

# W5D1

ESERCIZIO SUL FILE SYSTEM

# La traccia

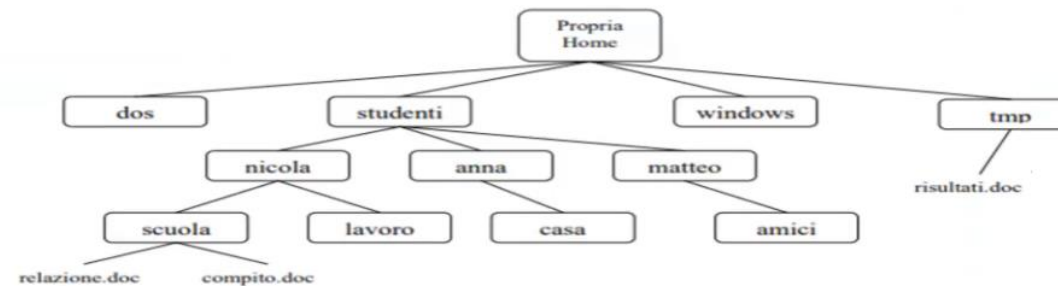
## ESERCIZI SHELL

cd	Cambia Directory
Mkdir	Make Directory (fa una directory)
rmdir	rimuove una directory (se vuota)
mv	sposta un file - directory
cp	Copia un file (directory)
rm	Cancella un file
ls	visualizza il contenuto della cartella
pwd	print working directory (stampa il percorso assoluto dove mi trovo)
man argomento	Visualizza il manuale di un comando

Collegarsi al sistema con utenza e password

### Esercizio 1

Come prima cosa creare le seguenti cartelle e sottocartelle (usando i comandi "terminale" mkdir cd rmdir ... a partire dalla propria HOME e visualizzarle a video:  
(Per "Propria home" si intende il posto dove vi posiziona quando aprite il terminale!)



Ti trovi nella directory **lavoro** (sotto nicola), scrivere il comando per passare alla directory **casa** (sotto anna) con percorso relativo e percorso assoluto.

- Copia il file compito.doc (dalla directory scuola) nella directory corrente (casa).
- Sposta il file relazione.doc nella directory corrente (casa).
- Cancella la cartella **tmp**
- Creare il file pippo.txt nella cartella lavoro
- Cambiare gli attributi del file pippo.txt e renderlo scrivibile e leggibile solo per il proprietario, mentre per tutti gli altri solo leggibile...
- Nascondere il contenuto della cartella anna
- Spostarsi nella cartella lavoro e visualizzare il contenuto del file pippo.txt
- Rimuovere la cartella amici
- Rimuovere tutte le cartelle precedentemente create

# Comandi eseguiti per realizzare i punti indicati

## Realizzazione File System

```
(kali㉿kali)-[/home]  
$ sudo mkdir dos studenti windows tmp
```

```
(kali㉿kali)-[/home/studenti/nicola/scuola]  
$ sudo touch relazione.doc compito.doc
```

a) 

```
(kali㉿kali)-[/home/studenti/nicola/scuola]  
$ sudo cp compito.doc ../../anna/casa
```

b) 

```
(kali㉿kali)-[/home/studenti/nicola/scuola]  
$ sudo mv relazione.doc ../../anna/casa
```

c) 

```
(kali㉿kali)-[/home]  
$ sudo rmdir tmp
```

d) 

```
(kali㉿kali)-[/home]  
$ cd /home/studenti/nicola/lavoro  
  
(kali㉿kali)-[/home/studenti/nicola/lavoro]  
$ sudo touch pippo.txt
```

e) 

```
(kali㉿kali)-[/home/studenti/nicola/lavoro]  
$ sudo chmod 600 pippo.txt  
  
(kali㉿kali)-[/home/studenti/nicola/lavoro]  
$ ls -l  
total 0  
-rw----- 1 root root 0 Nov 21 14:05 pippo.txt
```

# Comandi eseguiti per realizzare i punti indicati

f)

```
(kali㉿kali)-[/home/studenti]
$ sudo mv ./anna ../anna

(kali㉿kali)-[/home/studenti]
$ ls -l
total 8
drwxr-xr-x 3 root root 4096 Nov 21 13:55 matteo
drwxr-xr-x 4 root root 4096 Nov 21 13:59 nicola

(kali㉿kali)-[/home/studenti]
$ ls -la
total 20
drwxr-xr-x 5 root root 4096 Nov 21 14:12 .
drwxr-xr-x 6 root root 4096 Nov 21 14:04 ..
drwxr-xr-x 3 root root 4096 Nov 21 13:54 .anna
drwxr-xr-x 3 root root 4096 Nov 21 13:55 matteo
drwxr-xr-x 4 root root 4096 Nov 21 13:59 nicola
```

g)

```
(kali㉿kali)-[/home/studenti]
$ cd nicola/lavoro

(kali㉿kali)-[/home/studenti/nicola/lavoro]
$ cat pippo.txt
cat: pippo.txt: Permission denied

(kali㉿kali)-[/home/studenti/nicola/lavoro]
$ sudo cat pippo.txt

(kali㉿kali)-[/home/studenti/nicola/lavoro]
$
```

h)

```
(kali㉿kali)-[/home/studenti/nicola/lavoro]
$ sudo rmdir /home/studenti/matteo/amici
```

i)

```
(kali㉿kali)-[/home]
$ sudo rmdir -r dos studenti windows
rmdir: invalid option -- 'r'
Try 'rmdir --help' for more information.
```

# Comandi eseguiti per realizzare i punti indicati

Comandi w,who,whoami

```
(kali㉿kali)-[~/Desktop]
$ w
14:41:31 up 1:01, 1 user, load average: 0.32, 0.09, 0.06
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU WHAT
kali      tty7      :0            13:41    1:01m  1:12   0.73s xfce4-sessio
```

```
(kali㉿kali)-[~/Desktop]
$ who
kali      tty7      2023-11-21 13:41 (:0)
```

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

# Punto 2: manuale dei comandi ps, kill

```
kali@kali: ~/Desktop
File Actions Edit View Help
PS(1) User Commands PS(1)
NAME
  ps - report a snapshot of the current processes.
SYNOPSIS
  ps [options]
DESCRIPTION
  ps displays information about a selection of the active processes.
  If you want a repetitive update of the selection and the displayed
  information, use top instead.
  This version of ps accepts several kinds of options:
  1  UNIX options, which may be grouped and must be preceded by a
     dash.
  2  BSD options, which may be grouped and must not be used with a
     dash.
  3  GNU long options, which are preceded by two dashes.
  Options of different types may be freely mixed, but conflicts can
  appear. There are some synonymous options, which are functionally
  identical, due to the many standards and ps implementations that
  this ps is compatible with.
  Note that ps -aux is distinct from ps aux. The POSIX and UNIX
  standards require that ps -aux print all processes owned by a user
  named x, as well as printing all processes that would be selected by
  the -a option. If the user named x does not exist, this ps may
  interpret the command as ps aux instead and print a warning. This
  Manual page ps(1) line 1 (press h for help or q to quit)
```

```
kali@kali: ~/Desktop
File Actions Edit View Help
KILL(1) User Commands KILL(1)
NAME
  kill - send a signal to a process
SYNOPSIS
  kill [options] <pid> [ ... ]
DESCRIPTION
  The default signal for kill is TERM. Use -l or -L to list available
  signals. Particularly useful signals include HUP, INT, KILL, STOP,
  CONT, and 0. Alternate signals may be specified in three ways: -9,
-SIGKILL or -KILL. Negative PID values may be used to choose whole
  process groups; see the PGID column in ps command output. A PID of
-1 is special; it indicates all processes except the kill process
  itself and init.
OPTIONS
  <pid> [ ... ]
    Send signal to every <pid> listed.
  -<signal>
  -s <signal>
  --signal <signal>
    Specify the signal to be sent. The signal can be specified
    by using name or number. The behavior of signals is ex-
    plained in signal(7) manual page.
  -q, --queue value
    Use sigqueue(3) rather than kill(2) and the value argument is
    used to specify an integer to be sent with the signal. If the
  Manual page kill(1) line 1 (press h for help or q to quit)
```

# Punti 3 e 4: creazione file pippo tramite VI e visualizzazione processi

The image shows a Kali Linux desktop environment. On the left, a file manager window is open, displaying a large, stylized 'KALI' watermark. The right side of the image features two terminal windows. The top terminal window displays a list of system processes, including 'nm-applet', 'light-locker', 'xcap', 'xiced', 'colord', 'python3', 'dconf-service', 'pts', 'zsh', 'mmdbr', 'writeback', 'ata\_sff', 'qterminal', and 'vi'. The bottom terminal window shows the output of the 'ps' command, listing the PID, TTY, TIME, and CMD for the 'zsh' and 'ps' processes. The desktop background is dark, and the overall aesthetic is typical of a Linux distribution.



# Punti 5: terminazione del processo tramite PID

```
kali@kali: ~/Desktop
File Actions Edit View Help
└─$ df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            945M   0    945M   0% /dev
tmpfs           197M  980K   196M   1% /run
/dev/sda1       79G   15G   60G   20% /
tmpfs           984M   0    984M   0% /dev/shm
tmpfs           5.0M   0    5.0M   0% /run/lock
tmpfs           197M  112K   197M   1% /run/user/1000

(kali@kali)~[~/Desktop]
└─$ vi pippo

(kali@kali)~[~/Desktop]
└─$ vi pippo

(kali@kali)~[~/Desktop]
└─$ ls
pippo

(kali@kali)~[~/Desktop]
└─$ vi pippo

(kali@kali)~[~/Desktop]
└─$ vi pippo
Vim: Caught deadly signal TERM
Vim: Finished.

zsh: terminated vi pippo

(kali@kali)~[~/Desktop]
└─$
```

```
kali@kali: ~
File Actions Edit View Help
kali      1254  0.0  0.5 385768 10468 ?    Sl  13:41  0:00 /usr/libexec/gvfsd-trash --sp
kali      1265  0.0  0.4 233768  8464 ?    Ssl 13:41  0:00 /usr/libexec/gvfsd-metadata
kali      1271  0.0  0.4 307812  8188 ?    Sl  13:41  0:00 /usr/libexec/geoclue-2.0/demo
kali      1284  0.0  2.4 633316 49316 ?    Sl  13:41  0:00 nm-applet
kali      1287  0.0  1.5 505316 30332 ?    Sl  13:41  0:00 light-locker
kali      1288  0.0  0.1 14656  3904 ?    Ssl 13:41  0:00 xcace -e Super_L Control_L Es
kali      1289  0.0  0.5 924104 10732 ?    Sl  13:41  0:00 xiccd
kali      1299  0.0  0.9 259924 18848 ?    Sl  13:41  0:00 /usr/lib/policykit-1-gnome/po
color    1313  0.0  0.8 316516 17200 ?    Ssl 13:41  0:00 /usr/libexec/colord
kali      1318  0.0  2.5 448324 52308 ?    Sl  13:41  0:00 /usr/bin/python3 /usr/bin/blu
kali      1331  0.0  0.2 230212  5504 ?    Ssl 13:41  0:00 /usr/libexec/dconf-service
root     1405  0.0  0.0  0  0 ?    I<  13:41  0:00 [cfg80211]
root     1406  0.0  0.0  0  0 ?    I  13:41  0:01 [kworker/1:3-events]
kali      1407  0.1  0.3 13900  7904 pts/0  Ss  13:41  0:09 /usr/bin/zsh
kali      1444  0.0  0.3 48888  7936 ?    Ss  13:41  0:00 /usr/libexec/bluetooth/obexd
kali      1490  0.0  0.0 119780  1920 ?    S  13:41  0:00 /usr/bin/mmdbresolve -f /home
root      8765  0.0  0.0  0  0 ?    I  13:55  0:00 [kworker/u4:0-writeback]
root     32390  0.0  0.0  0  0 ?    I  14:39  0:01 [kworker/0:2-ata_sff]
kali     40712  0.8  5.1 446528 103604 ?    Sl  14:55  0:09 /usr/bin/qterminal
kali     40715  0.0  0.3 10180  6344 pts/1  Ss  14:55  0:00 /usr/bin/zsh
root     43919  0.0  0.0  0  0 ?    I  15:02  0:00 [kworker/1:1]
root     45363  0.0  0.0  0  0 ?    I  15:05  0:00 [kworker/0:0-ata_sff]
kali     46831  0.0  0.3 307036  8044 ?    Sl  15:08  0:00 /usr/lib/x86_64-linux-gnu/xfce
kali     47387  0.0  0.4 14880  9600 pts/0  SL+ 15:09  0:00 vi pippo
root     47917  0.0  0.0  0  0 ?    I  15:10  0:00 [kworker/0:1-events]
kali     49953  0.0  0.2 12536  5504 pts/1  R+  15:14  0:00 ps -aux

(kali@kali)~[~]
└─$ kill 47387

(kali@kali)~[~]
└─$
```



# Punti 6-7-8: lancio di firefox, visualizzazione del job e terminazione del processo.

```
(kali@kali)-[~]
$ firefox &
[1] 80348

(kali@kali)-[~]
$ jobs
[1] + running  firefox

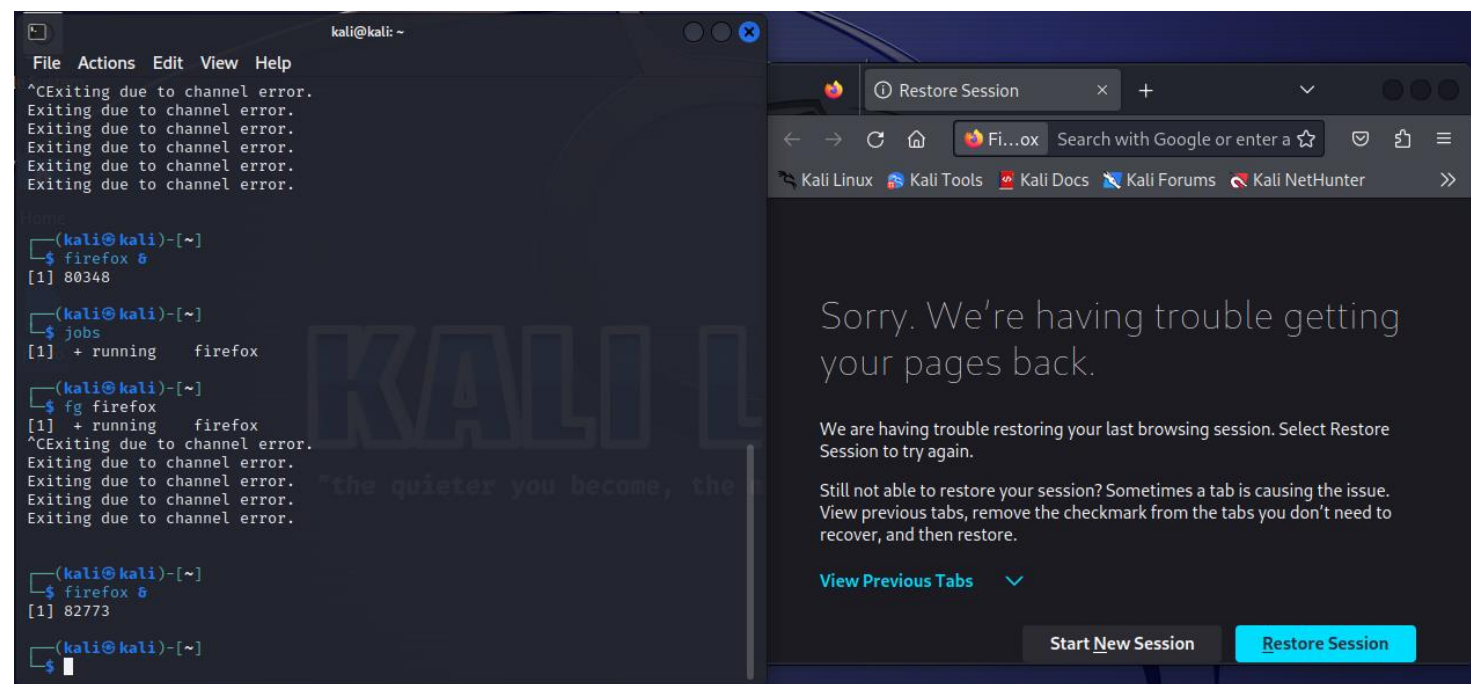
(kali@kali)-[~]
$ fg firefox
[1] + running  firefox
```

```
(kali@kali)-[~]
$ kill 82773

(kali@kali)-[~]
$ 
Exiting due to channel error.
Exiting due to channel error.
Exiting due to channel error.
Exiting due to channel error.

[1] + terminated  firefox

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

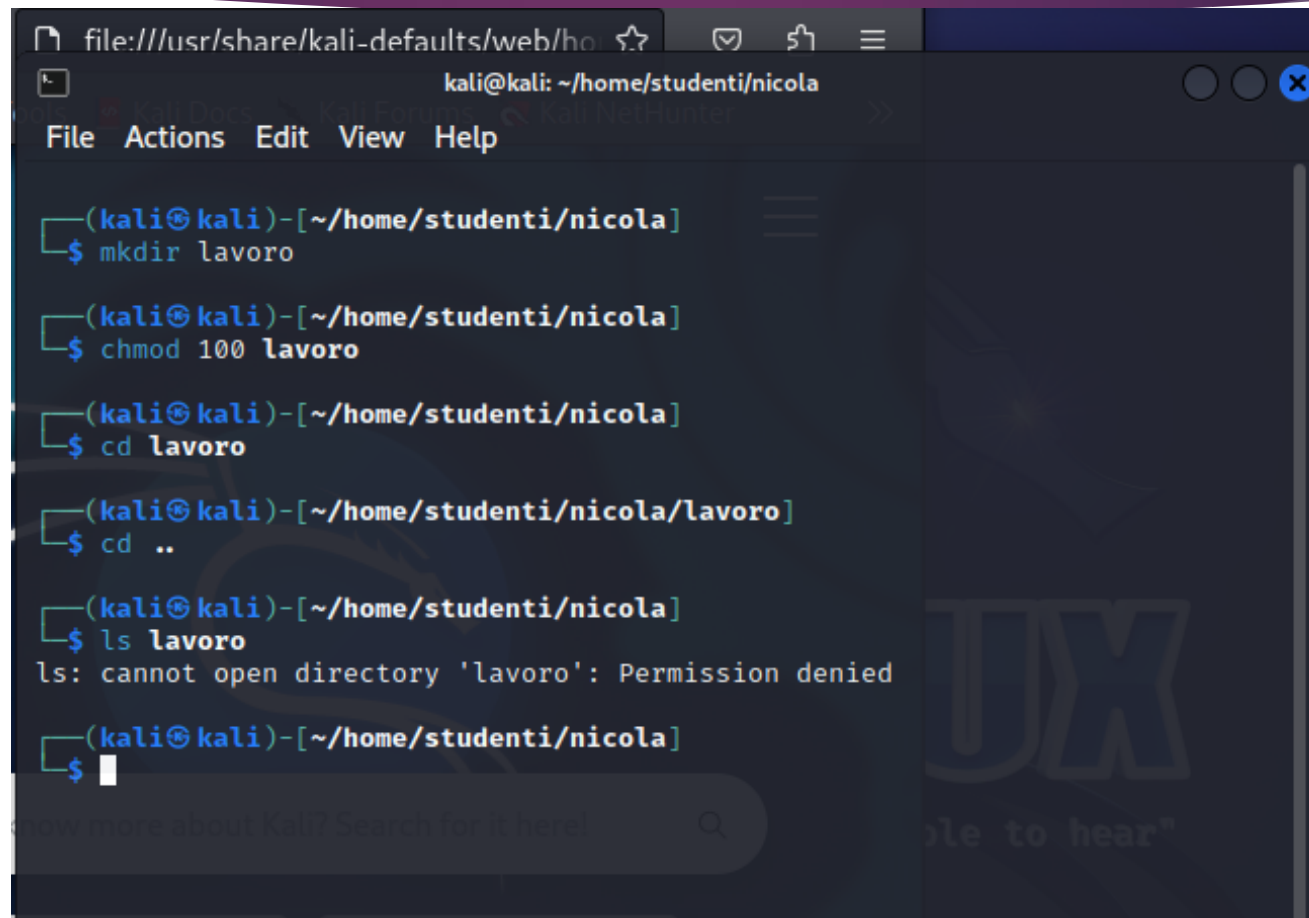


# Punto 9: verifica occupazione spazio dischi

```
[1] ... terminated - Firefox
(kali㉿kali)-[~]
$ df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            945M     0  945M   0% /dev
tmpfs           197M  992K   196M   1% /run
/dev/sda1       79G   15G   60G   20% /
tmpfs           984M     0   984M   0% /dev/shm
tmpfs           5.0M     0    5.0M   0% /run/lock
tmpfs           197M  112K   197M   1% /run/user/1000

(kali㉿kali)-[~]
$ █
```

# Punto j)



```
file:///usr/share/kali-defaults/web/ho
kali@kali: ~/home/studenti/nicola
File Actions Edit View Help

(kali@kali)-[~/home/studenti/nicola]
$ mkdir lavoro

(kali@kali)-[~/home/studenti/nicola]
$ chmod 100 lavoro

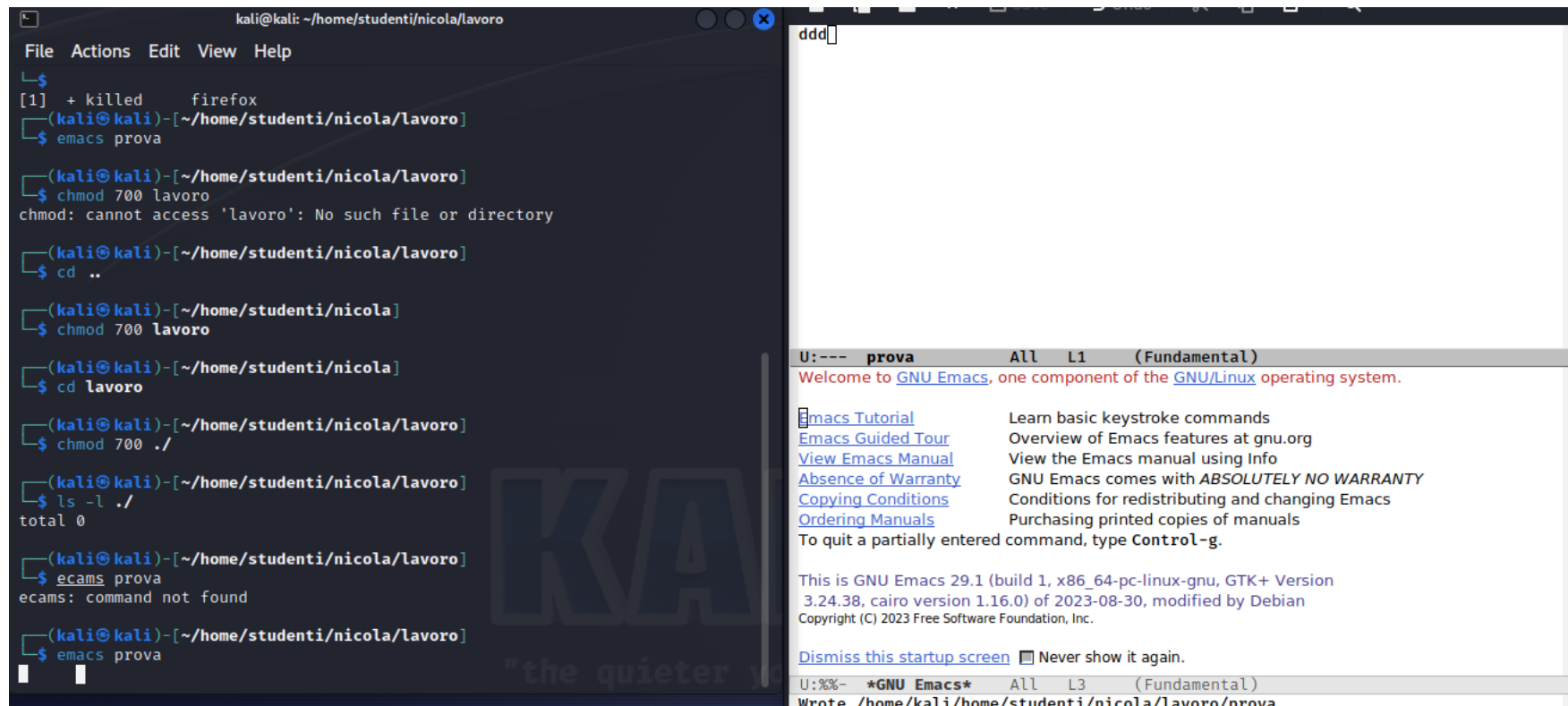
(kali@kali)-[~/home/studenti/nicola]
$ cd lavoro

(kali@kali)-[~/home/studenti/nicola/lavoro]
$ cd ..

(kali@kali)-[~/home/studenti/nicola]
$ ls lavoro
ls: cannot open directory 'lavoro': Permission denied

(kali@kali)-[~/home/studenti/nicola]
$
```

# Punto k)



```
kali@kali: ~/home/studenti/nicola/lavoro
File Actions Edit View Help
└─$
[1] + killed      firefox
└─(kali@kali)-[~/home/studenti/nicola/lavoro]
└─$ emacs prova

└─(kali@kali)-[~/home/studenti/nicola/lavoro]
└─$ chmod 700 lavoro
chmod: cannot access 'lavoro': No such file or directory

└─(kali@kali)-[~/home/studenti/nicola/lavoro]
└─$ cd ..

└─(kali@kali)-[~/home/studenti/nicola]
└─$ chmod 700 lavoro

└─(kali@kali)-[~/home/studenti/nicola]
└─$ cd lavoro

└─(kali@kali)-[~/home/studenti/nicola/lavoro]
└─$ chmod 700 ./

└─(kali@kali)-[~/home/studenti/nicola/lavoro]
└─$ ls -l ./
total 0

└─(kali@kali)-[~/home/studenti/nicola/lavoro]
└─$ ecams prova
ecams: command not found

└─(kali@kali)-[~/home/studenti/nicola/lavoro]
└─$ emacs prova
```

ddd

U:--- prova All L1 (Fundamental)  
Welcome to [GNU Emacs](#), one component of the [GNU/Linux](#) operating system.

<a href="#">Emacs Tutorial</a>	Learn basic keystroke commands
<a href="#">Emacs Guided Tour</a>	Overview of Emacs features at gnu.org
<a href="#">View Emacs Manual</a>	View the Emacs manual using Info
<a href="#">Absence of Warranty</a>	GNU Emacs comes with <b>ABSOLUTELY NO WARRANTY</b>
<a href="#">Copying Conditions</a>	Conditions for redistributing and changing Emacs
<a href="#">Ordering Manuals</a>	Purchasing printed copies of manuals

To quit a partially entered command, type **Control-g**.

This is GNU Emacs 29.1 (build 1, x86\_64-pc-linux-gnu, GTK+ Version 3.24.38, cairo version 1.16.0) of 2023-08-30, modified by Debian  
Copyright (C) 2023 Free Software Foundation, Inc.

[Dismiss this startup screen](#) ☐ Never show it again.

U:%%- \*GNU Emacs\* All L3 (Fundamental)  
Wrote /home/kali/home/studenti/nicola/lavoro/prova

# Punto I)

```
(kali㉿kali)-[~/home/studenti/nicola/lavoro]
$ emacs prova

(kali㉿kali)-[~/home/studenti/nicola/lavoro]
$ ls -l
total 4
-rw-r--r-- 1 kali kali 3 Nov 22 17:07 prova

(kali㉿kali)-[~/home/studenti/nicola/lavoro]
$ ls
prova

(kali㉿kali)-[~/home/studenti/nicola/lavoro]
$ chmod 700 ./

(kali㉿kali)-[~/home/studenti/nicola/lavoro]
$
```

## Punto m)

```
(kali㉿kali)-[~/home/studenti/nicola/lavoro]  
$ pwd  
/home/kali/home/studenti/nicola/lavoro  
  
(kali㉿kali)-[~/home/studenti/nicola/lavoro]  
$ cd ../scuola
```



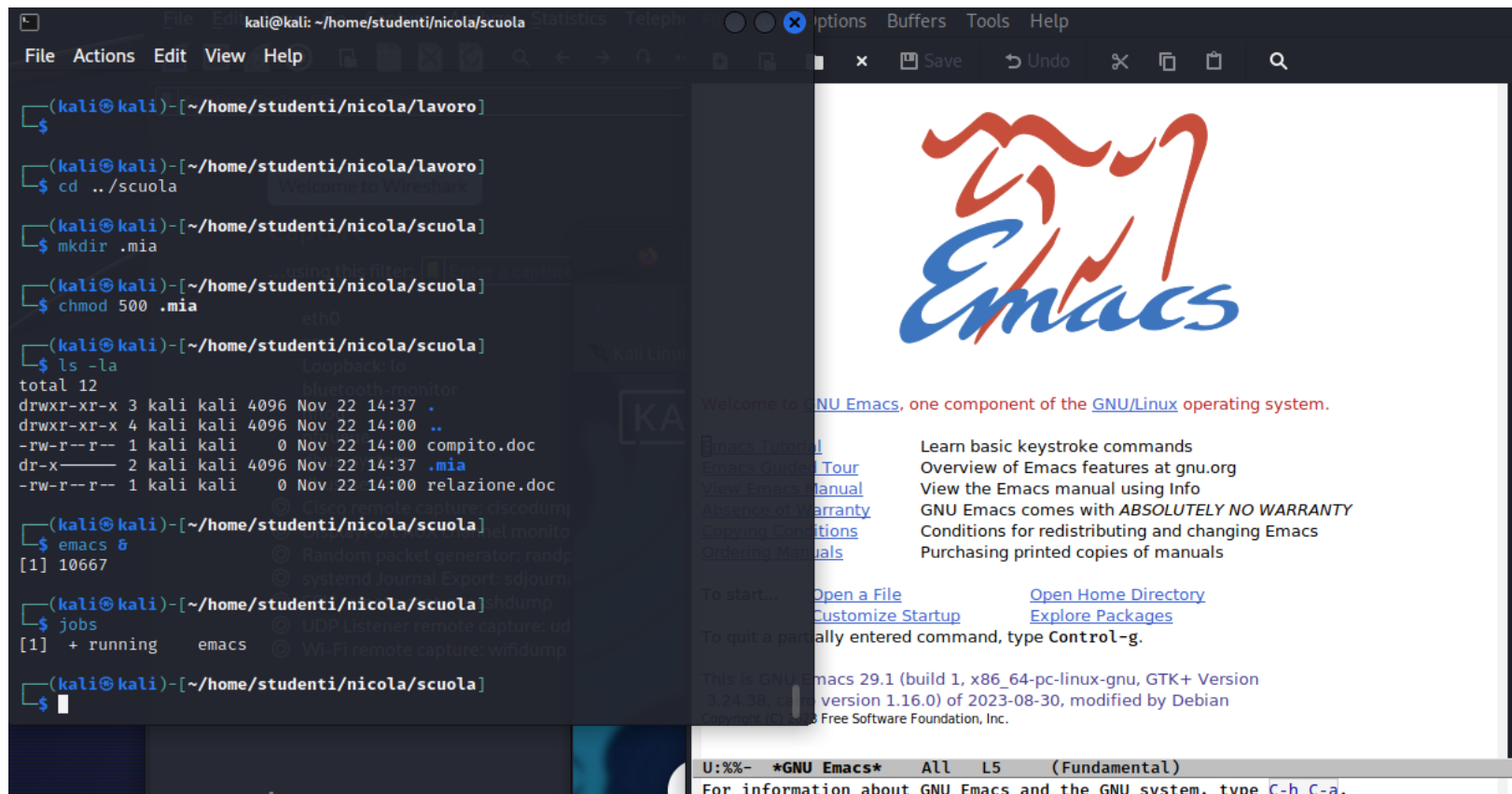
# Punto n,o)

```
(kali®kali)-[~/home/studenti/nicola/lavoro]  
$ cd ../scuola
```

```
(kali®kali)-[~/home/studenti/nicola/scuola]  
$ mkdir .mia
```

```
(kali®kali)-[~/home/studenti/nicola/scuola]  
$ ls -la  
total 12  
drwxr-xr-x 3 kali kali 4096 Nov 22 14:37 .  
drwxr-xr-x 4 kali kali 4096 Nov 22 16:44 ..  
-rw-r--r-- 1 kali kali 0 Nov 22 14:00 compito.doc  
dr-x----- 2 kali kali 4096 Nov 22 14:37 .mia  
-rw-r--r-- 1 kali kali 0 Nov 22 14:00 relazione.doc
```

# Punto 10-11



```
(kali@kali)-[~/home/studenti/nicola/lavoro]
$
(kali@kali)-[~/home/studenti/nicola/lavoro]
$ cd ../scuola
(kali@kali)-[~/home/studenti/nicola/scuola]
$ mkdir .mia
(kali@kali)-[~/home/studenti/nicola/scuola]
$ chmod 500 .mia
(kali@kali)-[~/home/studenti/nicola/scuola]
$ ls -la
total 12
drwxr-xr-x 3 kali kali 4096 Nov 22 14:37 .
drwxr-xr-x 4 kali kali 4096 Nov 22 14:00 ..
-rw-r--r-- 1 kali kali  0 Nov 22 14:00 compito.doc
dr-x----- 2 kali kali 4096 Nov 22 14:37 .mia
-rw-r--r-- 1 kali kali  0 Nov 22 14:00 relazione.doc
(kali@kali)-[~/home/studenti/nicola/scuola]
$ emacs 6
[1] 10667
(kali@kali)-[~/home/studenti/nicola/scuola]
$ jobs
[1] + running  emacs
(kali@kali)-[~/home/studenti/nicola/scuola]
$
```

The Emacs editor window displays the GNU Emacs logo and the following text:

Welcome to GNU Emacs, one component of the GNU/Linux operating system.

[Emacs Tutorial](#) Learn basic keystroke commands  
[Emacs Guide](#) Overview of Emacs features at gnu.org  
[View Emacs Manual](#) View the Emacs manual using Info  
[Absence of Warranty](#) GNU Emacs comes with **ABSOLUTELY NO WARRANTY**  
[Copying Conditions](#) Conditions for redistributing and changing Emacs  
[Ordering Manuals](#) Purchasing printed copies of manuals

To start... [Open a File](#) [Open Home Directory](#)  
[Customize Startup](#) [Explore Packages](#)

To quit a partially entered command, type **Control-g**.

This is GNU Emacs 29.1 (build 1, x86\_64-pc-linux-gnu, GTK+ Version 3.24.38, compiled version 1.16.0) of 2023-08-30, modified by Debian  
Copyright (C) 2023 Free Software Foundation, Inc.

U:%%- \*GNU Emacs\* All L5 (Fundamental)  
For information about GNU Emacs and the GNU system, type **C-h C-a**.

# Punto 12

kali@kali: ~/home/studenti/nicola/scuola

File Actions Edit View Help

```
(kali@kali)~[~/home/studenti/nicola/scuola]
$ emacs &
[1] 113823

(kali@kali)~[~/home/studenti/nicola/scuola]
$ jobs
[1] + running  emacs

(kali@kali)~[~/home/studenti/nicola/scuola]
$ firefox
^Z
zsh: suspended  firefox

(kali@kali)~[~/home/studenti/nicola/scuola]
$
```

Sorry. We're having trouble getting your pages back.

We're having trouble restoring your last browsing session. Select Restore Session to try again.

Still not able to restore your session? Sometimes a tab is causing the issue. View previous tabs, remove the checkmark from the tabs you don't need to recover, and then restore.

view Previous Tabs

# Punto13-14

```
(kali㉿kali)-[~/home/studenti/nicola/scuola]
$ firefox
^Z
zsh: suspended  firefox
```

```
(kali㉿kali)-[~/home/studenti/nicola/scuola]
$ bg %1
bg: job already in background
```

```
(kali㉿kali)-[~/home/studenti/nicola/scuola]
$ jobs
[1]  - running      emacs
[2]  + suspended    firefox
```

# Punto15-16

```
(kali@kali)-[~/home/studenti/nicola/scuola]
```

```
$ jobs
```

```
[1] - running      emacs  
[2] + suspended    firefox
```

```
(kali@kali)-[~/home/studenti/nicola/scuola]
```

```
$ fg %1
```

```
[1] - running      emacs
```

```
[1] - running      emacs
```

```
^C
```

# Punto17

```
(kali㉿kali)-[~/home/studenti/nicola/scuola]
$ df -h
```

Filesystem	Size	Used	Avail	Use%	Mounted on
udev	945M	0	945M	0%	/dev
tmpfs	197M	988K	196M	1%	/run
/dev/sda1	79G	15G	60G	20%	/
tmpfs	984M	0	984M	0%	/dev/shm
tmpfs	5.0M	0	5.0M	0%	/run/lock
tmpfs	197M	112K	197M	1%	/run/user/1000