

ESERCIZIO SHELL LINUX

Nella prima parte dell'esercizio ci viene richiesto di creare le directory necessarie per lo svolgimento. Ho commesso un errore di distrazione e ho creato *“relazione.doc”* in *“/studenti/nicola/lavoro”* invece di *“/studenti/nicola/scuola”*.

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

(pireddone@kali)-[~]
$ mkdir dos studenti windows tmp

(pireddone@kali)-[~]
$ cd studenti

(pireddone@kali)-[~/studenti]
$ mkdir nicola anna matteo

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

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

(pireddone@kali)-[~/studenti/nicola]
$ cd scuola

(pireddone@kali)-[~/studenti/nicola/scuola]
$ touch compito.doc

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

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ touch relazione.doc
```

In seguito ho commesso qualche errore di sintassi per andare avanti nell'esercizio e completare la creazione delle restanti sottodirectory.

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

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ cd /studenti/anna
cd: no such file or directory: /studenti/anna

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

(pireddone@kali)-[~]
$ cd studenti

(pireddone@kali)-[~/studenti]
$ cd anna

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

(pireddone@kali)-[~/studenti/anna]
$ cd studenti
cd: no such file or directory: studenti

(pireddone@kali)-[~/studenti/anna]
$ cd ./matteo
cd: no such file or directory: ./matteo

(pireddone@kali)-[~/studenti/anna]
$ cd ~

(pireddone@kali)-[~]
$ cd studenti/matteo

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

Procedo poi a spostarmi direttamente da una cartella all'altra ed eseguire la copia del file "compito.doc".

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

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ cd ../studenti/anna/casa
zsh: no such file or directory: cd ../studenti/anna/casa

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ cd ~/studenti/anna/casa

(pireddone@kali)-[~/studenti/anna/casa]
$ cd ~

(pireddone@kali)-[~]
$ cd /studenti/nicola/lavoro
cd: no such file or directory: /studenti/nicola/lavoro

(pireddone@kali)-[~]
$ cd studenti/nicola/scuola

(pireddone@kali)-[~/studenti/nicola/scuola]
$ cp compito.doc .
cp: 'compito.doc' and './compito.doc' are the same file

(pireddone@kali)-[~/studenti/nicola/scuola]
$ cp compito.doc
cp: missing destination file operand after 'compito.doc'
Try 'cp --help' for more information.

(pireddone@kali)-[~/studenti/nicola/scuola]
$ cd ~

(pireddone@kali)-[~]
$ cp ../scuola/compito.doc .
cp: cannot stat '../scuola/compito.doc': No such file or directory

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

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ cp ../scuola/compito.doc .
```

Procedo a spostare il file “*relazione.doc*” da “*/studenti/nicola/lavoro*” a “*studenti/anna/casa*”, rimuovo la cartella *tmp* e procedo alla creazione del file “*pippo.txt*” in “*studenti/nicola/lavoro*”.

```
(pireddone@kali)-[~]
$ cd studenti/nicola/scuola

(pireddone@kali)-[~/studenti/nicola/scuola]
$ mv relazione.doc ~/studenti/anna/casa
mv: cannot stat 'relazione.doc': No such file or directory

(pireddone@kali)-[~/studenti/nicola/scuola]
$ cd

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

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ mv relazione.doc ~/studenti/anna/casa

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

(pireddone@kali)-[~]
$ rm -r ~tmp
rm: cannot remove '~tmp': No such file or directory

(pireddone@kali)-[~]
$ cd temp
cd: no such file or directory: temp

(pireddone@kali)-[~]
$ cd tmp

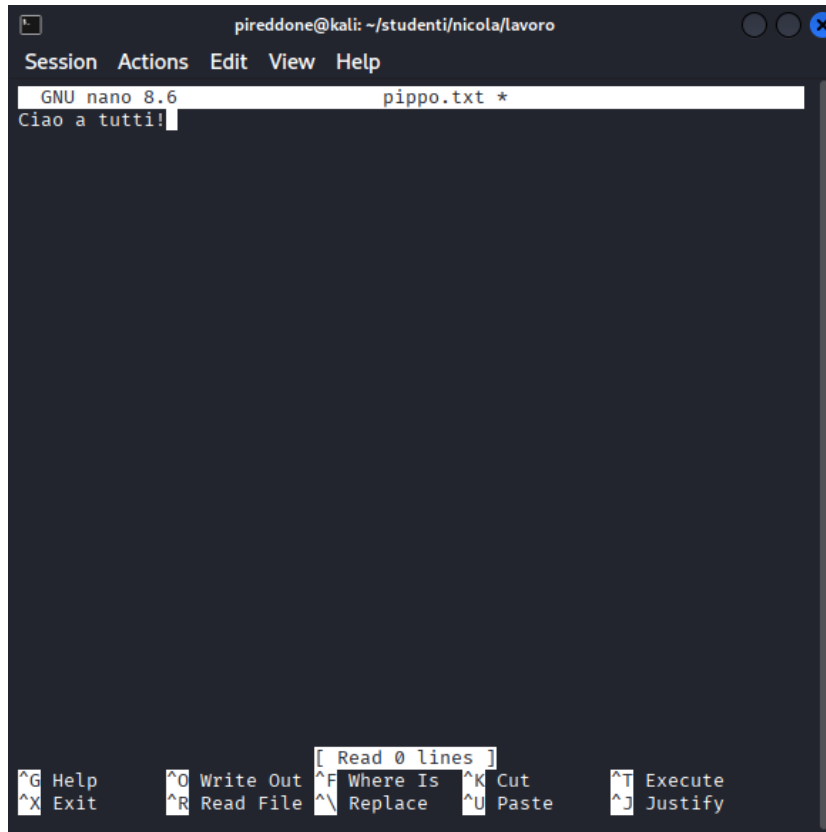
(pireddone@kali)-[~/tmp]
$ rm -r ~/tmp

(pireddone@kali)-[~/tmp]
$ cd ~

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

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ touch pippo.txt
```

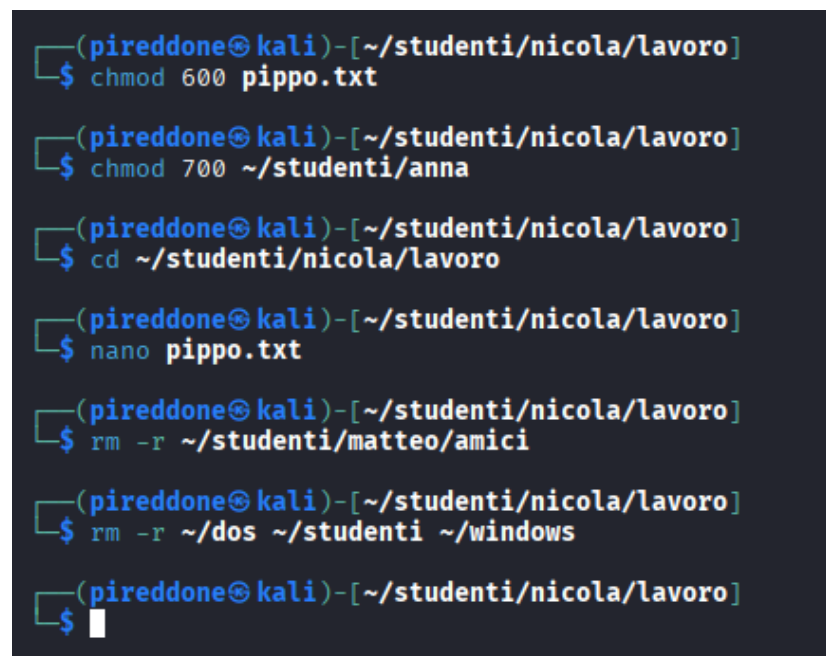
Vado a concludere l'esercizio rendendo il file *"pippo.txt"* disponibile solo per il proprietario con un *"chmod 600"* e andando a nascondere la cartella *"anna"* rendendola visibile solo al proprietario con un *"chmod 700"*. Procedo inoltre a visualizzare e modificare il file *"pippo.txt"* con *"nano"* e rimuovo tutte le directory create per l'esercizio



```
pireddone@kali: ~/studenti/nicola/lavoro
Session Actions Edit View Help
GNU nano 8.6 pippo.txt *
Ciao a tutti!
```

[Read 0 lines]

^G Help	^O Write Out	^F Where Is	^K Cut	^T Execute
^X Exit	^R Read File	^N Replace	^U Paste	^J Justify



```
(pireddone@kali)-[~/studenti/nicola/lavoro]
$ chmod 600 pippo.txt

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ chmod 700 ~/studenti/anna

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

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ nano pippo.txt

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ rm -r ~/studenti/matteo/amici

(pireddone@kali)-[~/studenti/nicola/lavoro]
$ rm -r ~/dos ~/studenti ~/windows

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

PARTE FACOLTATIVA

Nella parte facoltativa la traccia ci chiede innanzitutto di leggere i manuali di *job*, *ps* e *kill*. Non ho avuto problemi con *ps* e *kill*, ma non mi ha aperto il manuale di *job/jobs*.

```
(pireddone@kali)-[~]
$ man job
No manual entry for job

(pireddone@kali)-[~]
$ man jobs
No manual entry for jobs

(pireddone@kali)-[~]
$ man ps

(pireddone@kali)-[~]
$ man kill

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

In seguito ho aperto un altro tab di terminale e ho lanciato *nano pippo*, nell'altra scheda ho lanciato *ps aux* per vedere i processi attivi, ho individuato il PID di *nano pippo* e l'ho terminato.

```
pireddone@kali: ~
root      1251  0.0  0.5 318748 10192 ?        Ssl  10:35   0:04 /usr/libexec/upowerd
pireddo+  1305  0.0  0.3 308532  6624 ?        Sl   10:35   0:00 /usr/libexec/geoclue-2.0/demos/
pireddo+  1306  0.0  3.0 604144 61236 ?        Sl   10:35   0:01 /usr/bin/python3 /usr/bin/bluem
pireddo+  1323  0.0  1.2 410708 25612 ?        Sl   10:35   0:00 xfce4-power-manager
pireddo+  1324  0.0  0.0  12424  1876 ?        Ssl  10:35   0:00 xcace -e Super_L Control_L Esca
pireddo+  1327  0.0  2.0 66068 40672 ?        S    10:35   0:00 /usr/bin/python3 /usr/share/sys
pireddo+  1328  0.0  2.2 521420 44780 ?        Sl   10:35   0:01 nm-applet
pireddo+  1336  0.0  1.8 281492 37232 ?        Sl   10:35   0:02 xfce4-screensaver
pireddo+  1346  0.0  0.9 265368 18484 ?        Sl   10:35   0:00 /usr/libexec/polkit-mate-authen
pireddo+  1347  0.0  0.4 463916  8836 ?        Sl   10:35   0:00 xiccd
colord    1375  0.0  0.7 317128 15268 ?        Ssl  10:35   0:00 /usr/libexec/colord
pireddo+  1439  0.0  0.5 390900 11316 ?        Ssl  10:35   0:00 /usr/libexec/gvfs-udisks2-volum
root      1443  0.0  0.6 478416 14016 ?        Ssl  10:35   0:00 /usr/libexec/udisks2/udisksd
pireddo+  1461  0.0  0.3 307944  6868 ?        Ssl  10:35   0:00 /usr/libexec/gvfs-mtp-volume-mo
pireddo+  1466  0.0  0.3 308900  7040 ?        Ssl  10:35   0:00 /usr/libexec/gvfs-gphoto2-volum
pireddo+  1471  0.0  0.4 389916  8676 ?        Ssl  10:35   0:00 /usr/libexec/gvfs-afc-volume-mo
pireddo+  1477  0.0  0.3 307888  6628 ?        Ssl  10:35   0:00 /usr/libexec/gvfs-goa-volume-mo
pireddo+  1514  0.0  0.3 168892  6384 ?        Ssl  10:35   0:00 /usr/libexec/gvfsd-metadata
pireddo+  1518  0.0  0.4 534216  8888 ?        Sl   10:35   0:00 /usr/libexec/gvfsd-trash --spaw
pireddo+  1559  0.0  0.9 378812 18952 ?        Ssl  10:35   0:00 /usr/libexec/bluetooth/obexd
pireddo+  1820  0.0  0.9 630720 19896 ?        Ssl  10:36   0:00 /usr/libexec/xdg-desktop-portal
pireddo+  1834  0.0  0.3 308780  6464 ?        Ssl  10:36   0:00 /usr/libexec/xdg-permission-sto
pireddo+  1840  0.0  0.3 539748  7152 ?        Ssl  10:36   0:00 /usr/libexec/xdg-document-porta
root      1849  0.0  0.0  2584  1772 ?        Ss   10:36   0:00 fusermount3 -o rw,nosuid,nodev,
pireddo+  1854  0.0  0.9 479616 19508 ?        Ssl  10:36   0:00 /usr/libexec/xdg-desktop-portal
root      14097  0.0  0.0  0  0 ?        I<   11:00   0:00 [kworker/0:0H]
root      18290  0.0  0.0  0  0 ?        I<   11:08   0:00 [kworker/u5:2-ttm]
root      19250  0.0  0.0  0  0 ?        I   11:10   0:00 [kworker/u4:1-flush-8:0]
root      37250  0.2  0.0  0  0 ?        I   11:47   0:01 [kworker/0:3-ata_sff]
root      39799  0.5  0.0  0  0 ?        I   11:52   0:03 [kworker/0:2-events]
root      42768  0.0  0.0  0  0 ?        I   11:57   0:00 [kworker/0:0-ata_sff]
root      43116  0.0  0.0  0  0 ?        I   11:58   0:00 [kworker/u4:3-events_unbound]
pireddo+  43218  1.6  3.3 583068 67788 ?        RL   11:58   0:02 /usr/bin/qterminal
pireddo+  43233  0.9  0.3  10316  6440 pts/0    Ss   11:58   0:01 /usr/bin/zsh
pireddo+  44596  3.0  0.3  10312  6332 pts/1    Ss   12:01   0:00 /usr/bin/zsh
pireddo+  44687  0.0  0.2  7100  4128 pts/1    S+   12:01   0:00 nano pippo
pireddo+  44730  200  0.2  9544  4184 pts/0    R+   12:01   0:00 ps aux

(pireddone@kali)-[~]
$ kill 44687
```

```
(pireddone@kali)-[~]
$ nano pippo
Received SIGHUP or SIGTERM

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

Lancio firefox da terminale, deduco che dia problemi poiché non sono connesso ad internet con la MV.

```
(pireddone@kali)-[~]
$ firefox &
[1] 46030

(pireddone@kali)-[~]
$ [Parent 46030, Main Thread] WARNING: unable to open file '/etc/dconf/db/local': Failed to open file "/etc/dconf/db/local": open() failed: No such file or directory; expect degraded performance: 'glib warning', file toolkit/xre/nsSigHandlers.cpp:201

(firefox-esr:46030): dconf-WARNING **: 12:04:26.077: unable to open file '/etc/dconf/db/local': Failed to open file "/etc/dconf/db/local": open() failed: No such file or directory; expect degraded performance
```

Termino firefox.

```
(pireddone@kali)-[~]
$ pkill firefox

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

Provo i comandi w, who e whoami e vedo che cosa mi risponde a video nel terminale.

```
(pireddone@kali)-[~]
$ w
12:06:20 up 1:31, 1 user, load average: 0.57, 0.69, 0.56
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
pireddon  -                10:35          0.00s   0.03s  lightdm --session-child 13 24

(pireddone@kali)-[~]
$ who
pireddone seat0      2025-10-28 10:35 (:0)

(pireddone@kali)-[~]
$ who am i
pireddone

(pireddone@kali)-[~]
$ whoami
pireddone

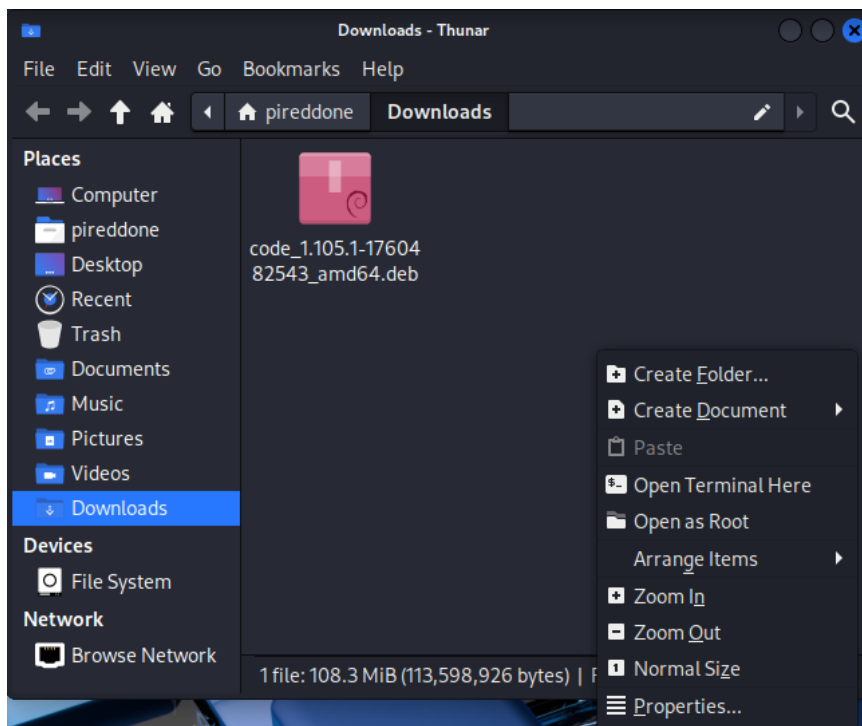
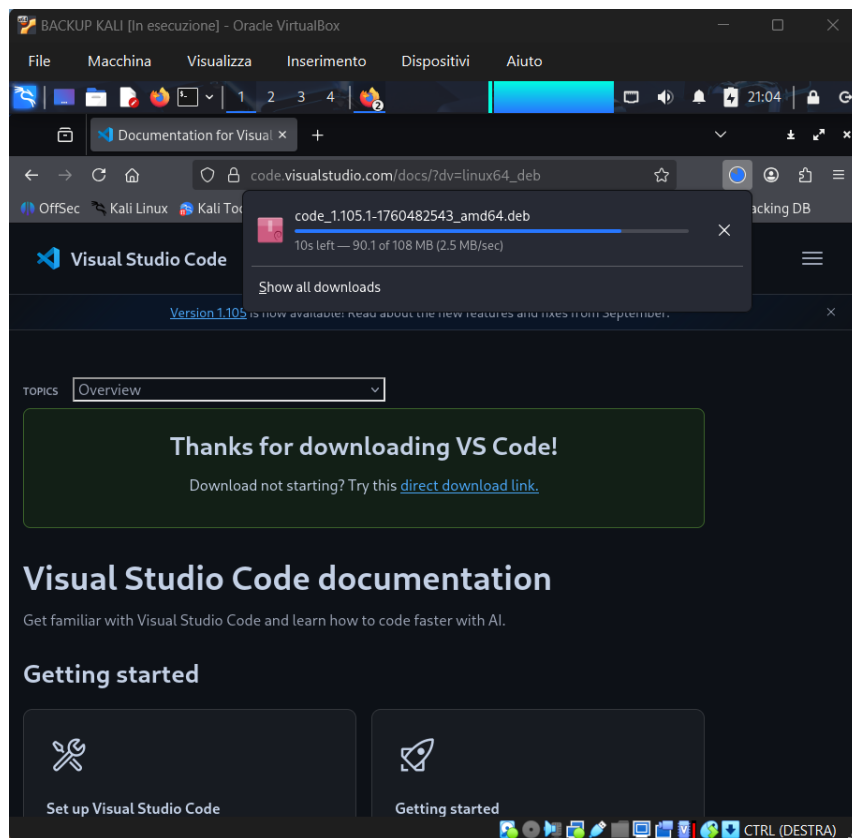
(pireddone@kali)-[~]
$
```

Non conoscendo il comando per verificare quanto spazio stiamo utilizzando sul disco, faccio una ricerca su internet e trovo il comando `df` (disk-free), utilizzo anche chatGPT, che mi consiglia di aggiungere `-h` (human readable) poiché altrimenti mi darebbe valori in byte invece di MB/GB/TB.

```
(pireddone@kali)-[~]
$ df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            921M   0    921M   0% /dev
tmpfs           198M 1008K  197M   1% /run
/dev/sda1       47G   17G   28G  38% /
tmpfs           987M   4.0K  987M   1% /dev/shm
tmpfs           1.0M   0    1.0M   0% /run/credentials/systemd-journald.service
tmpfs           987M  444K  987M   1% /tmp
tmpfs           1.0M   0    1.0M   0% /run/credentials/getty@tty1.service
tmpfs           198M  104K  198M   1% /run/user/1000

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

INSTALLAZIONE VISUAL STUDIO CODE E GDB SU KALI



```
pireddone@kali: ~/Downloads
Session Actions Edit View Help
(pireddone@kali)-[~/Downloads]
$ sudo dpkg -i code_1.105.1-1760482543_amd64.deb
[sudo] password for pireddone: 
```

```
pireddone@kali: ~/Downloads
Session Actions Edit View Help
Package configuration
```

Configuring code

The installer would like to add the Microsoft repository and signing key to update VS Code through apt.

Add Microsoft apt repository for Visual Studio Code?

<Yes> <No>


```
pireddone@kali: ~/Downloads
Session Actions Edit View Help
(pireddone@kali)-[~/Downloads]
└─$ sudo dpkg -i code_1.105.1-1760482543_amd64.deb
[sudo] password for pireddone:
Selecting previously unselected package code.
(Reading database ... 417065 files and directories currently installed
.)
Preparing to unpack code_1.105.1-1760482543_amd64.deb ...
Unpacking code (1.105.1-1760482543) ...
Setting up code (1.105.1-1760482543) ...
Processing triggers for desktop-file-utils (0.28-1) ...
Processing triggers for shared-mime-info (2.4-5+b3) ...

(pireddone@kali)-[~/Downloads]
└─$ sudo apt update && sudo apt install gdb
Get:1 https://packages.microsoft.com/repos/code stable InRelease [3,590 B]
Get:3 https://packages.microsoft.com/repos/code stable/main amd64 Packages [19.7 kB]
Get:2 http://kali.download/kali kali-rolling InRelease [34.0 kB]
Get:4 http://kali.download/kali kali-rolling/main amd64 Packages [20.9 MB]
Get:5 http://kali.download/kali kali-rolling/main amd64 Contents (deb) [51.7 MB]
Get:6 http://kali.download/kali kali-rolling/contrib amd64 Packages [113 kB]
Get:7 http://kali.download/kali kali-rolling/contrib amd64 Contents (deb) [245 kB]
Fetched 73.0 MB in 28s (2,595 kB/s)
55 packages can be upgraded. Run 'apt list --upgradable' to see them.
Upgrading:
  login
```

```
pireddone@kali: ~/Downloads
Session Actions Edit View Help
Get:2 http://kali.download/kali kali-rolling InRelease [34.0 kB]
Get:4 http://kali.download/kali kali-rolling/main amd64 Packages [20.9 MB]
Get:5 http://kali.download/kali kali-rolling/main amd64 Contents (deb) [51.7 MB]
Get:6 http://kali.download/kali kali-rolling/contrib amd64 Packages [13 kB]
Get:7 http://kali.download/kali kali-rolling/contrib amd64 Contents (deb) [245 kB]
Fetched 73.0 MB in 28s (2,595 kB/s)
55 packages can be upgraded. Run 'apt list --upgradable' to see them.
Upgrading:
  login

Installing:
  gdb

Installing dependencies:
  libbabeltrace1      libsource-highlight-common
  libdebuginfod-common libsource-highlight4t64
  libdebuginfod1t64   util-linux-extra
  libipt2

Suggested packages:
  gdb-doc gdbserver libc-dbg

Summary:
  Upgrading: 1, Installing: 8, Removing: 0, Not Upgrading: 54
  Download size: 5,333 kB
  Space needed: 17.6 MB / 30.0 GB available

Continue? [Y/n] █
```

```
pireddone@kali: ~/Downloads
Session Actions Edit View Help
Selecting previously unselected package libdebuginfod1t64:amd64.
Preparing to unpack .../4-libdebuginfod1t64_0.193-3_amd64.deb ...
Unpacking libdebuginfod1t64:amd64 (0.193-3) ...
Selecting previously unselected package libipt2.
Preparing to unpack .../5-libipt2_2.1.2-3_amd64.deb ...
Unpacking libipt2 (2.1.2-3) ...
Selecting previously unselected package libsource-highlight-common.
Preparing to unpack .../6-libsource-highlight-common_3.1.9-4.3_all.deb
...
Unpacking libsource-highlight-common (3.1.9-4.3) ...
Selecting previously unselected package libsource-highlight4t64:amd64.
Preparing to unpack .../7-libsource-highlight4t64_3.1.9-4.3+b1_amd64.d
eb ...
Unpacking libsource-highlight4t64:amd64 (3.1.9-4.3+b1) ...
Selecting previously unselected package gdb.
Preparing to unpack .../8-gdb_16.3-5_amd64.deb ...
Unpacking gdb (16.3-5) ...
Setting up libdebuginfod-common (0.193-3) ...
Setting up libsource-highlight-common (3.1.9-4.3) ...
Setting up libipt2 (2.1.2-3) ...
Setting up libbabeltrace1:amd64 (1.5.11-4+b2) ...
Setting up util-linux-extra (2.41.2-1) ...
Setting up login (1:4.16.0-2+really2.41.2-1) ...
Setting up libdebuginfod1t64:amd64 (0.193-3) ...
Setting up libsource-highlight4t64:amd64 (3.1.9-4.3+b1) ...
Setting up gdb (16.3-5) ...
Processing triggers for libc-bin (2.41-12) ...
Processing triggers for man-db (2.13.1-1) ...
Processing triggers for kali-menu (2025.4.1) ...

(pireddone@kali)-[~/Downloads]
$
```