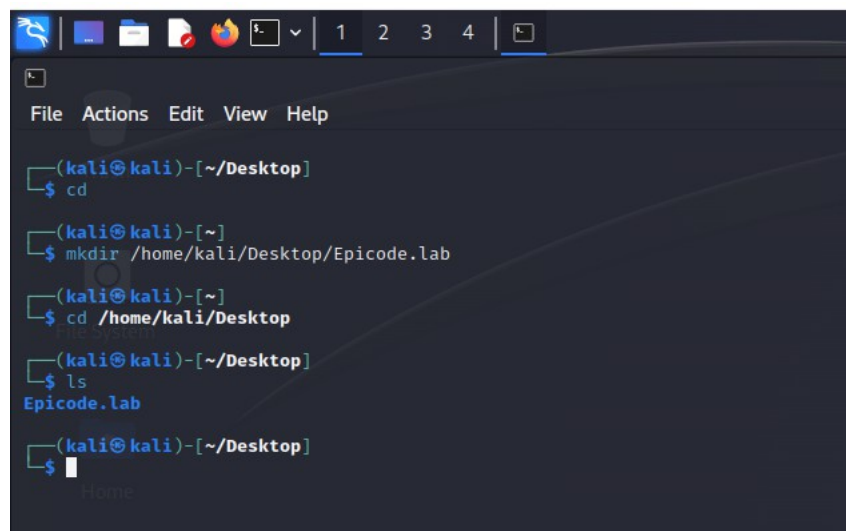


```

(kali@kali)-[/home]
$ top | grep kali
 902 kali      20   0  941616 108552  77208 S   6.2   5.4   0:11.65 xfwm4
29631 kali      20   0   11580   5040   3140 R   6.2   0.2   0:00.01 top
4581 kali      20   0  446928 110140  89236 S   0.7   5.5   0:03.03 qtermin+
 842 kali      20   0  217956   2456   2112 S   0.3   0.1   0:13.62 VBoxCli+
 952 kali      20   0  204040   31900  18544 S   0.3   1.6   0:07.41 panel-1+
 902 kali      20   0  941616 108552  77208 S   0.3   5.4   0:11.66 xfwm4
4581 kali      20   0  446928 110140  89236 S   0.3   5.5   0:03.04 qtermin+

```

- Creazione di una nuova directory su desktop



```

(kali@kali)-[~/Desktop]
$ cd

(kali@kali)-[~]
$ mkdir /home/kali/Desktop/Epicode.lab

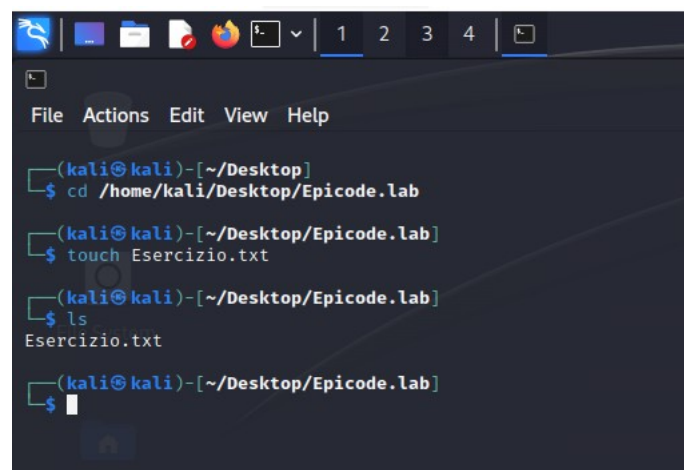
(kali@kali)-[~]
$ cd /home/kali/Desktop

(kali@kali)-[~/Desktop]
$ ls
Epicode.lab

(kali@kali)-[~/Desktop]
$

```

- Creazione file Esercizio.txt nella cartella Epicode.lab



```

(kali@kali)-[~/Desktop]
$ cd /home/kali/Desktop/Epicode.lab

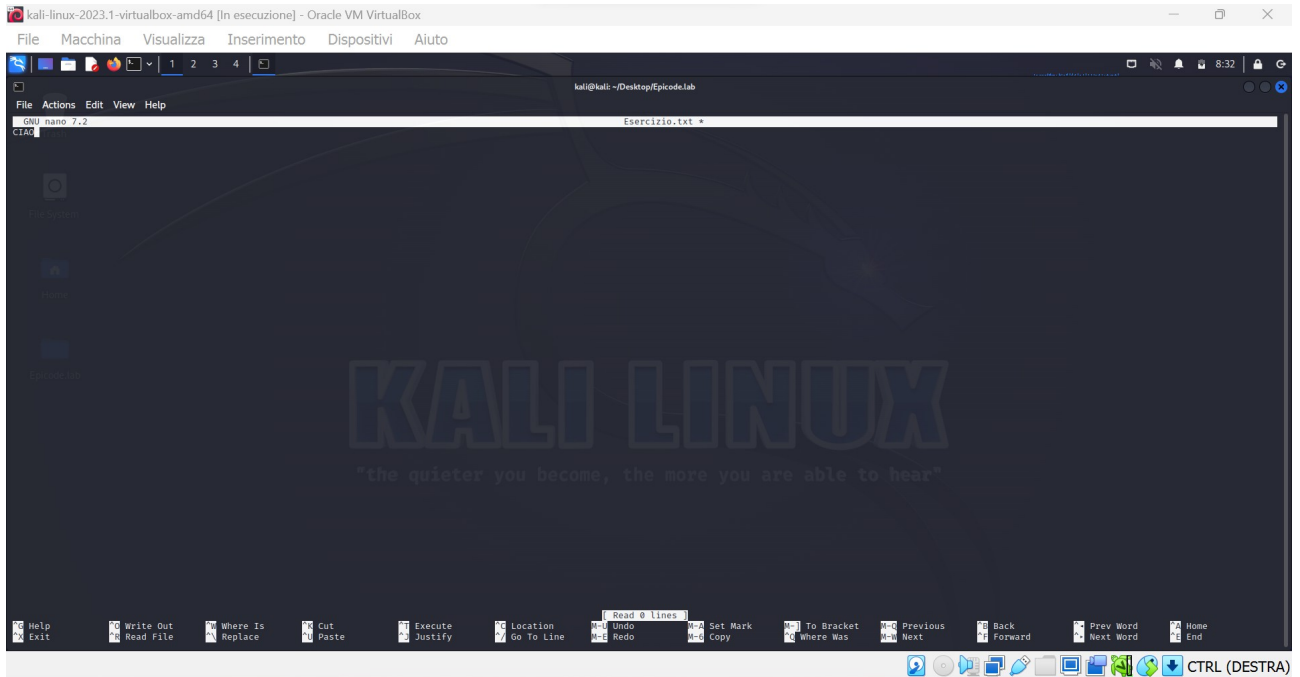
(kali@kali)-[~/Desktop/Epicode.lab]
$ touch Esercizio.txt

(kali@kali)-[~/Desktop/Epicode.lab]
$ ls
Esercizio.txt

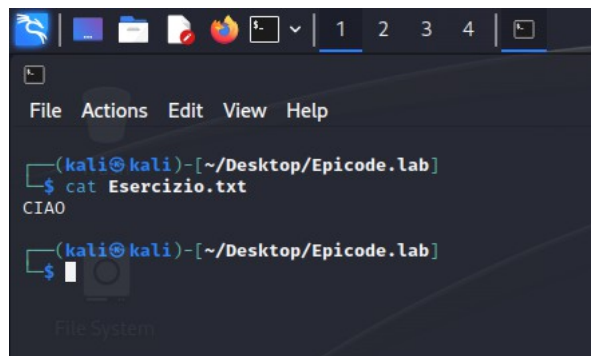
(kali@kali)-[~/Desktop/Epicode.lab]
$

```

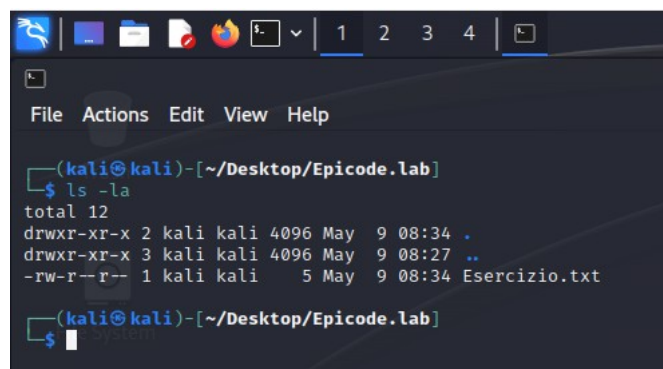
- Modifica del file Eserzio.txt con editor di testo nano



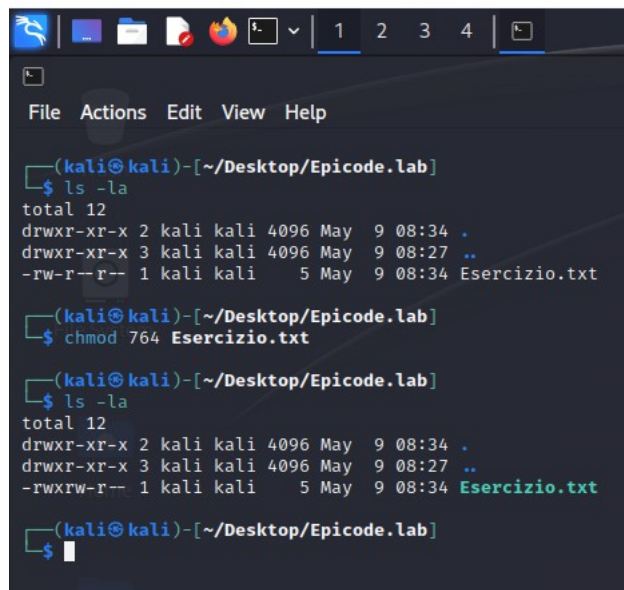
- Lettura a schermo con il comando cat



- Controllo dei permessi del file con il comando ls -la



- Modifica dei privilegi del file Esercizio.txt



```

(kali@kali)-[~/Desktop/Epicode.lab]
$ ls -la
total 12
drwxr-xr-x 2 kali kali 4096 May  9 08:34 .
drwxr-xr-x 3 kali kali 4096 May  9 08:27 ..
-rw-r--r-- 1 kali kali   5 May  9 08:34 Esercizio.txt

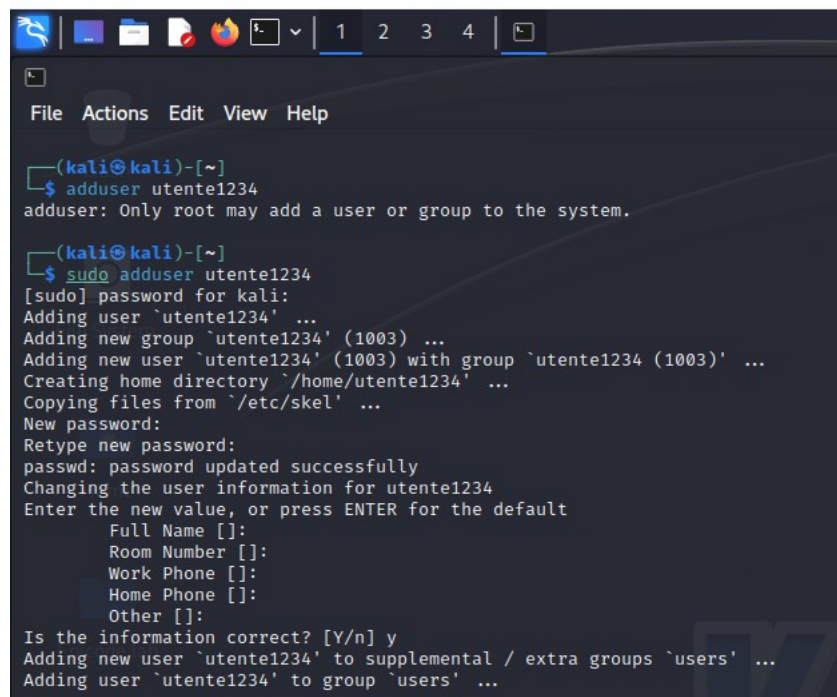
(kali@kali)-[~/Desktop/Epicode.lab]
$ chmod 764 Esercizio.txt

(kali@kali)-[~/Desktop/Epicode.lab]
$ ls -la
total 12
drwxr-xr-x 2 kali kali 4096 May  9 08:34 .
drwxr-xr-x 3 kali kali 4096 May  9 08:27 ..
-rwxr--r-- 1 kali kali   5 May  9 08:34 Esercizio.txt

(kali@kali)-[~/Desktop/Epicode.lab]
$

```

- Creazione di un nuovo utente



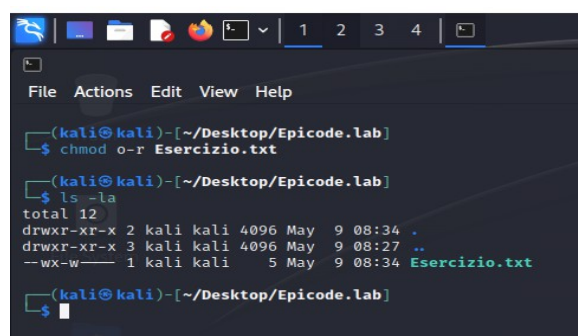
```

(kali@kali)-[~]
$ adduser utente1234
adduser: Only root may add a user or group to the system.

(kali@kali)-[~]
$ sudo adduser utente1234
[sudo] password for kali:
Adding user `utente1234' ...
Adding new group `utente1234' (1003) ...
Adding new user `utente1234' (1003) with group `utente1234 (1003)' ...
Creating home directory `/home/utente1234' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for utente1234
Enter the new value, or press ENTER for the default
  Full Name []:
  Room Number []:
  Work Phone []:
  Home Phone []:
  Other []:
Is the information correct? [Y/n] y
Adding new user `utente1234' to supplemental / extra groups `users' ...
Adding user `utente1234' to group `users' ...

```

- Modifica privilegi gruppo "others"



```

(kali@kali)-[~/Desktop/Epicode.lab]
$ chmod o-r Esercizio.txt

(kali@kali)-[~/Desktop/Epicode.lab]
$ ls -la
total 12
drwxr-xr-x 2 kali kali 4096 May  9 08:34 .
drwxr-xr-x 3 kali kali 4096 May  9 08:27 ..
--wx-w--- 1 kali kali   5 May  9 08:34 Esercizio.txt

(kali@kali)-[~/Desktop/Epicode.lab]
$

```

- Spostamento file Esercizio.txt nella directory root

```
(kali@kali)-[~/Desktop/Epicode.lab]
└─$ sudo mv Esercizio.txt /
(kali@kali)-[~/Desktop/Epicode.lab]
└─$ cd /
(kali@kali)-[/]
└─$ ls
bin  boot  dev  Esercizio.txt  etc  home  initrd.img  initrd.img.old  lib  lib32  lib64  libx32  lost+found  media  mnt  opt  proc  root  run  sbin  srv  swapfile  sys  tmp  usr  var  vmlinuz  vmlinuz.old
└─$
```

- Cambiamento utente con il comando "su"

```
(kali@kali)-[/]
└─$ su utente1234
Password:
(utente1234@kali)-[/]
└─$
```

- Errore apertura Esercizio.txt con nuovo utente

```
Help  Write Out  Where Is  Cut  Execute  Error reading Esercizio.txt: Permission denied  To Bracket  Previous  Back  Prev Word  Home
Exit  Read File  Replace  Paste  Justify  Location  Undo  Redo  Set Mark  Where Was  Next  Forward  Next Word  End
```


- Modifica dei permessi per consentire al nuovo utente di leggere il file Esercizio.txt

```
(utente1234@kali)-[/]
└─$ su kali
Password:
(kali@kali)-[/]
└─$ chmod o+r Esercizio.txt
(kali@kali)-[/]
└─$ su utente1234
Password:
(utente1234@kali)-[/]
└─$ nano Esercizio.txt
```

- Apertura file con nano dal nuovo utente

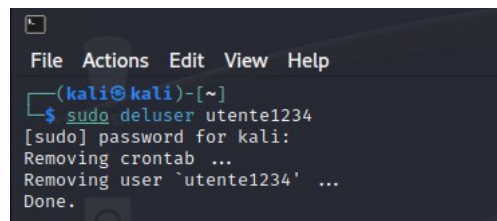
```
utente1234@kali: /
File Actions Edit View Help
GNU nano 7.2 Esercizio.txt
GIAO
```


- Ritorno allo scenario iniziale



A terminal window on a Kali Linux system. The window title is 'kali@kali: ~/Desktop'. The menu bar shows 'File', 'Actions', 'Edit', 'View', and 'Help'. The terminal shows the following commands and output:

```
(kali@kali)-[/]  
$ sudo rm Esercizio.txt  
[sudo] password for kali:  
(kali@kali)-[/]  
$ ls  
bin boot dev etc home initrd.img initrd.img.old lib lib32 lib64 libx32 lost+found media mnt opt proc root run sbin srv swapfile sys tmp usr var vmlinuz vmlinuz.old  
(kali@kali)-[/]  
$ cd /home/kali/Desktop  
(kali@kali)-[~/Desktop]  
$ rmdir Epicode.lab
```



A terminal window on a Kali Linux system. The window title is 'kali@kali: ~'. The menu bar shows 'File', 'Actions', 'Edit', 'View', and 'Help'. The terminal shows the following commands and output:

```
(kali@kali)-[~]  
$ sudo deluser utente1234  
[sudo] password for kali:  
Removing crontab ...  
Removing user `utente1234' ...  
Done.
```

