

1. Les commandes de gestion de fichiers et de répertoires

1,1

```
Debian GNU/Linux 13 deb13server tty1
deb13server login: guest
Password:
Linux deb13server 6.12.48+deb13-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.12.48-1 (2025-09-20) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
guest@deb13server:~$
```

1,2

```
guest@deb13server:~$ pwd
/home/guest
guest@deb13server:~$ _
```

1,3

```
guest@deb13server:~$ cp /ect/password mot_de_passe
cp: impossible d'évaluer '/ect/password': Aucun fichier ou dossier de ce nom
guest@deb13server:~$ cp /etc/passwd mot_de_passe
guest@deb13server:~$ cp /ect/password mot_de_passe
cp: impossible d'évaluer '/ect/password': Aucun fichier ou dossier de ce nom
guest@deb13server:~$ ls -l
total 4
-rw-r--r-- 1 guest guest 1261  3 déc.  10:38 mot_de_passe
guest@deb13server:~$
```

1,4

```
guest@deb13server:~$ cp /etc/group /etc/profile .
guest@deb13server:~$ ls -l
total 12
-rw-r--r-- 1 guest guest  713 10 déc.  09:38 group
-rw-r--r-- 1 guest guest 1261  3 déc.  10:38 mot_de_passe
-rw-r--r-- 1 guest guest  828 10 déc.  09:38 profile
guest@deb13server:~$ _
```

1,5

```
guest@deb13server:~$ ls -a
.  ..  .bash_logout  .bashrc  group  mot_de_passe  .profile  profile
guest@deb13server:~$ ls -la
total 32
drwx----- 2 guest guest 4096 10 déc.  09:38 .
drwxr-xr-x 4 root  root  4096  3 déc.  10:30 ..
-rw-r--r-- 1 guest guest  220  3 déc.  10:30 .bash_logout
-rw-r--r-- 1 guest guest 3526  3 déc.  10:30 .bashrc
-rw-r--r-- 1 guest guest  713 10 déc.  09:38 group
-rw-r--r-- 1 guest guest 1261  3 déc.  10:38 mot_de_passe
-rw-r--r-- 1 guest guest  807  3 déc.  10:30 .profile
-rw-r--r-- 1 guest guest  828 10 déc.  09:38 profile
guest@deb13server:~$
```

1,6

```
guest@deb13server:~$ mkdir un_rep
guest@deb13server:~$ ls -l
total 16
-rw-r--r-- 1 guest guest 713 10 déc. 09:38 group
-rw-r--r-- 1 guest guest 1261 3 déc. 10:38 mot_de_passe
-rw-r--r-- 1 guest guest 828 10 déc. 09:38 profile
drwxrwxr-x 2 guest guest 4096 10 déc. 09:49 un_rep
guest@deb13server:~$ ls -F
group mot_de_passe profile un_rep/
guest@deb13server:~$ _
```

1,7

```
guest@deb13server:~$ ls
group mot_de_passe profile un_rep
guest@deb13server:~$ cp group g2
guest@deb13server:~$ ls
g2 group mot_de_passe profile un_rep
guest@deb13server:~$ rm -i group
rm : supprimer 'group' du type regular file ? n
guest@deb13server:~$ alias rm='rm -i'
guest@deb13server:~$ rm group
rm : supprimer 'group' du type regular file ? n
guest@deb13server:~$ unalias rm
guest@deb13server:~$ rm group
guest@deb13server:~$ ls
g2 mot_de_passe profile un_rep
guest@deb13server:~$ mw g2 group
-bash: mw : commande introuvable
guest@deb13server:~$ mv g2 group
guest@deb13server:~$ ls
group mot_de_passe profile un_rep
guest@deb13server:~$
```

1,8

```
guest@deb13server:~$ cd /usr/bin
guest@deb13server:/usr/bin$ pwd
/usr/bin
guest@deb13server:/usr/bin$ ls -l who
-rwxr-xr-x 1 root root 63944 4 juin 2025 who
guest@deb13server:/usr/bin$ cd
guest@deb13server:~$ _
```

1,9

```
guest@deb13server:~$ file /usr/bin/who
/usr/bin/who: ELF 64-bit LSB pie executable, x86-64, version 1 (SYSV), dynamically linked, interpreter /lib64/ld-linux
f06bb45edcf50157a6e1ab0523, for GNU/Linux 3.2.0, stripped
guest@deb13server:~$ file /etc/issue
/etc/issue: ASCII text
guest@deb13server:~$
```

1,10

```
guest@deb13server:~$ cat /etc/network/interfaces
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
allow-hotplug enp0s3
iface enp0s3 inet dhcp
# This is an autoconfigured IPv6 interface
iface enp0s3 inet6 auto
guest@deb13server:~$
```

1,11

```
# Network services, Internet style
#
# Updated from https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml .
#
# New ports will be added on request if they have been officially assigned
# by IANA and used in the real-world or are needed by a debian package.
# If you need a huge list of used numbers please install the nmap package.

tcpmux      1/tcp                # TCP port service multiplexer
echo        7/tcp
echo        7/udp
discard    9/tcp          sink null
discard    9/udp          sink null
sysstat    11/tcp         users
daytime    13/tcp
daytime    13/udp
netstat    15/tcp
gotd       17/tcp          quote
chargen    19/tcp         ttytst source
chargen    19/udp         ttytst source
ftp-data   20/tcp
ftp        21/tcp
fsp        21/udp          fspd
ssh        22/tcp                # SSH Remote Login Protocol
telnet     23/tcp
smtp       25/tcp          mail
time       37/tcp         timserver
time       37/udp         timserver
whois      43/tcp          nickname
tacacs     49/tcp                # Login Host Protocol (TACACS)
tacacs     49/udp
domain     53/tcp                # Domain Name Server
domain     53/udp
bootps     67/udp
bootpc     68/udp
tftp       69/udp
gopher     70/tcp                # Internet Gopher
finger     79/tcp
http       80/tcp                # WorldWideWeb HTTP
kerberos   88/tcp          kerberos5 krb5 kerberos-sec # Kerberos v5
kerberos   88/udp          kerberos5 krb5 kerberos-sec # Kerberos v5
iso-tsap   102/tcp         tsap # part of ISODE
acr-nema   104/tcp         dicom # Digital Imag. & Comm. 300
pop3       110/tcp         pop-3 # POP version 3
sunrpc     111/tcp         portmapper # RPC 4.0 portmapper
sunrpc     111/udp         portmapper
auth       113/tcp         authentication tap ident
nntp       119/tcp         readnews untp # USENET News Transfer Protocol
ntp        123/udp         # Network Time Protocol
```

1,12

```
# Network services, Internet style
#
# Updated from https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml
#
# New ports will be added on request if they have been officially assigned
# by IANA and used in the real-world or are needed by a debian package.
# If you need a huge list of used numbers please install the nmap package.

tcpmux      1/tcp          # TCP port service multiplexer
echo        7/tcp
echo        7/udp
discard     9/tcp          sink null
discard     9/udp          sink null
sysstat     11/tcp         users
daytime     13/tcp
daytime     13/udp
netstat     15/tcp
gotd        17/tcp         quote
chargen    19/tcp         ttytst source
chargen    19/udp         ttytst source
ftp-data    20/tcp
ftp         21/tcp
ftp         21/udp         fspd
ssh         22/tcp          # SSH Remote Login Protocol
telnet     23/tcp
smtp        25/tcp         mail
time        37/tcp         timserver
time        37/udp         timserver
whois       43/tcp         nickname
tacacs      49/tcp          # Login Host Protocol (TACACS)
tacacs      49/udp
domain      53/tcp          # Domain Name Server
domain      53/udp
bootps     67/udp
bootpc     68/udp
tftp        69/udp
gopher     70/tcp          # Internet Gopher
finger     79/tcp
http        80/tcp          www          # WorldWideWeb HTTP
kerberos    88/tcp         kerberos5 krb5 kerberos-sec # Kerberos v5
kerberos    88/udp         kerberos5 krb5 kerberos-sec # Kerberos v5
iso-tsap    102/tcp        tsap         # part of ISODE
acr-nema    104/tcp        dicom        # Digital Imag. & Comm. 300
pop3        110/tcp        pop-3        # POP version 3
sunrpc      111/tcp        portmapper   # RPC 4.0 portmapper
sunrpc      111/udp        portmapper
auth        113/tcp        authentication tap ident
nntp        119/tcp        readnews untp # USENET News Transfer Protocol
ntp         123/udp        # Network Time Protocol
--Plus--(12%)
```

2

2,1

```
guest@deb13server:~$ head /etc/services
# Network services, Internet style
#
# Updated from https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml
#
# New ports will be added on request if they have been officially assigned
# by IANA and used in the real-world or are needed by a debian package.
# If you need a huge list of used numbers please install the nmap package.

tcpmux      1/tcp          # TCP port service multiplexer
echo        7/tcp
guest@deb13server:~$ _
```

2,2

```
guest@deb13server:~$ tail /etc/services
sgi-cad      17004/tcp          # Cluster Admin daemon
binkp       24554/tcp          # binkp fidonet protocol
asp         27374/tcp          # Address Search Protocol
asp         27374/udp
csync2      30865/tcp          # cluster synchronization tool
dircproxy   57000/tcp          # Detachable IRC Proxy
tfido       60177/tcp          # fidonet EMSI over telnet
fido        60179/tcp          # fidonet EMSI over TCP

# Local services
guest@deb13server:~$ _
```

2,3

```
guest@deb13server:~$ unalias grep
guest@deb13server:~$ alias grep='grep --color=auto'
guest@deb13server:~$ grep HTTP /etc/services
http        80/tcp           www              # WorldWideWeb HTTP
https       443/udp          # HTTP/3
hkp         11371/tcp        # OpenPGP HTTP Keyserver
guest@deb13server:~$
```

2,4

```
guest@deb13server:~$ grep HTTP /etc/services
http        80/tcp           www              # WorldWideWeb HTTP
https       443/udp          # HTTP/3
hkp         11371/tcp        # OpenPGP HTTP Keyserver
guest@deb13server:~$ grep -i HTTP /etc/services
# Updated from https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml .
http        80/tcp           www              # WorldWideWeb HTTP
https       443/tcp          # http protocol over TLS/SSL
https       443/udp          # HTTP/3
http-alt    8080/tcp         webcache        # WWW caching service
hkp         11371/tcp        # OpenPGP HTTP Keyserver
guest@deb13server:~$ _
```

2,5

```
guest@deb13server:~$ grep '^http' /etc/services
http        80/tcp           www              # WorldWideWeb HTTP
https       443/tcp          # http protocol over TLS/SSL
https       443/udp          # HTTP/3
http-alt    8080/tcp         webcache        # WWW caching service
guest@deb13server:~$
```

2,6

```
guest@deb13server:~$ sort /etc/services | tail -3
zope        9673/tcp          # zope server
zope-ftp    8021/tcp          # zope management by ftp
zserv       346/tcp           # Zebra server
guest@deb13server:~$
```

2,7

```
tacacs      49/tcp      # Login Host Protocol (TACACS)
tacacs      49/udp
talk        517/udp
tcpmux      1/tcp      # TCP port service multiplexer
telnet      23/tcp
telnetcs    992/tcp    # Telnet over SSL
tftpd       60177/tcp  # tftpd
time        37/tcp     timserver
time        37/udp     timserver
tinc        655/tcp    # tinc control port
tinc        655/udp
tproxy      8081/tcp   # Transparent Proxy
uucpd       540/tcp    uucpd      # uucp daemon
venus       2430/tcp   # codacon port
venus       2430/udp   # Venus callback/wbc interface
venus-se    2431/tcp   # tcp side effects
venus-se    2431/udp   # udp sftp side effect
webmin      10000/tcp
who         513/udp    whod
whois       43/tcp     nicname
wnn6        22273/tcp  # wnn6
x11-1       6001/tcp
x11-2       6002/tcp
x11-3       6003/tcp
x11-4       6004/tcp
x11-5       6005/tcp
x11         6000/tcp   x11-0      # X Window System
x11-6       6006/tcp
x11-7       6007/tcp
xdmcp       177/udp    # X Display Manager Control Protocol
xinetd      9098/tcp
xmms2       9667/tcp   # Cross-platform Music Multiplexing System
xmpp-client 5222/tcp   jabber-client # Jabber Client Connection
xmpp-server 5269/tcp   jabber-server # Jabber Server Connection
xtel        1313/tcp   # french minitel
xtelw       1314/tcp   # french minitel
z3950       210/tcp    wais       # NISO Z39.50 database
zabbix-agent 10050/tcp  # Zabbix Agent
zabbix-trapper 10051/tcp # Zabbix Trapper
zebra       2601/tcp   # zebra vty
zebrasrv    2600/tcp   # zebra service
zephyr-clt  2103/udp   # Zephyr serv-hm connection
zephyr-hm   2104/udp   # Zephyr hostmanager
zephyr-srv  2102/udp   # Zephyr server
zip         6/ddp     # Zone Information Protocol
zope        9673/tcp   # zope server
zope-ftp    8021/tcp   # zope management by ftp
zserv       346/tcp    # Zebra server
```

2,8

```
jest@deb13server:~$ wc /etc/services
365 1795 12990 /etc/services
jest@deb13server:~$ _
```

2,9

```
guest@deb13server:~$ wc -l /etc/services
365 /etc/services
guest@deb13server:~$
```

2,11

```
[root@deb13server: ~]#sort etudiants.txt
Antoine
Azer
Cedric
David
Denis
Fabien
Nicolas
Souphiane
Tiphaine
Xavier
```

2,12

```
]root@deb13server: ~#sort -r etudiants.txt
Xavier
Tiphaine
Souphiane
Nicolas
Fabien
Denis
David
Cedric
Azer
Antoine
```

2,13

```
]root@deb13server: ~#sort -o prenom_tries eudiants.txt
sort: impossible de lire: eudiants.txt: Aucun fichier ou dossier de ce nom
]root@deb13server: ~#sort -o prenom_tries etudiants.txt
]root@deb13server: ~#ls -l
total 12
-rw-r--r-- 1 root root 74 11 déc. 16:23 etudiants.txt
-rw-r--r-- 1 root root 73 11 déc. 16:21 etudiant.txt
-rw-r--r-- 1 root root 74 11 déc. 16:29 prenom_tries
```

2,14

```
]root@deb13server: ~#cut -c -3 etudiant.txt
Nic
Den
Sou
Aze
Fab
Ced
Tip
Xav
Ant
Dav
```

2,15

```
]root@deb13server: ~#cut -c 2-5 etudiants.txt
icol
enis
ouph
zer
abie
edri
ipha
avie
ntoi
avid
```

2,16

```
]root@deb13server: ~#cut -c 3- etudiant.txt
coles
nis
uphiane
er
bien
dric
phaine
vier
toine
vid
```

2,18

```
]root@deb13server: ~#cut -d , -f 1 notes.csv
Antoine
Azer
Cedric
David
Denis
Fabien
Nicolas
Souphiane
Tiphaine
Xavier
]root@deb13server: ~#
```

2,19

```
]root@deb13server: ~# cut -d , -f -3 notes.csv
Antoine,SISR,13
Azer,SISR,13
Cedric,SISR,13
David,SISR,14
Denis,SLAM,17
Fabien,SISR,13
Nicolas,SISR,17
Souphiane,SLAM,16
Tiphaine,SLAM,15
Xavier,SLAM,11
]root@deb13server: ~#_
```

2,20

```
]root@deb13server: ~#cut -d , -f 1,3 notes.csv
Antoine,13
Azer,13
Cedric,13
David,14
Denis,17
Fabien,13
Nicolas,17
Souphiane,16
Tiphaine,15
Xavier,11
]root@deb13server: ~#
```

