

Esercizio SHELL LINUX

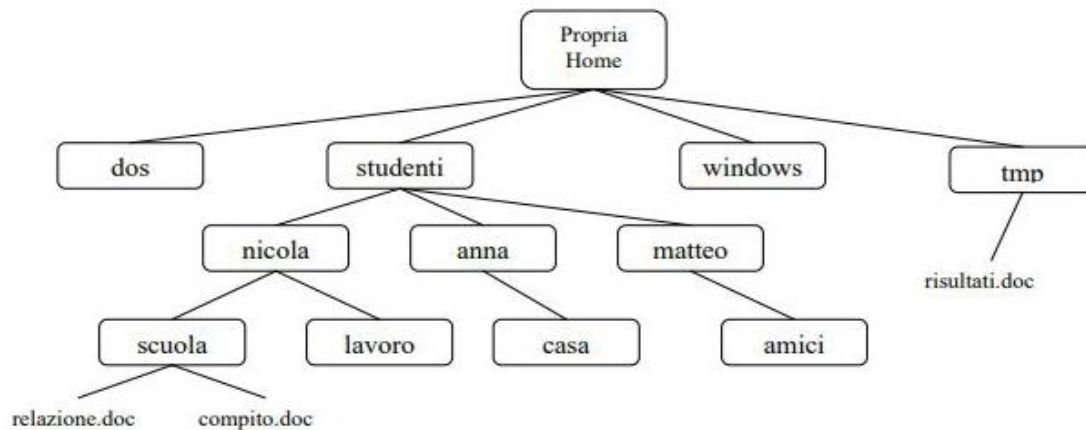
Traccia

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 quanto 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

Esercizio Parte 1:

Iniziamo dalla creazione delle cartelle e dei file doc all'interno delle directory:

```
kali@kali: ~  
File Actions Edit View Help  
$ mkdir dos  
$ ls  
Desktop Documents dos Downloads Music Pictures pippo pippo.txt Public Templates Videos  
$ mkdir tmp  
$ mkdir studenti  
$ mkdir windows  
$ cd studenti  
$ mkdir nicola  
$ mkdir anna  
$ mkdir matteo
```

Lo screenshot mostra un terminale Kali Linux con i comandi per creare le directory. Il prompt è kali@kali: ~. Il menu di sistema mostra Desktop, Documents, dos, Downloads, Music, Pictures, pippo, pippo.txt, Public, Templates, Videos. I comandi eseguiti sono: mkdir dos, ls, mkdir tmp, mkdir studenti, mkdir windows, cd studenti, mkdir nicola, mkdir anna, mkdir matteo.

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

(kali㉿kali)-[~/studenti/nicola]
$ mkdir scuola

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

(kali㉿kali)-[~/studenti/nicola]
$ cd ../../anna
cd: no such file or directory: ../../anna

(kali㉿kali)-[~/studenti/nicola]
$ cd ../../studenti/anna

(kali㉿kali)-[~/studenti/anna]
$ mkdir casa

(kali㉿kali)-[~/studenti/anna]
$ cd ../../studenti/matteo

(kali㉿kali)-[~/studenti/matteo]
$ mkdir amici
```

```
(kali㉿kali)-[~/studenti/nicola/scuola]
$ sudo nano relazione.doc
[sudo] password for kali:

(kali㉿kali)-[~/studenti/nicola/scuola]
$ sudo nano compito.doc

(kali㉿kali)-[~/studenti/nicola/scuola]
$ ls
compito.doc  relazione.doc
```

Passiamo ai diversi punti richiesti dall'esercizio. In ordine di richiesta:

Percorso da cartella lavoro a cartella casa

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

(kali㉿kali)-[~/studenti/nicola/lavoro]
$ cd ../../anna/casa
```

Copia doc in altra cartella

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

Sposta doc in altra cartella

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

Rimuovi cartella tmp con file

```
(kali㉿kali)-[~/]
$ sudo rm -r tmp
```

Creazione file pippo.txt

```
(kali㉿kali)-[~/studenti/nicola/lavoro]
$ sudo nano pippo.txt

(kali㉿kali)-[~/studenti/nicola/lavoro]
$ ls
pippo.txt
```

Attributi file pippo.txt

```
(kali㉿kali)-[~/studenti/nicola/lavoro]
$ ls -l pippo.txt
-rw-r--r-- 1 root root 19 Jan 17 12:31 pippo.txt
```

Nascondere cartella

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

Visualizzare contenuto file pippo.txt

```
(kali㉿kali)-[~/studenti/nicola/lavoro]  
$ ls pippo.txt  
pippo.txt  
  
(kali㉿kali)-[~/studenti/nicola/lavoro]  
$ cat pippo.txt  
ciao Pippo come va
```

Rimuovere cartella amici

```
(kali㉿kali)-[~/studenti/matteo]  
$ rm -r amici
```

Esercizio Parte 2:

Comandi w-who-who am i

```
kali@kali: ~  
File Actions Edit View Help  
(kali@kali)-[~]  
$ vi pippo  
(kali@kali)-[~]  
$ w  
14:32:36 up 2:50, 1 user, load average: 0.09, 0.09, 0.09  
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU   WHAT  
kali      tty7      :0            11:43    2:50m  2:59   0.54s  xfce4-session  
(kali@kali)-[~]  
$ who  
kali      tty7      2024-01-09 11:43 (:0)  
(kali@kali)-[~]  
$ who am i
```

Manuale Kill

```
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.  
  
-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  
explained 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 sig-  
nal. If the receiving process has installed a handler for this signal using the SA_SIGINFO flag to sigaction(2),  
then it can obtain this data via the si_value field of the siginfo_t structure.  
  
-l, --list [signal]  
List signal names. This option has optional argument, which will convert signal number to signal name, or other  
way round.  
  
-L, --table  
List signal names in a nice table.  
  
NOTES Your shell (command line interpreter) may have a built-in kill command. You may need to run the command de-  
scribed here as /bin/kill to solve the conflict.  
  
Manual page kill(1) line 1/66 65% (press h for help or q to quit)
```

Manuale ps

```
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 behavior is intended to aid in  
transitioning old scripts and habits. It is fragile, subject to change, and thus should not be relied upon.  
  
By default, ps selects all processes with the same effective user ID (euid=EUID) as the current user and associated with  
the same terminal as the invoker. It displays the process ID (pid=PID), the terminal associated with the process  
(tname=TTY), the cumulated CPU time in [DD-]hh:mm:ss format (time=TIME), and the executable name (ucmd=CMD). Output is  
unsorted by default.  
  
The use of BSD-style options will add process state (stat=STAT) to the default display and show the command args  
(args=COMMAND) instead of the executable name. You can override this with the PS_FORMAT environment variable. The use  
of BSD-style options will also change the process selection to include processes on other terminals (TTVs) that are  
owned by you; alternately, this may be described as setting the selection to be the set of all processes filtered to  
exclude processes owned by other users or not on a terminal. These effects are not considered when options are  
described as being "identical" below, so -M will be considered identical to -Z and so on.  
  
Except as described below, process selection options are additive. The default selection is discarded, and then the  
Manual page ps(1) line 1 (press h for help or q to quit)
```


Processo vi Pippo + Kill processo

```
kali@kali: ~  
File Actions Edit View Help  
$ vi pippo  
vim: Caught deadly signal TERM  
Press ENTER or type command to continue: vim: Finished.  
  
kali@kali: ~  
File Actions Edit View Help  
kali 1197 1172 0 12:04 ? 00:00:00 /usr/lib/x86_64-linux-gnu/xfce4/panel/wrapper-2.0 /  
kali 1231 945 0 12:04 ? 00:00:00 /usr/lib/x86_64-linux-gnu/xfce4/notifyd/xfce4-notif  
kali 1268 988 0 12:04 ? 00:00:00 /usr/libexec/geoclue-2.0/demos/agent  
kali 1277 988 0 12:04 ? 00:00:00 xfce4-power-manager  
kali 1282 988 0 12:04 ? 00:00:00 nm-applet  
kali 1287 988 0 12:04 ? 00:00:00 light-locker  
kali 1288 1 0 12:04 ? 00:00:00 xcape -e Super_L Control_L Escape  
kali 1290 988 0 12:04 ? 00:00:00 xiccd  
colord 1303 1 0 12:04 ? 00:00:00 /usr/libexec/colord  
kali 1304 988 0 12:04 ? 00:00:00 /usr/lib/policykit-1-gnome/polkit-gnome-authenticat  
kali 1320 945 0 12:04 ? 00:00:00 /usr/libexec/gvfs-udisks2-volume-monitor  
kali 1321 988 0 12:04 ? 00:00:00 /usr/bin/python3 /usr/bin/blueman-applet  
kali 1328 945 0 12:04 ? 00:00:00 /usr/libexec/dconf-service  
root 1341 1 0 12:04 ? 00:00:00 /usr/libexec/udisks2/udisksd  
root 1379 2 0 12:04 ? 00:00:00 [kworker/1:0H-kblockd]  
kali 1413 945 0 12:04 ? 00:00:00 /usr/libexec/gvfs-goa-volume-monitor  
kali 1419 945 0 12:04 ? 00:00:00 /usr/libexec/gvfs-mtp-volume-monitor  
kali 1425 945 0 12:04 ? 00:00:00 /usr/libexec/gvfs-afc-volume-monitor  
kali 1436 945 0 12:04 ? 00:00:00 /usr/libexec/gvfs-gphoto2-volume-monitor  
kali 1448 1125 0 12:04 ? 00:00:00 /usr/libexec/gvfsd-trash --spawner :1.20 /org/gtk/g  
root 1452 2 0 12:04 ? 00:00:00 [kworker/u4:2-events_unbound]  
kali 1455 945 0 12:04 ? 00:00:00 /usr/libexec/gvfsd-metadata  
kali 1481 945 0 12:04 ? 00:00:00 /usr/libexec/bluetooth/obexd  
kali 1625 1 0 12:04 ? 00:00:13 /usr/bin/qterminal  
kali 1628 1625 0 12:04 pts/0 00:00:11 /usr/bin/zsh  
root 19749 2 0 12:40 ? 00:00:00 [kworker/1:2-ata_sff]  
root 25106 2 0 12:50 ? 00:00:00 [kworker/1:0-events_freezable_power_]  
kali 26784 945 0 12:54 ? 00:00:00 /usr/lib/x86_64-linux-gnu/xfce4/xfconf/xfconfd  
kali 27565 1 0 12:55 ? 00:00:01 /usr/bin/qterminal  
kali 27568 27565 0 12:55 pts/1 00:00:00 /usr/bin/zsh  
root 27692 2 0 12:55 ? 00:00:00 [kworker/1:1-events]  
kali 28323 1628 0 12:57 pts/0 00:00:00 vi pippo  
kali 28696 1628 0 12:57 pts/0 00:00:00 vi pippo  
kali 29625 1628 0 12:59 pts/0 00:00:00 vi pippo  
kali 30069 27568 0 13:00 pts/1 00:00:00 ps -ef  
  
(kali@kali)-[~]  
$ kill 29625  
  
(kali@kali)-[~]  
$
```

Lancio firefox in background

```
(kali@kali)-[~]  
$ firefox &  
[3] 34225
```

Firefox in background (già lo era al momento del lancio di prima)

```
(kali@kali)-[~]  
$ bg firefox  
bg: job already in background
```

Firefox processo + kill processo

```
kali@kali: ~  
File Actions Edit View Help  
(kali@kali)-[~]  
$ firefox &  
[1] 37234  
(kali@kali)-[~]  
$  
Exiting due to channel error.  
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)-[~]  
$  
  
kali@kali: ~  
File Actions Edit View Help  
kali 1419 945 0 12:04 ? 00:00:00 /usr/libexec/gvfs-mtp-volume-monitor  
kali 1425 945 0 12:04 ? 00:00:00 /usr/libexec/gvfs-afc-volume-monitor  
kali 1436 945 0 12:04 ? 00:00:00 /usr/libexec/gvfs-gphoto2-volume-monitor  
kali 1448 1125 0 12:04 ? 00:00:00 /usr/libexec/gvfsd-trash --spawner :1.20 /org/gtk/gvfs/exec_spaw/0  
root 1452 2 0 12:04 ? 00:00:00 [kworker/u4:2-events_unbound]  
kali 1455 945 0 12:04 ? 00:00:00 /usr/libexec/gvfsd-metadata  
kali 1481 945 0 12:04 ? 00:00:00 /usr/libexec/bluetooth/obexd  
root 25106 2 0 12:50 ? 00:00:00 [kworker/1:0-ata_sff]  
kali 26784 945 0 12:54 ? 00:00:00 /usr/lib/x86_64-linux-gnu/xfce4/xfconf/xfconfd  
root 30221 2 0 13:01 ? 00:00:00 [kworker/1:2-events]  
root 32814 2 0 13:06 ? 00:00:00 [kworker/1:1-events]  
kali 33075 945 0 13:06 ? 00:00:00 /usr/libexec/xdg-desktop-portal  
kali 33080 945 0 13:06 ? 00:00:00 /usr/libexec/xdg-document-portal  
kali 33084 945 0 13:06 ? 00:00:00 /usr/libexec/xdg-permission-store  
root 33091 33080 0 13:06 ? 00:00:00 fusermount3 -o rw,nosuid,nodev,fsname=portal,auto_unmount,subtype=portal -- /ru  
kali 33096 945 0 13:06 ? 00:00:00 /usr/libexec/xdg-desktop-portal-gtk  
root 33143 1 0 13:06 ? 00:00:00 /usr/sbin/pcsd --foreground --auto-exit  
root 34144 2 0 13:08 ? 00:00:00 [kworker/0:0-ipv6_addrconf]  
root 34145 2 0 13:08 ? 00:00:00 [kworker/1:3-ata_sff]  
root 36479 2 0 13:11 ? 00:00:00 [kworker/u4:1-events_unbound]  
kali 36686 1 0 13:12 ? 00:00:00 /usr/bin/qterminal  
kali 36689 36686 0 13:12 pts/0 00:00:00 /usr/bin/zsh  
kali 37234 37234 0 13:12 pts/0 00:00:00 firefox-esr  
kali 37389 37234 0 13:12 pts/0 00:00:00 /usr/lib/firefox-esr/firefox-esr -contentproc -parentBuildID 20230724124053 -pr  
kali 37384 37234 2 13:12 pts/0 00:00:00 -contentproc -childID 1 -isForBrowser -prefsle  
kali 37419 37234 2 13:12 pts/0 00:00:00 /usr/lib/firefox-esr/firefox-esr -contentproc -childID 2 -isForBrowser -prefsle  
kali 37455 37234 1 13:12 pts/0 00:00:00 /usr/lib/firefox-esr/firefox-esr -contentproc -childID 3 -isForBrowser -prefsle  
kali 37522 37234 0 13:12 pts/0 00:00:00 /usr/lib/firefox-esr/firefox-esr -contentproc -childID 4 -isForBrowser -prefsle  
kali 37524 37234 0 13:12 pts/0 00:00:00 /usr/lib/firefox-esr/firefox-esr -contentproc -childID 5 -isForBrowser -prefsle  
kali 37559 37234 0 13:12 pts/0 00:00:00 /usr/lib/firefox-esr/firefox-esr -contentproc -childID 6 -isForBrowser -prefsle  
kali 37680 1 0 13:12 ? 00:00:00 /usr/bin/xfce4-mime-helper --Launch TerminalEmulator  
kali 37681 37680 2 13:12 ? 00:00:00 /usr/bin/qterminal  
kali 37684 37681 1 13:12 pts/1 00:00:00 /usr/bin/zsh  
kali 37740 37684 0 13:12 pts/1 00:00:00 ps -ef  
  
(kali@kali)-[~]  
$ kill 37234  
  
(kali@kali)-[~]  
$
```

Memoria disco

```
File Actions Edit View Help
(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
```