

| = Pipe = un operatore che serve a concatenare due comandi, mette in comunicazione due processi tra loro separati

PID = Process IDentifier = identifica un processo in esecuzione

USER = Utente. Esiste anche il Super User, è un utente a cui vengono assegnati tutti i privilegi della root del service

COMMAND = Comando

1 - Controllo processi attivi sulla macchina

```
kali@kali: ~  
File Actions Edit View Help  
top - 13:06:01 up 4:34, 1 user, load average: 0.05, 0.19, 0.18  
Tasks: 190 total, 1 running, 189 sleeping, 0 stopped, 0 zombie  
%Cpu(s): 6.2 us, 4.7 sy, 0.0 ni, 88.9 id, 0.2 wa, 0.0 hi, 0.0 si, 0.0 st  
MiB Mem : 1967.1 total, 427.4 free, 1196.3 used, 530.0 buff/cache  
MiB Swap: 1024.0 total, 1024.0 free, 0.0 used, 770.8 avail Mem  

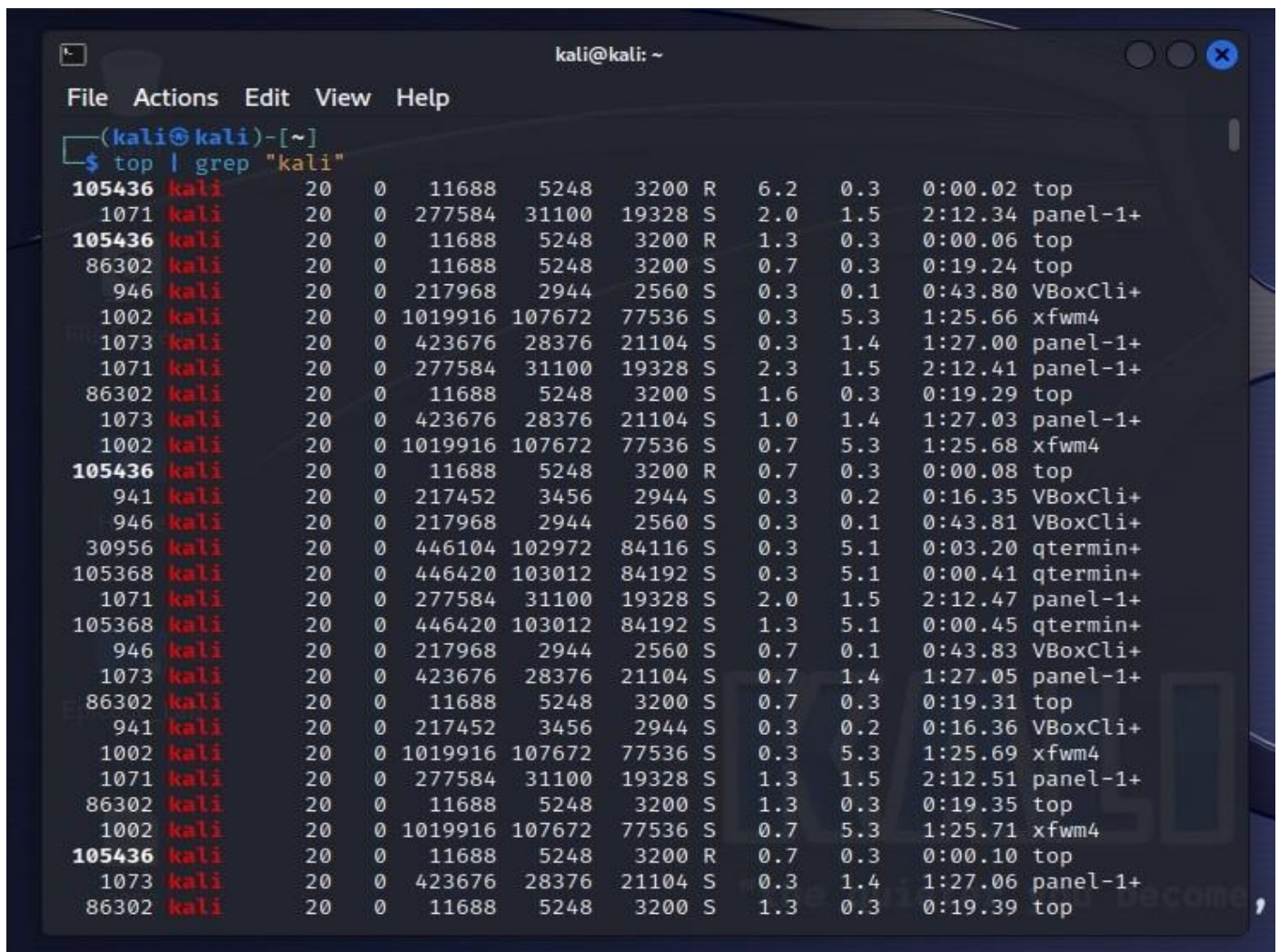

| PID    | USER | PR  | NI  | VIRT    | RES    | SHR   | S | %CPU | %MEM | TIME+   | COMMAND                     |
|--------|------|-----|-----|---------|--------|-------|---|------|------|---------|-----------------------------|
| 700    | root | 20  | 0   | 552480  | 227140 | 91492 | S | 5.3  | 11.3 | 6:01.39 | Xorg                        |
| 135399 | kali | 20  | 0   | 447396  | 104140 | 85120 | S | 2.3  | 5.2  | 0:02.19 | qterminal                   |
| 1071   | kali | 20  | 0   | 277584  | 31228  | 19328 | S | 2.0  | 1.6  | 2:52.18 | panel-13-cpugra             |
| 1063   | kali | 20  | 0   | 555748  | 72948  | 43364 | S | 1.7  | 3.6  | 0:29.60 | xfdesktop                   |
| 1073   | kali | 20  | 0   | 423676  | 28376  | 21104 | S | 1.0  | 1.4  | 1:51.42 | panel-15-genmon             |
| 105436 | kali | 20  | 0   | 11688   | 5248   | 3200  | S | 1.0  | 0.3  | 0:32.23 | top                         |
| 108089 | kali | 20  | 0   | 11688   | 5248   | 3200  | S | 1.0  | 0.3  | 0:30.98 | top                         |
| 135435 | kali | 20  | 0   | 11868   | 5376   | 3328  | R | 1.0  | 0.3  | 0:01.32 | top                         |
| 1002   | kali | 20  | 0   | 1019916 | 107672 | 77536 | S | 0.7  | 5.3  | 1:43.91 | xfwm4                       |
| 86302  | kali | 20  | 0   | 11688   | 5248   | 3200  | S | 0.7  | 0.3  | 0:51.24 | top                         |
| 455    | root | 20  | 0   | 8264    | 5308   | 1664  | S | 0.3  | 0.3  | 0:01.13 | haveged                     |
| 866    | kali | 20  | 0   | 341116  | 27180  | 17664 | S | 0.3  | 1.3  | 0:06.55 | xfce4-session               |
| 946    | kali | 20  | 0   | 217968  | 2944   | 2560  | S | 0.3  | 0.1  | 0:56.86 | VBoxClient                  |
| 1052   | kali | 20  | 0   | 476188  | 46568  | 35680 | S | 0.3  | 2.3  | 0:18.80 | xfce4-panel                 |
| 41110  | kali | 20  | 0   | 446420  | 102884 | 84056 | S | 0.3  | 5.1  | 0:04.50 | qterminal                   |
| 50481  | kali | 20  | 0   | 446076  | 103064 | 84292 | S | 0.3  | 5.1  | 0:04.31 | qterminal                   |
| 67825  | kali | 20  | 0   | 446740  | 103628 | 84624 | S | 0.3  | 5.1  | 0:03.24 | qterminal                   |
| 95285  | root | 20  | 0   | 0       | 0      | 0     | I | 0.3  | 0.0  | 0:00.60 | kworker/u4:3-events_unbound |
| 105368 | kali | 20  | 0   | 460148  | 103012 | 84192 | S | 0.3  | 5.1  | 0:11.20 | qterminal                   |
| 108029 | kali | 20  | 0   | 446952  | 103776 | 84896 | S | 0.3  | 5.2  | 0:07.13 | qterminal                   |
| 1      | root | 20  | 0   | 20828   | 12752  | 9424  | S | 0.0  | 0.6  | 0:02.48 | 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/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  | 0:01.32 | ksoftirqd/0                 |
| 15     | root | 20  | 0   | 0       | 0      | 0     | I | 0.0  | 0.0  | 0:09.77 | rcu_preempt                 |
| 16     | root | rt  | 0   | 0       | 0      | 0     | S | 0.0  | 0.0  | 0:00.16 | 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               |


```

2 – Controllo programmi in esecuzione dell’utente “root”

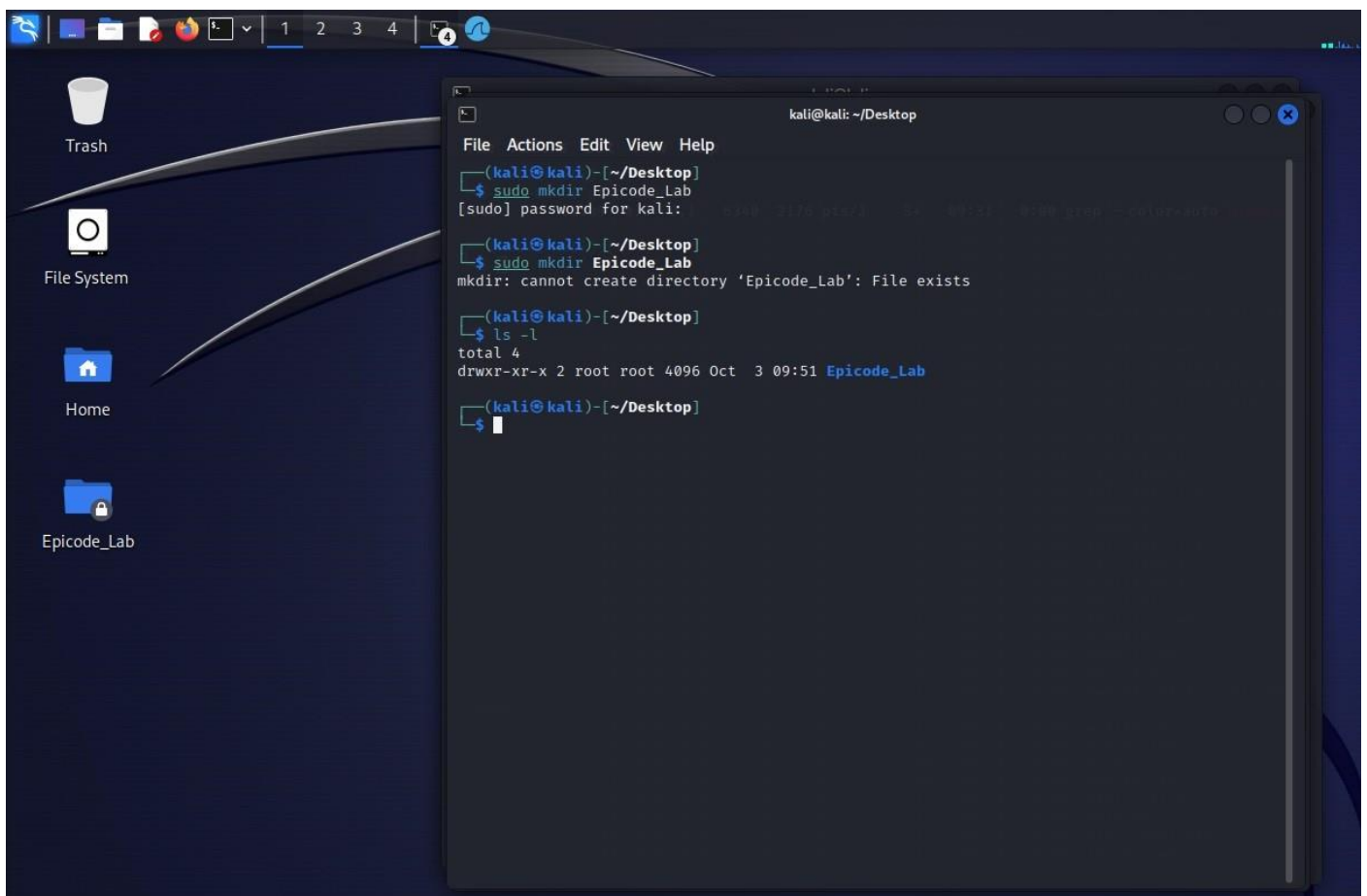
```
kali@kali: ~  
File Actions Edit View Help  
top - 13:08:56 up 4:37, 1 user, load average: 0.21, 0.23, 0.19  
700 root 20 0 552480 227152 91504 S 8.3 11.3 6:06.57 Xorg  
700 root 20 0 557832 232568 91504 S 9.6 11.5 6:06.86 Xorg  
700 root 20 0 557832 232568 91504 S 12.3 11.5 6:07.23 Xorg  
1 root 20 0 20828 12752 9424 S 0.7 0.6 0:02.50 systemd  
15 root 20 0 0 0 0 I 0.3 0.0 0:09.87 rcu_pre+  
297 root 20 0 49972 16592 15312 S 0.3 0.8 0:01.05 systemd+  
518 root 20 0 17484 8576 7424 S 0.3 0.4 0:00.44 systemd+  
700 root 20 0 557832 232568 91504 S 4.3 11.5 6:07.36 Xorg  
37 root 39 19 0 0 0 S 0.3 0.0 0:01.25 khugepa+  
700 root 20 0 557832 232568 91504 S 5.3 11.5 6:07.52 Xorg  
1 root 20 0 20828 12752 9424 S 0.0 0.6 0:02.50 systemd  
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+  
10 root 0 -20 0 0 0 I 0.0 0.0 0:00.00 mm_perc+  
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+
```

3 – Controllo programmi in esecuzione dell'utente "Kali"



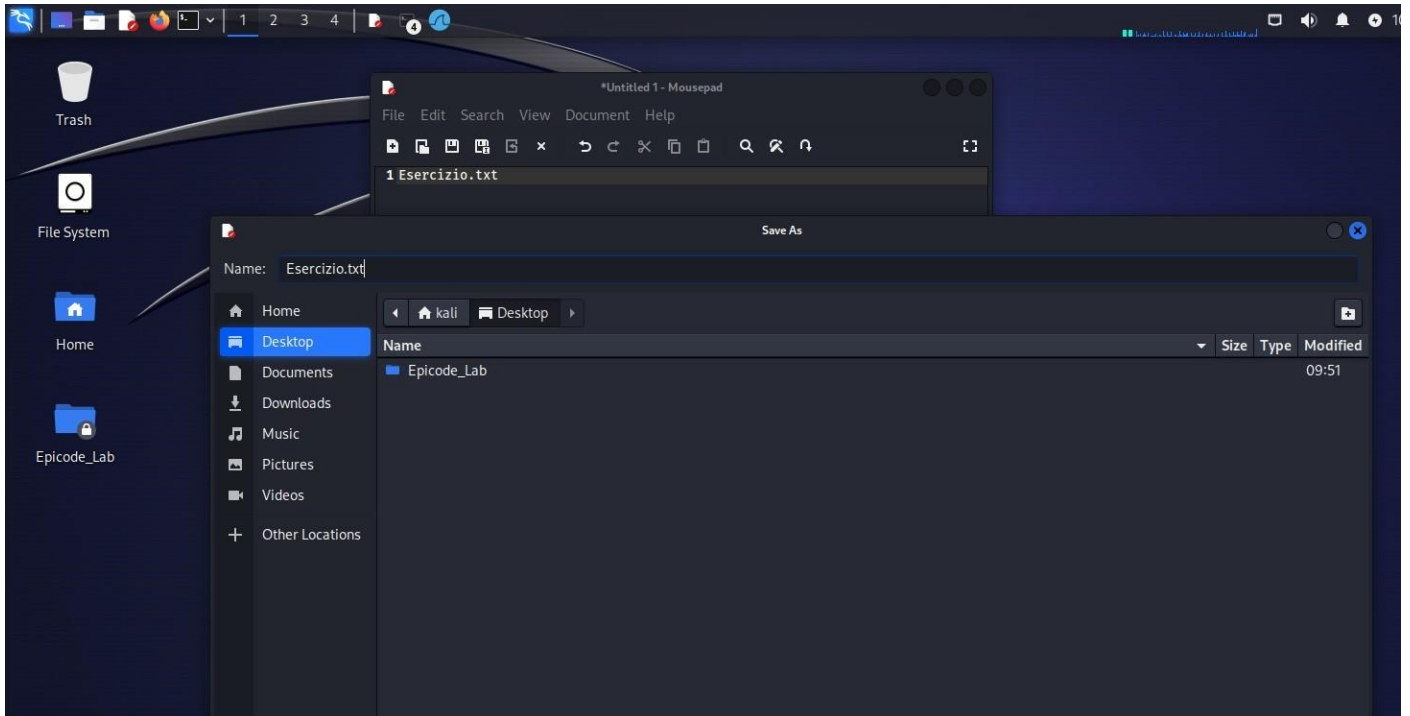
```
kali@kali: ~  
File Actions Edit View Help  
(kali@kali)-[~]  
$ top | grep "kali"  
105436 kali 20 0 11688 5248 3200 R 6.2 0.3 0:00.02 top  
1071 kali 20 0 277584 31100 19328 S 2.0 1.5 2:12.34 panel-1+  
105436 kali 20 0 11688 5248 3200 R 1.3 0.3 0:00.06 top  
86302 kali 20 0 11688 5248 3200 S 0.7 0.3 0:19.24 top  
946 kali 20 0 217968 2944 2560 S 0.3 0.1 0:43.80 VBoxCli+  
1002 kali 20 0 1019916 107672 77536 S 0.3 5.3 1:25.66 xfwm4  
1073 kali 20 0 423676 28376 21104 S 0.3 1.4 1:27.00 panel-1+  
1071 kali 20 0 277584 31100 19328 S 2.3 1.5 2:12.41 panel-1+  
86302 kali 20 0 11688 5248 3200 S 1.6 0.3 0:19.29 top  
1073 kali 20 0 423676 28376 21104 S 1.0 1.4 1:27.03 panel-1+  
1002 kali 20 0 1019916 107672 77536 S 0.7 5.3 1:25.68 xfwm4  
105436 kali 20 0 11688 5248 3200 R 0.7 0.3 0:00.08 top  
941 kali 20 0 217452 3456 2944 S 0.3 0.2 0:16.35 VBoxCli+  
946 kali 20 0 217968 2944 2560 S 0.3 0.1 0:43.81 VBoxCli+  
30956 kali 20 0 446104 102972 84116 S 0.3 5.1 0:03.20 qtermin+  
105368 kali 20 0 446420 103012 84192 S 0.3 5.1 0:00.41 qtermin+  
1071 kali 20 0 277584 31100 19328 S 2.0 1.5 2:12.47 panel-1+  
105368 kali 20 0 446420 103012 84192 S 1.3 5.1 0:00.45 qtermin+  
946 kali 20 0 217968 2944 2560 S 0.7 0.1 0:43.83 VBoxCli+  
1073 kali 20 0 423676 28376 21104 S 0.7 1.4 1:27.05 panel-1+  
86302 kali 20 0 11688 5248 3200 S 0.7 0.3 0:19.31 top  
941 kali 20 0 217452 3456 2944 S 0.3 0.2 0:16.36 VBoxCli+  
1002 kali 20 0 1019916 107672 77536 S 0.3 5.3 1:25.69 xfwm4  
1071 kali 20 0 277584 31100 19328 S 1.3 1.5 2:12.51 panel-1+  
86302 kali 20 0 11688 5248 3200 S 1.3 0.3 0:19.35 top  
1002 kali 20 0 1019916 107672 77536 S 0.7 5.3 1:25.71 xfwm4  
105436 kali 20 0 11688 5248 3200 R 0.7 0.3 0:00.10 top  
1073 kali 20 0 423676 28376 21104 S 0.3 1.4 1:27.06 panel-1+  
86302 kali 20 0 11688 5248 3200 S 1.3 0.3 0:19.39 top
```

4 – creare nuova directory su Desktop denominata "Epicode_Lab"

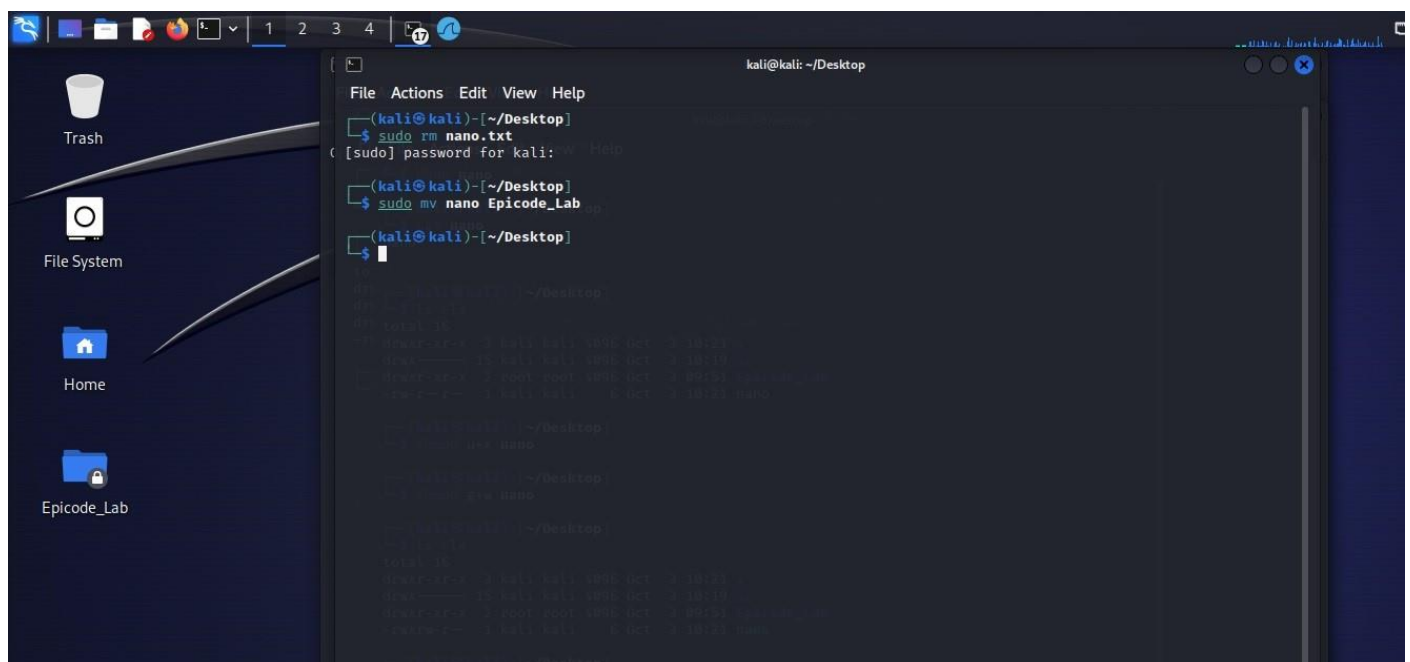


```
kali@kali: ~/Desktop  
File Actions Edit View Help  
(kali@kali)-[~/Desktop]  
$ sudo mkdir Epicode_Lab  
[sudo] password for kali:  
(kali@kali)-[~/Desktop]  
$ sudo mkdir Epicode_Lab  
mkdir: cannot create directory 'Epicode_Lab': File exists  
(kali@kali)-[~/Desktop]  
$ ls -l  
total 4  
drwxr-xr-x 2 root root 4096 Oct 3 09:51 Epicode_Lab  
(kali@kali)-[~/Desktop]  
$
```

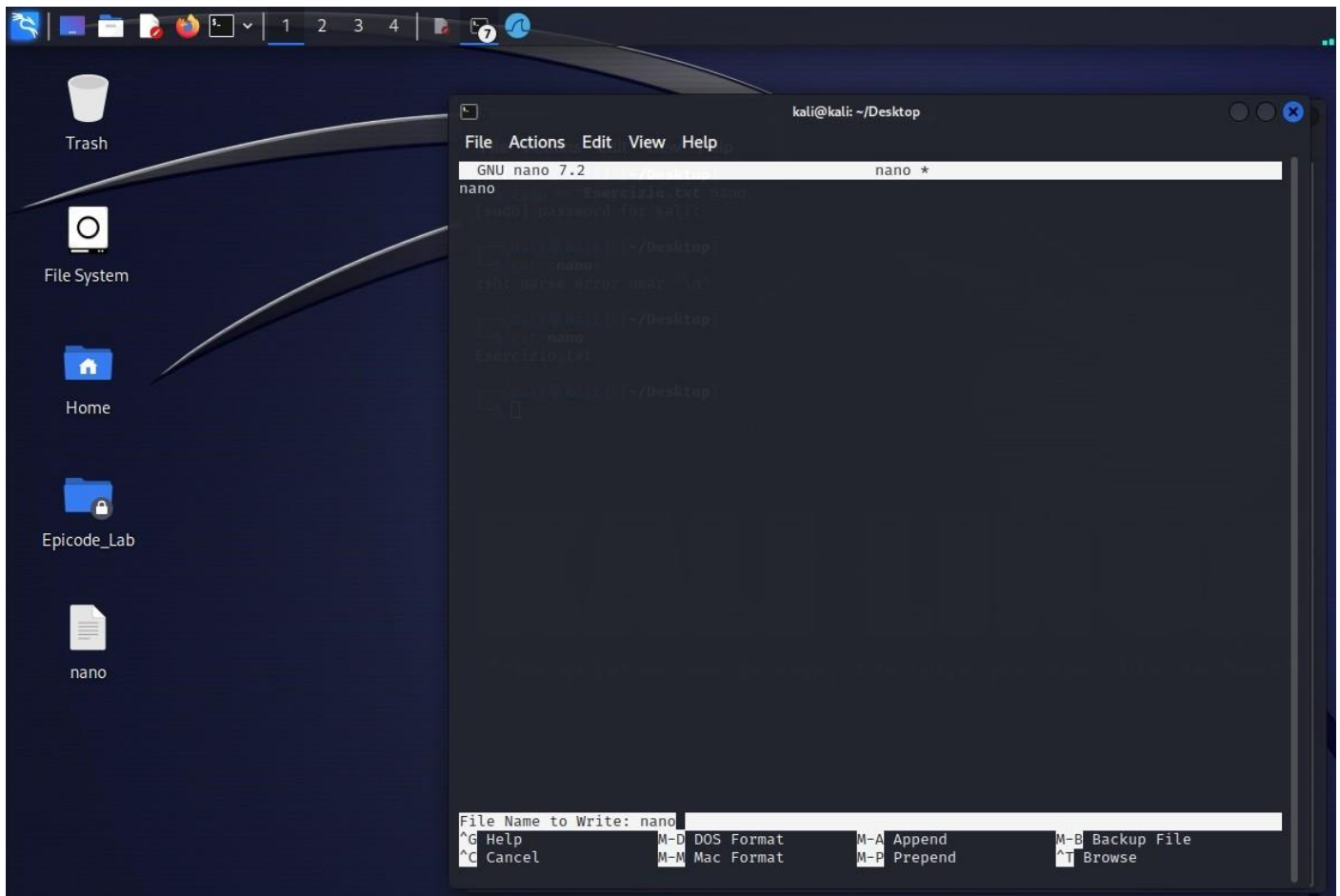
5 – Creare file “Esercizio.txt” nella directory Epicode_Lab



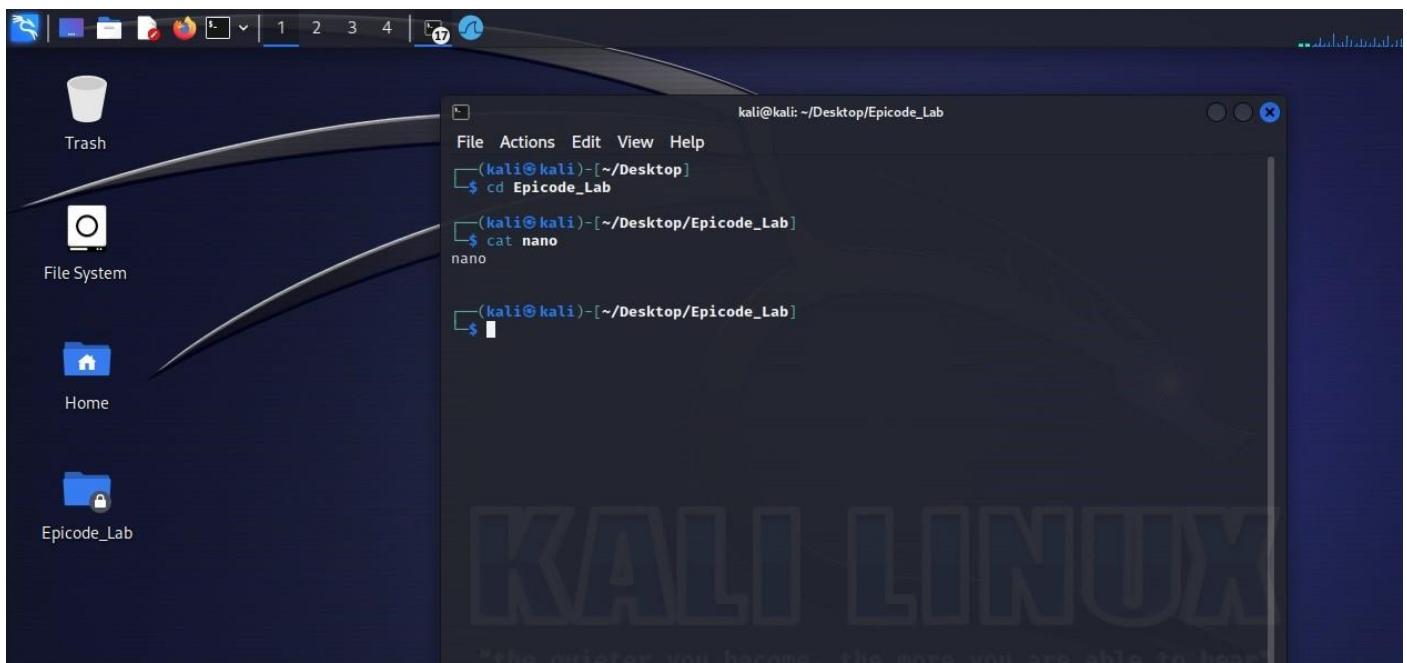
6 – Spostare Esercizio.txt (rinominato nano) nella cartella Epicode_Lab



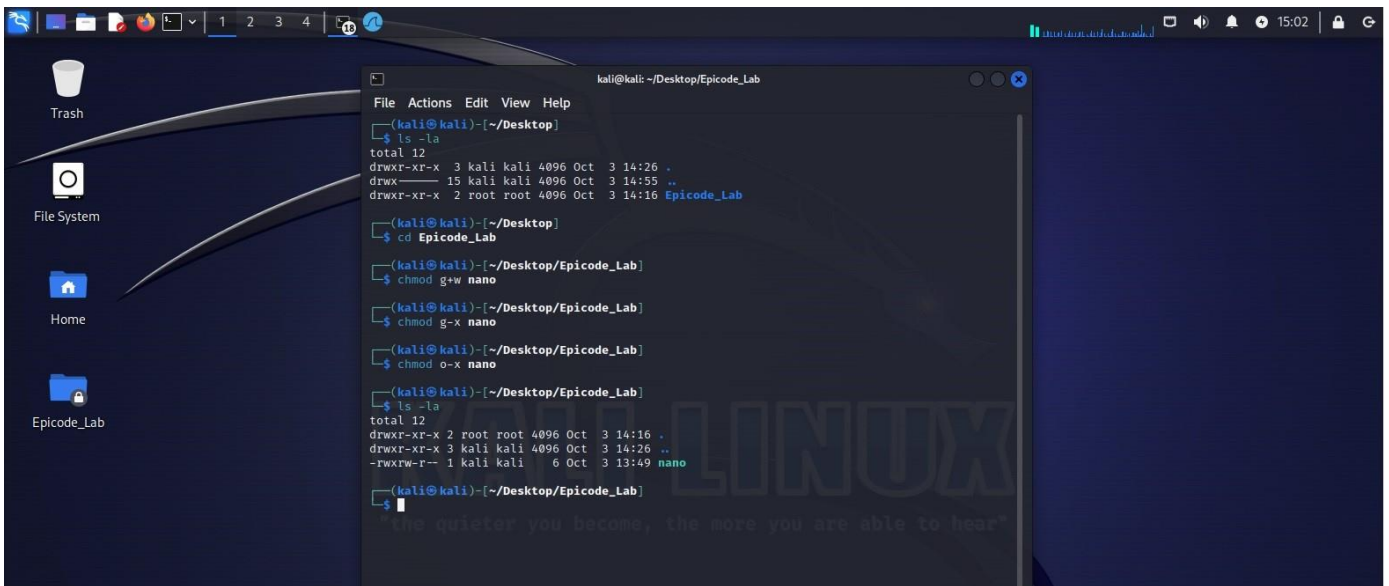
6 – Modificare il file con l'editor di testo “nano” (screenshot fatto prima dello spostamento del file nano in directory)



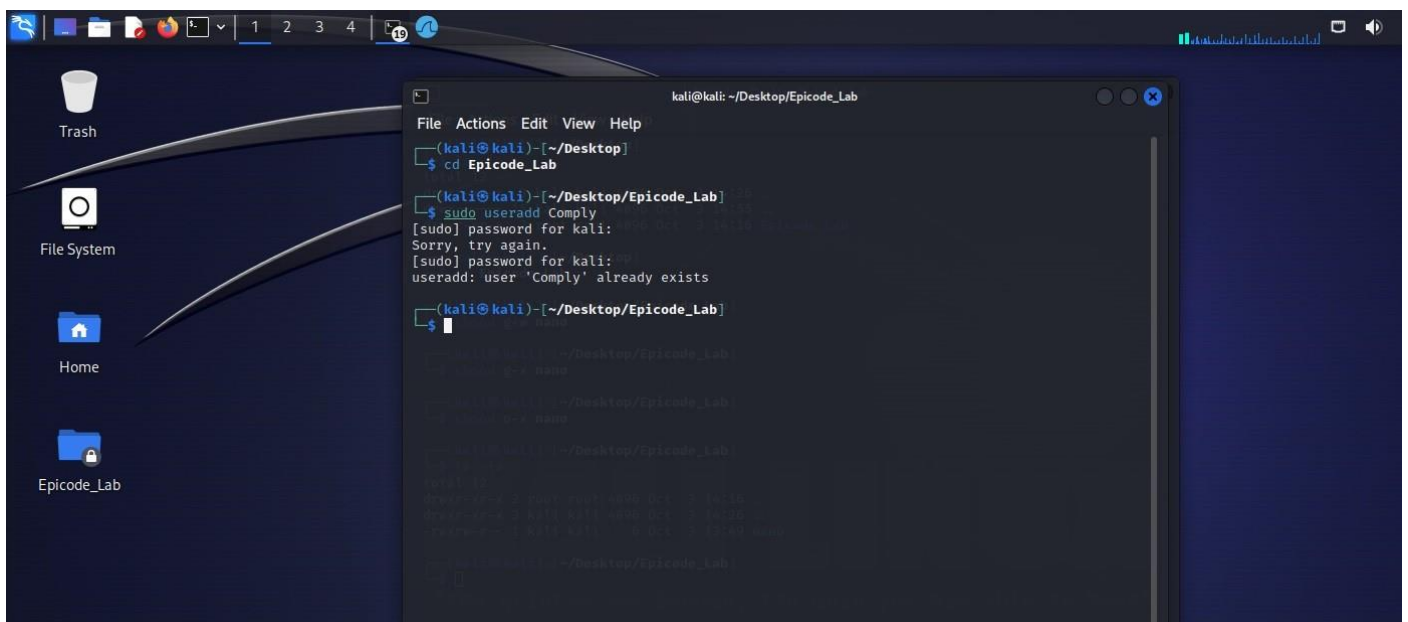
7 – utilizzare comando “cat” per leggere il file (screenshot fatto prima dello spostamento del file nano in directory)



8 – Controllare permessi e modificare privilegi (u=r,w,x – g=r,w – o=r)



9 – Creazione nuovo utente (l'utente era già stato creato, ho dimenticato di fare lo screenshot)



10 – Creazione password

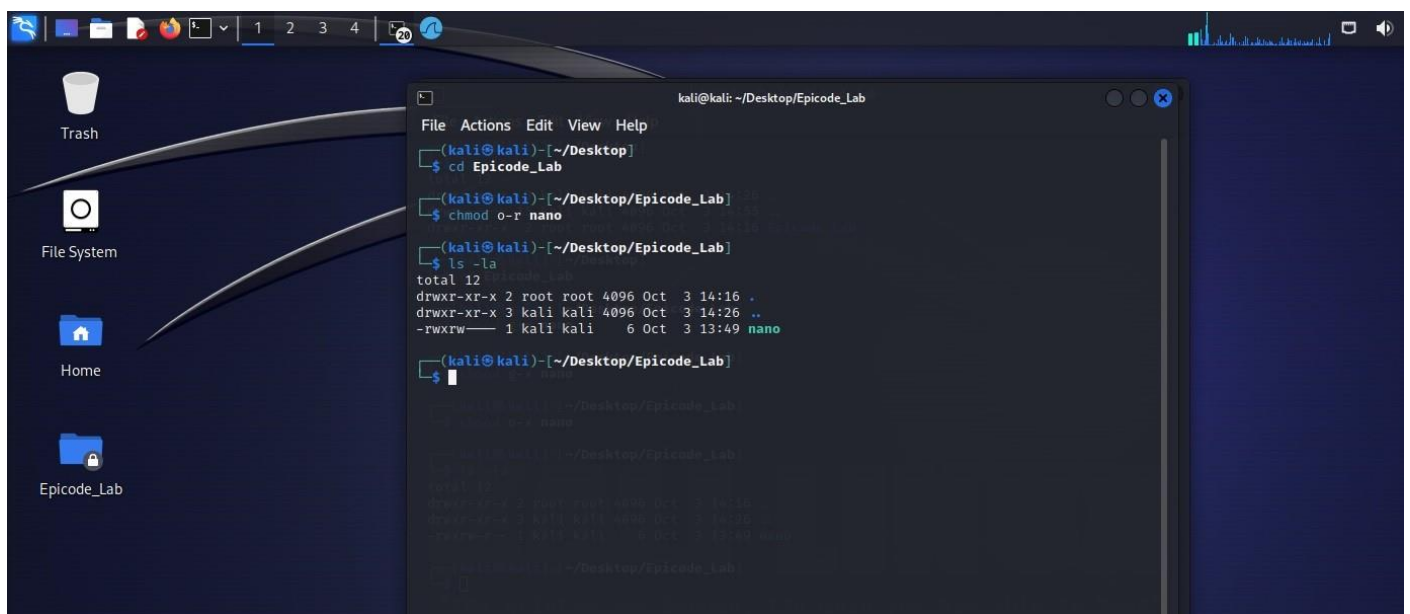
```
File Actions Edit View Help
useradd -D [options]

Options:
--badname          do not check for bad names
-b, --base-dir BASE_DIR  base directory for the home directory of the
                        new account
--btrfs-subvolume-home  use BTRFS subvolume for home directory
-c, --comment COMMENT  GECOS field of the new account
-d, --home-dir HOME_DIR  home directory of the new account
-D, --defaults        print or change default useradd configuration
-e, --expiredate EXPIRE_DATE  expiration date of the new account
-f, --inactive INACTIVE  password inactivity period of the new account
-F, --add-subids-for-system  add entries to sub[uid]id even when adding a system user
-g, --gid GROUP         name or ID of the primary group of the new
                        account
-G, --groups GROUPS     list of supplementary groups of the new
                        account
-h, --help              display this help message and exit
-k, --skel SKEL_DIR     use this alternative skeleton directory
-K, --key KEY=VALUE     override /etc/login.defs defaults
-l, --no-log-init        do not add the user to the lastlog and
                        faillog databases
-m, --create-home       create the user's home directory
-M, --no-create-home    do not create the user's home directory
-N, --no-user-group      do not create a group with the same name as
                        the user
-o, --non-unique         allow to create users with duplicate
                        (non-unique) UID
-p, --password PASSWORD  encrypted password of the new account
-r, --system            create a system account
-R, --root CHROOT_DIR   directory to chroot into
-P, --prefix PREFIX_DIR  prefix directory where are located the /etc/* files
-s, --shell SHELL       login shell of the new account
-u, --uid UID           user ID of the new account
-U, --user-group         create a group with the same name as the user
-Z, --selinux-user SEUSER  use a specific SEUSER for the SELinux user mapping

(kali@kali)-[~/Desktop]
$ sudo passwd Complify
New password:
Retype new password:
passwd: password updated successfully

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

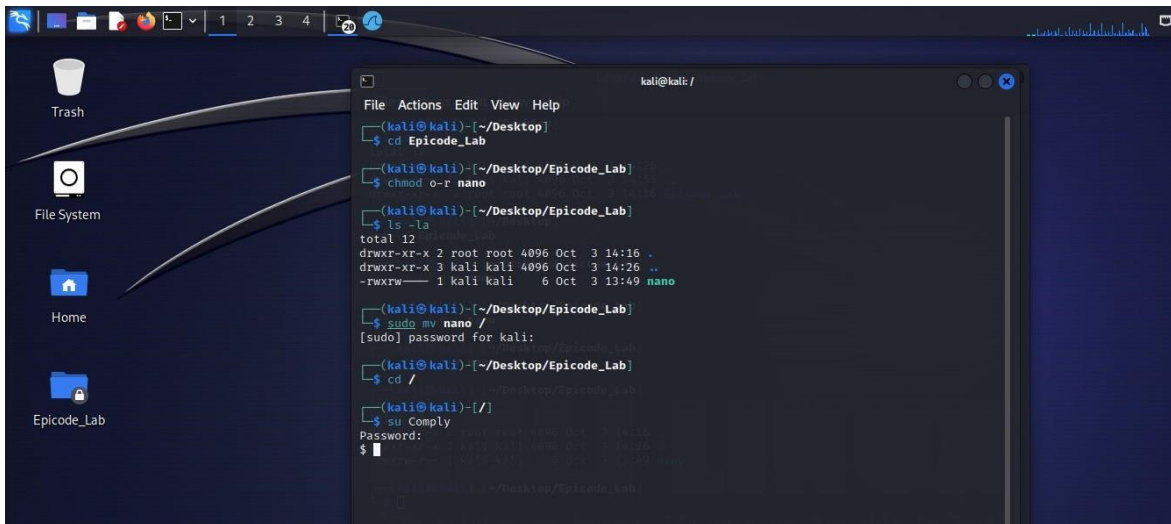
11 – Eliminare abilitazione alla lettura altri utenti (o)



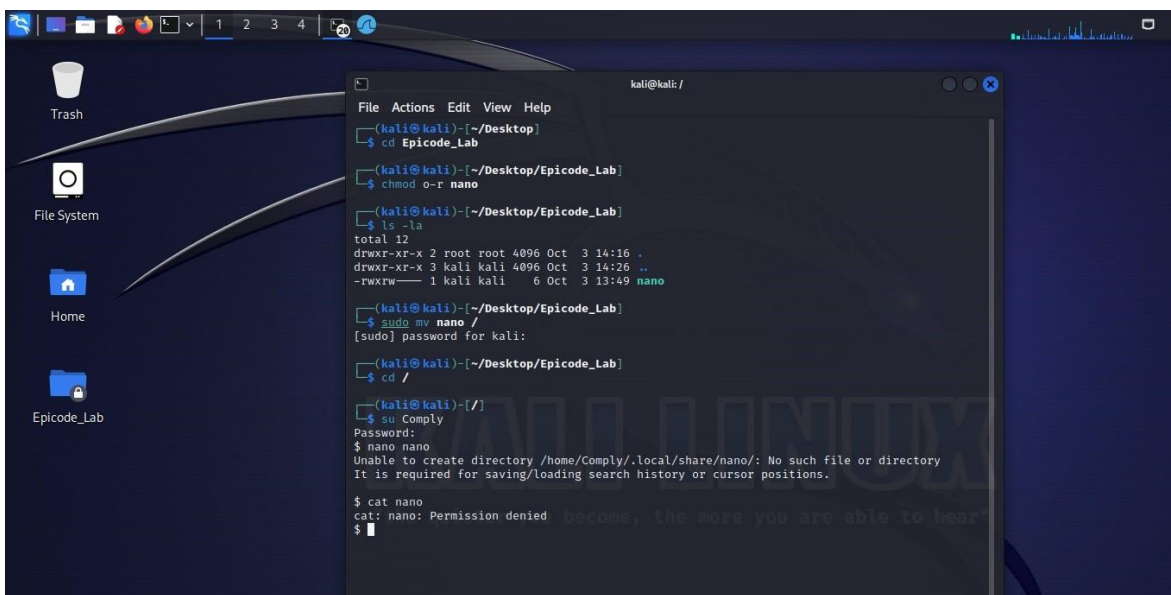
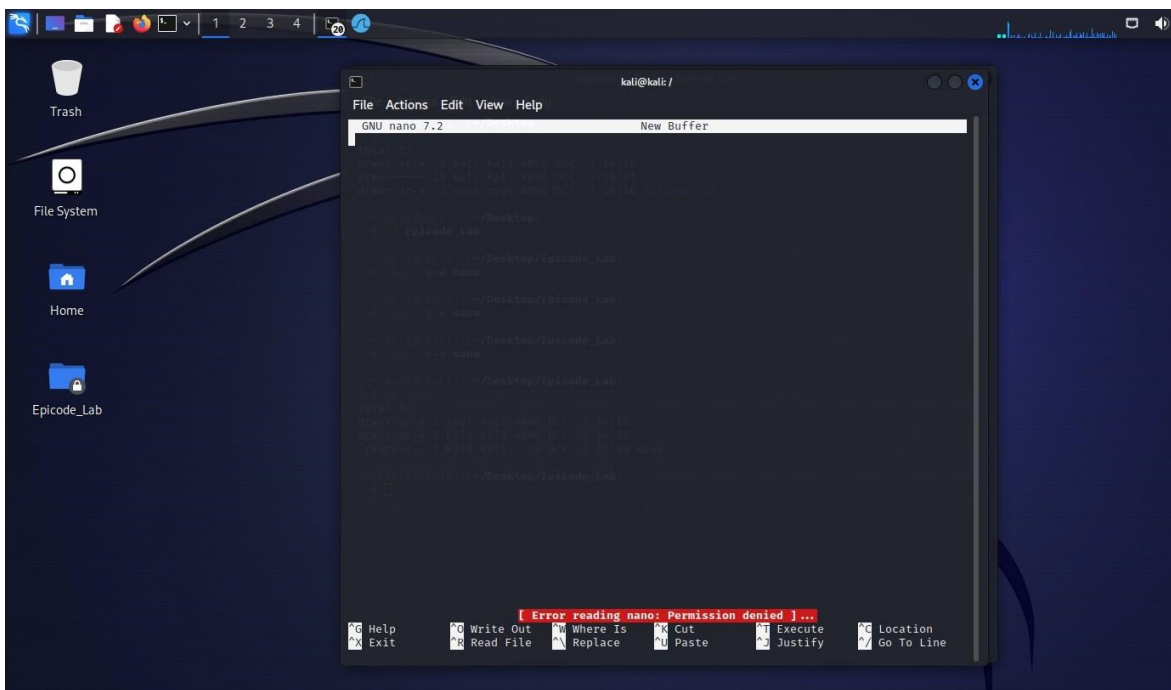
The screenshot shows a Kali Linux desktop with a terminal window open. The terminal shows the user navigating to the `Epicode_Lab` directory and using `chmod` to change permissions. The `ls -la` command output shows the permissions for the `Epicode_Lab` directory and its contents.

```
kali@kali: ~/Desktop/Epicode_Lab
File Actions Edit View Help
(kali@kali)-[~/Desktop]
$ cd Epicode_Lab
(kali@kali)-[~/Desktop/Epicode_Lab]
$ chmod o-r nano
(kali@kali)-[~/Desktop/Epicode_Lab]
$ ls -la
total 12
drwxr-xr-x 2 root root 4096 Oct  3 14:16 .
drwxr-xr-x 3 kali kali 4096 Oct  3 14:26 ..
-rwxr-- 1 kali kali  6 Oct  3 13:49 nano
(kali@kali)-[~/Desktop/Epicode_Lab]
$
```

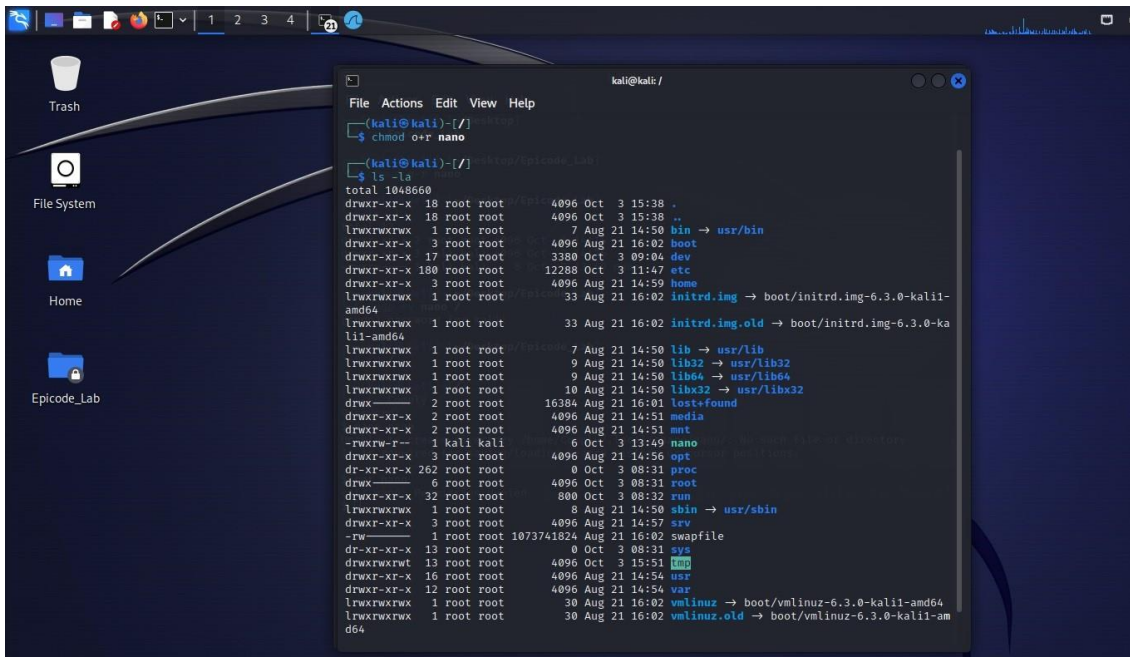
12 – Spostare file nella directory di root (/) e cambio utente con comando su



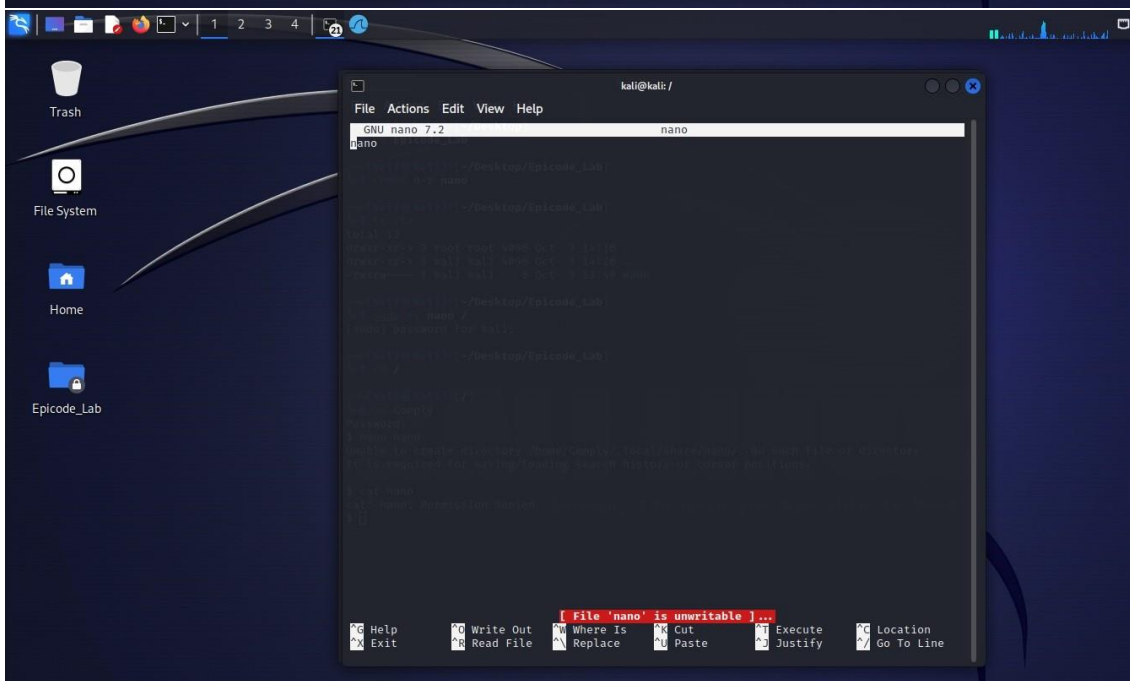
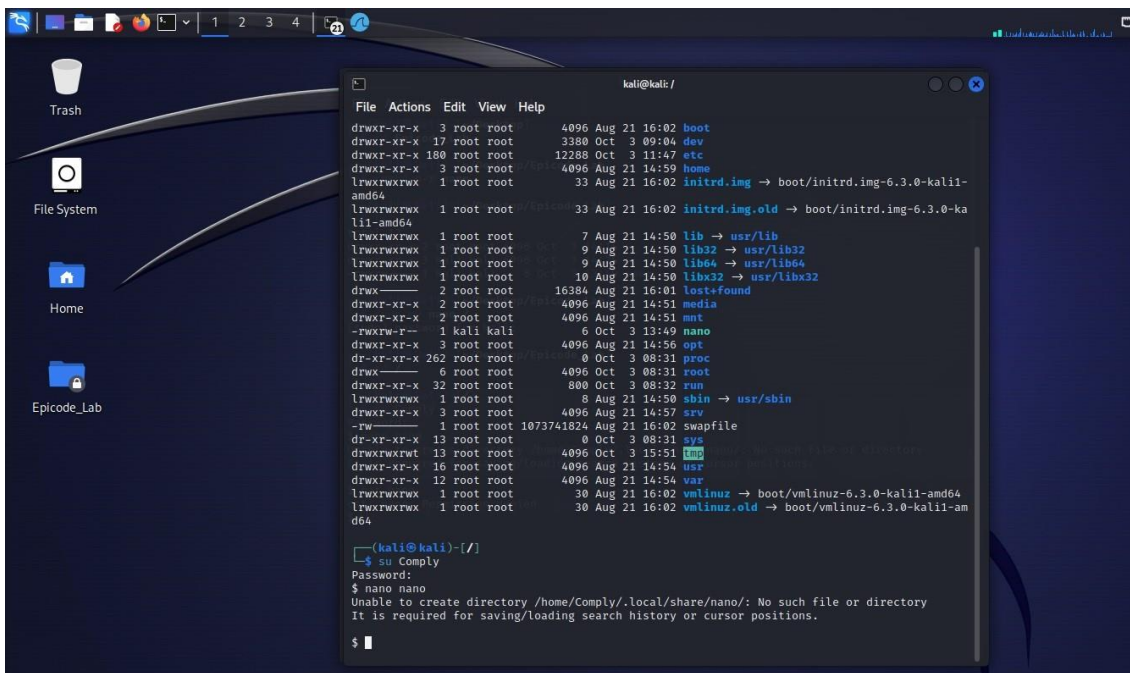
13 – prova apertura file (accesso negato)



14 – Modifica permessi, l'utente può leggere



15 – ripetere i due passaggi e verifica lettura



16 – Rimuovere file (dimenticato lo screenshot), cartella e utente

