

1. Da terminale ho digitato il comando `top | grep root` in modo da vedere solo i processi in esecuzione per l'utente root...

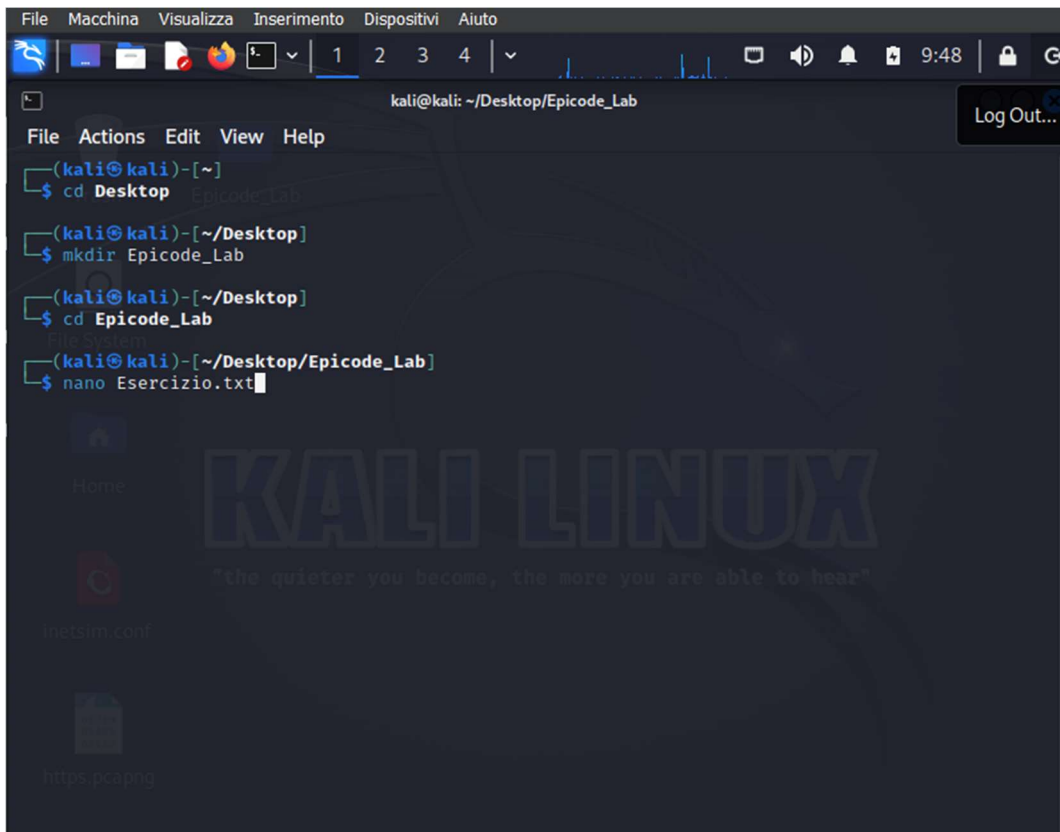
```
File Actions Edit View Help
top - 10:34:43 up 1:32, 1 user, load average: 0.11, 0.17, 0.16
 594 root      20   0 487380 159880 77944 S   1.0   7.9  0:26.97 Xorg
36852 root      20   0      0      0      0 I   0.3   0.0  0:00.18 kworker+
  1 root      20   0 102224 12140  9016 S   0.0   0.6  0:00.54 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+
  5 root      0 -20      0      0      0 I   0.0   0.0  0:00.00 slub_fl+
  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_tas+
 12 root      20   0      0      0      0 I   0.0   0.0  0:00.00 rcu_tas+
 13 root      20   0      0      0      0 I   0.0   0.0  0:00.00 rcu_tas+
 14 root      20   0      0      0      0 S   0.0   0.0  0:00.10 ksoftir+
 15 root      20   0      0      0      0 I   0.0   0.0  0:00.65 rcu_pre+
 18 root      20   0      0      0      0 S   0.0   0.0  0:00.00 cpuhp/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
```

... e poi `top | grep kali` per i processi in esecuzione sull'utente kali.

```
(kali@kali)-[~]
└─$ top | grep kali
45834 kali      20   0 448016 111672 91344 S   1.0   5.5  0:00.51 qtermin+
 938 kali      20   0 164364 10076  7212 S   0.3   0.5  0:00.25 at-spi2+
 950 kali      20   0 876216 108916 77476 S   0.3   5.4  0:06.59 xfwm4
45834 kali      20   0 448016 111672 91344 S   0.7   5.5  0:00.53 qtermin+
 900 kali      20   0 217956  2440  2084 S   0.3   0.1  0:03.12 VBoxCli+
1011 kali      20   0 352532 38452 22308 S   0.3   1.9  0:05.09 panel-1+
47034 kali      20   0 11580  5080  3184 R   0.3   0.3  0:00.01 top
1013 kali      20   0 342156 31272 21308 S   0.3   1.5  0:05.37 panel-1+
 950 kali      20   0 876216 108916 77476 S   0.3   5.4  0:06.60 xfwm4
1013 kali      20   0 342156 31272 21308 S   0.3   1.5  0:05.38 panel-1+
1011 kali      20   0 352532 38452 22308 S   0.3   1.9  0:05.10 panel-1+
45834 kali      20   0 448016 111672 91344 S   0.3   5.5  0:00.54 qtermin+
 893 kali      20   0 217440  2476  2132 S   0.3   0.1  0:01.27 VBoxCli+
 950 kali      20   0 876216 108916 77476 S   0.3   5.4  0:06.61 xfwm4
1013 kali      20   0 342156 31272 21308 S   0.3   1.5  0:05.39 panel-1+
47034 kali      20   0 11580  5080  3184 R   0.3   0.3  0:00.02 top
 950 kali      20   0 876216 108916 77476 S   0.3   5.4  0:06.62 xfwm4
1011 kali      20   0 352532 38452 22308 S   0.3   1.9  0:05.11 panel-1+
45834 kali      20   0 448016 111672 91344 S   0.3   5.5  0:00.55 qtermin+
 900 kali      20   0 217956  2440  2084 S   0.3   0.1  0:03.13 VBoxCli+
1011 kali      20   0 352532 38452 22308 S   0.3   1.9  0:05.12 panel-1+
45834 kali      20   0 448016 111672 91344 S   0.3   5.5  0:00.56 qtermin+
 809 kali      20   0  9792  5572  4348 S   0.3   0.3  0:00.69 dbus-da+
1013 kali      20   0 342156 31272 21308 S   0.3   1.5  0:05.40 panel-1+
47034 kali      20   0 11580  5080  3184 R   0.3   0.3  0:00.03 top
 878 kali      20   0 217340  4092  3544 S   0.3   0.2  0:00.02 VBoxCli+
 950 kali      20   0 876216 108916 77476 S   0.3   5.4  0:06.63 xfwm4
1013 kali      20   0 342156 31272 21308 S   0.3   1.5  0:05.41 panel-1+
45834 kali      20   0 448016 111672 91344 S   0.3   5.5  0:00.57 qtermin+
```

Qui possiamo evidenziare che esistono le colonne PID che identifica il Processo, User che indica l'utente sul quale è in atto il processo e Command che ci dice qual è il processo.

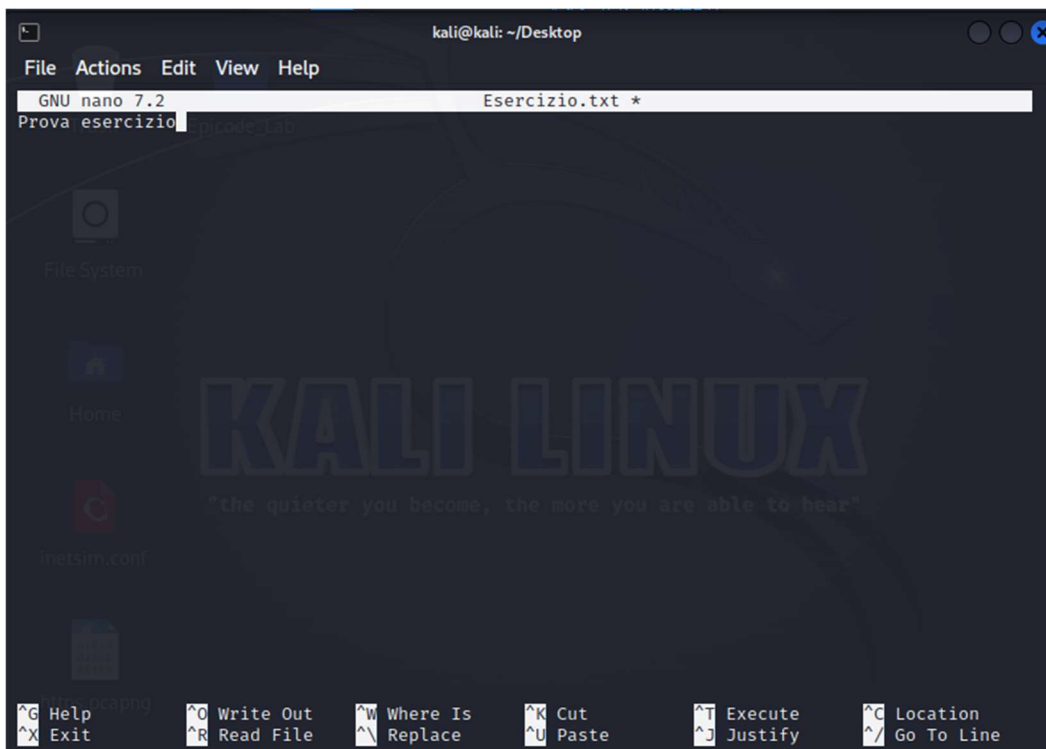
2. Ho creato la nuova directory "Epicode_lab" e il file di testo "Esercizio.txt"....



```
kali@kali: ~/Desktop/Epicode_Lab
File Actions Edit View Help
(kali@kali)-[~]
$ cd Desktop
(kali@kali)-[~/Desktop]
$ mkdir Epicode_Lab
(kali@kali)-[~/Desktop]
$ cd Epicode_Lab
(kali@kali)-[~/Desktop/Epicode_Lab]
$ nano Esercizio.txt
```

The terminal window shows the user navigating to the Desktop, creating a directory named Epicode_Lab, and then entering the nano text editor to create a file named Esercizio.txt. The background of the terminal displays the Kali Linux logo and the quote "the quieter you become, the more you are able to hear".

...dato l'invio si apre la seguente schermata...

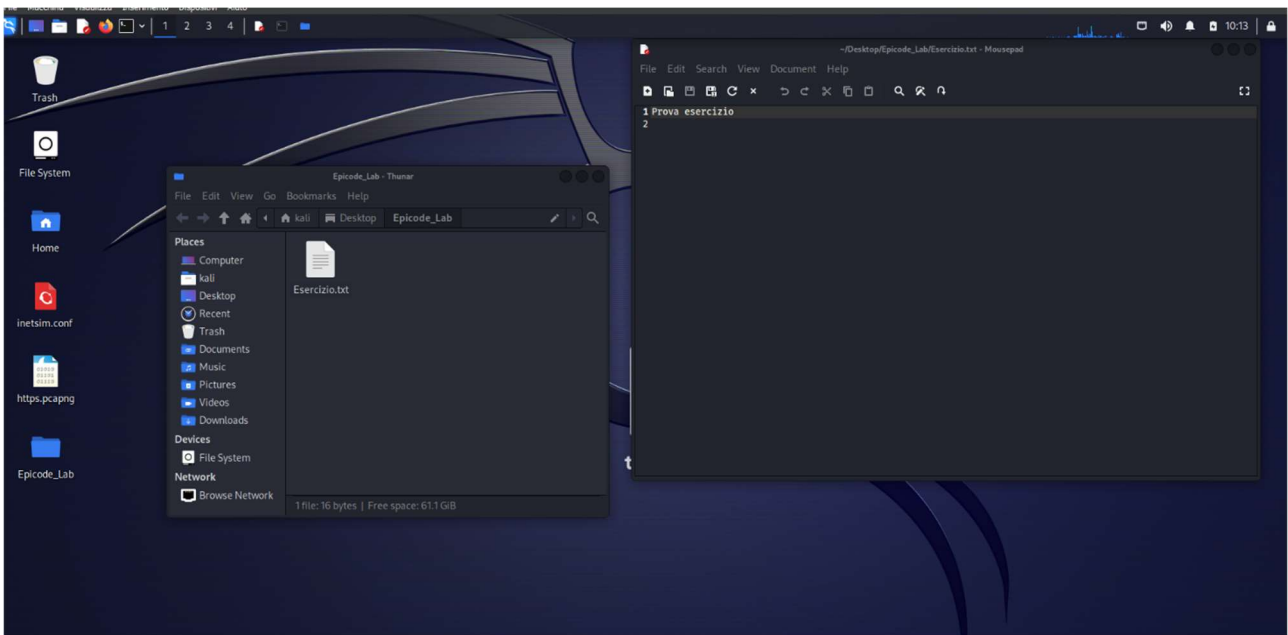


```
kali@kali: ~/Desktop
File Actions Edit View Help
GNU nano 7.2 Esercizio.txt *
Prova esercizio
```

The terminal window shows the nano text editor interface. The title bar indicates the file being edited is Esercizio.txt. The editor shows the text "Prova esercizio" on the first line. The background of the terminal displays the Kali Linux logo and the quote "the quieter you become, the more you are able to hear".

...dove ho modificato il file vuoto.

Alla fine del procedimento la situazione era la seguente:



Controllando tramite il comando `cat Esercizio.txt`...

```
(kali㉿kali)-[~/Desktop/Epicode_Lab]
$ cat Esercizio.txt
Prova esercizio
```

3. Fatto ciò ho controllato i permessi del file...

```
(kali㉿kali)-[~/Desktop/Epicode_Lab]
$ ls -al
total 12
drwxr-xr-x 2 kali kali 4096 May  9 09:49 .
drwxr-xr-x 3 kali kali 4096 May  9 09:46 ..
-rw-r--r-- 1 kali kali  16 May  9 09:49 Esercizio.txt
```

...e li ho cambiati con il comando `chmod 774 Esercizio.txt`

```
(kali㉿kali)-[~/Desktop/Epicode_Lab]
$ chmod 774 Esercizio.txt

(kali㉿kali)-[~/Desktop/Epicode_Lab]
$ ls -al
total 12
drwxr-xr-x 2 kali kali 4096 May  9 09:49 .
drwxr-xr-x 3 kali kali 4096 May  9 09:46 ..
-rwxrwxr-- 1 kali kali  16 May  9 09:49 Esercizio.txt
```

4. Passiamo alla creazione del nuovo user con il comando `sudo useradd` e della password con il comando `sudo passwd`:

```
File Actions Edit View Help
(kali㉿kali)-[~]
$ sudo useradd Pier
[sudo] password for kali:

(kali㉿kali)-[~]
$ sudo passwd Pier
New password:
Retype new password:
passwd: password updated successfully

(kali㉿kali)-[~]
$
```

5. Cambiamo ancora i permessi sul file `Esercizio.txt` in modo che gli altri utenti non possano leggerlo...

```
File Actions Edit View Help
(kali㉿kali)-[~]
$ cd Desktop

(kali㉿kali)-[~/Desktop]
$ cd Epicode_Lab

(kali㉿kali)-[~/Desktop/Epicode_Lab]
$ chmod 770 Esercizio.txt
File System
(kali㉿kali)-[~/Desktop/Epicode_Lab]
$ ls -al
total 12
drwxr-xr-x 2 kali kali 4096 May  9 09:49 .
drwxr-xr-x 3 kali kali 4096 May  9 09:46 ..
-rwxrwx--- 1 kali kali  16 May  9 09:49 Esercizio.txt
Home
(kali㉿kali)-[~/Desktop/Epicode_Lab]
$
```

...e lo spostiamo nella directory /

```
(kali㉿kali)-[~/Desktop/Epicode_Lab]
$ sudo mv Esercizio.txt /
[sudo] password for kali:

(kali㉿kali)-[~/Desktop/Epicode_Lab]
$
```

6. Ci spostiamo sul nuovo user e proviamo ad aprire il file `Esercizio.txt`...

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

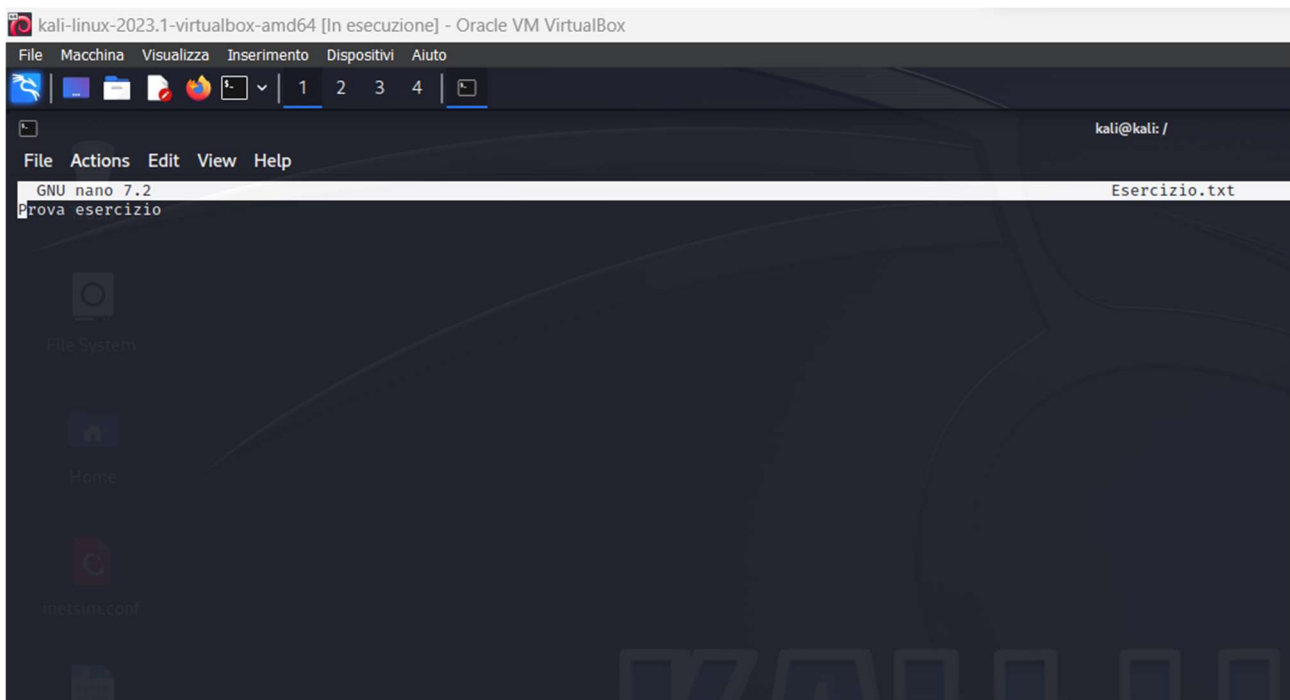

...ma riceviamo questo errore che ci dice che il permesso è negato.



7. Rimodifichiamo in maniera che il nuovo utente abbia tutti i permessi...

```
$ su kali
Password: (em)
(kali@kali)-[~]
$ cd /
(kali@kali)-[/]
$ chmod 777 Esercizio.txt
(kali@kali)-[/]
$ ls -al
total 1048660
drwxr-xr-x 18 root root      4096 May  9 10:15 .
drwxr-xr-x 18 root root      4096 May  9 10:15 ..
lrwxrwxrwx  1 root root         7 Mar 10 08:43 bin -> usr/bin
drwxr-xr-x  3 root root      4096 Mar 10 09:06 boot
drwxr-xr-x 17 root root     3160 May  9 09:02 dev
-rwxrwxrwx  1 kali kali      16 May  9 09:49 Esercizio.txt
drwxr-xr-x 176 root root    12288 May  9 10:07 etc
drwxr-xr-x  3 root root      4096 Mar 10 08:52 home
lrwxrwxrwx  1 root root         33 Mar 10 09:06 initrd.img -> boot/initrd.img-6.1.0-kali5-amd64
lrwxrwxrwx  1 root root         33 Mar 10 09:06 initrd.img.old -> boot/initrd.img-6.1.0-kali5-amd64
lrwxrwxrwx  1 root root         7 Mar 10 08:43 lib -> usr/lib
lrwxrwxrwx  1 root root         9 Mar 10 08:43 lib32 -> usr/lib32
lrwxrwxrwx  1 root root         9 Mar 10 08:43 lib64 -> usr/lib64
lrwxrwxrwx  1 root root        10 Mar 10 08:43 libx32 -> usr/libx32
drwx----- 2 root root    16384 Mar 10 09:03 lost+found
drwxr-xr-x  2 root root      4096 Mar 10 08:43 media
drwxr-xr-x  2 root root      4096 Mar 10 08:43 mnt
drwxr-xr-x  3 root root      4096 Mar 10 08:48 opt
dr-xr-xr-x 212 root root         0 May  9 09:02 proc
drwx----- 7 root root      4096 May  9 09:06 root
drwxr-xr-x 31 root root      780 May  9 09:02 run
lrwxrwxrwx  1 root root         8 Mar 10 08:43 sbin -> usr/sbin
drwxr-xr-x  3 root root      4096 Mar 10 08:50 srv
-rw----- 1 root root 1073741824 Mar 10 09:05 swapfile
dr-xr-xr-x 13 root root         0 May  9 09:02 sys
drwxrwxrwt 13 root root      4096 May  9 10:09 tmp
drwxr-xr-x 16 root root      4096 Mar 10 08:46 usr
drwxr-xr-x 12 root root      4096 Mar 10 08:46 var
lrwxrwxrwx  1 root root        30 Mar 10 09:06 vmlinuz -> boot/vmlinuz-6.1.0-kali5-amd64
lrwxrwxrwx  1 root root        30 Mar 10 09:06 vmlinuz.old -> boot/vmlinuz-6.1.0-kali5-amd64
(kali@kali)-[/]
$
```

...e adesso riusciamo a leggere il file anche dal nuovo user.



8. Procedo alla eliminazione della cartella, del file e del nuovo user.

