

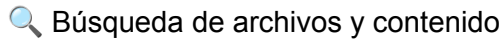
DevOps

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2025



find → Busca archivos en el sistema.

`find /home -name '*.log'` → Encuentra todos los `.log` en `/home`.

```
jose@PC-Jose:~$ find /home -name '*.html'
/home/jose/proyectos/index.html
jose@PC-Jose:~$ find /home -name '*.txt'
/home/jose/ejemplosComandos2.txt
/home/jose/ejemplosComandos.txt
jose@PC-Jose:~$ |
```

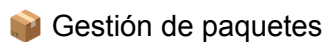
grep → Busca texto dentro de archivos.

grep 'ERROR' /var/log/syslog → Busca la palabra "ERROR" en los logs.

```

2025-08-12T09:59:50.902318-05:00 PC-Jose system[1]: apport-autoreport.path - Process error reports when automatic reporting is enabled (file watch) was skipped because of an unmet condition check (ConditionPathExists=/var/lib/apport/autoreport).
2025-08-12T09:59:50.902328-05:00 PC-Jose system[1]: apport-autoreport.timer - Process error reports when automatic reporting is enabled (timer based) was skipped because of an unmet condition check (ConditionPathExists=/var/lib/apport/autoreport).
2025-08-12T09:59:50.903401-05:00 PC-Jose kernel: RAS: Correctable Errors collector initialized.
2025-08-12T09:59:50.904507-05:00 PC-Jose kernel: WSL (26/9) ERROR: CheckConnection: getaddrinfo() failed: -5
2025-08-12T09:59:50.912712-05:00 PC-Jose snapd[60]: helpers.go:160 error trying to compare the snap system key: system-key missing on disk
2025-08-12T10:00:25.267817-05:00 PC-Jose system[1]: apport-autoreport.path - Process error reports when automatic reporting is enabled (file watch) was skipped because of an unmet condition check (ConditionPathExists=/var/lib/apport/autoreport).
2025-08-12T10:00:25.267823-05:00 PC-Jose system[1]: apport-autoreport.timer - Process error reports when automatic reporting is enabled (timer based) was skipped because of an unmet condition check (ConditionPathExists=/var/lib/apport/autoreport).
2025-08-12T10:00:25.267830-05:00 PC-Jose kernel: RAS: Correctable Errors collector initialized.
2025-08-19T06:46:47.492712-05:00 PC-Jose system[1]: apport-autoreport.path - Process error reports when automatic reporting is enabled (file watch) was skipped because of an unmet condition check (ConditionPathExists=/var/lib/apport/autoreport).
2025-08-19T06:46:47.492720-05:00 PC-Jose system[1]: apport-autoreport.timer - Process error reports when automatic reporting is enabled (timer based) was skipped because of an unmet condition check (ConditionPathExists=/var/lib/apport/autoreport).
2025-08-19T06:47:30.746111-05:00 PC-Jose kernel: WSL (26/9) ERROR: CheckConnection: getaddrinfo() failed: -5
2025-08-19T12:02:49.119892-05:00 PC-Jose kernel: WSL (26/9) ERROR: CheckConnection: getaddrinfo() failed: -5
2025-08-19T12:02:49.119900-05:00 PC-Jose kernel: WSL (26/9) ERROR: CheckConnection: getaddrinfo() failed: -5
2025-08-19T12:22:46.959169-05:00 PC-Jose kernel: WSL (26/9) ERROR: CheckConnection: getaddrinfo() failed: -3
2025-08-19T12:22:46.959175-05:00 PC-Jose kernel: WSL (26/9) ERROR: CheckConnection: getaddrinfo() failed: -5
2025-08-19T12:23:37.952675-05:00 PC-Jose kernel: WSL (26/9) ERROR: CheckConnection: getaddrinfo() failed: -5
2025-08-19T12:23:37.952682-05:00 PC-Jose kernel: WSL (26/9) ERROR: CheckConnection: getaddrinfo() failed: -5
2025-08-26T06:52:13.726912-05:00 PC-Jose system[1]: apport-autoreport.path - Process error reports when automatic reporting is enabled (file watch) was skipped because of an unmet condition check (ConditionPathExists=/var/lib/apport/autoreport).
2025-08-26T06:52:13.726918-05:00 PC-Jose system[1]: apport-autoreport.timer - Process error reports when automatic reporting is enabled (timer based) was skipped because of an unmet condition check (ConditionPathExists=/var/lib/apport/autoreport).
2025-08-26T06:52:13.727007-05:00 PC-Jose kernel: RAS: Correctable Errors collector initialized.
2025-08-26T06:52:58.171790-05:00 PC-Jose kernel: WSL (27/0) ERROR: CheckConnection: getaddrinfo() failed: -5

```



apt / yum / dnf → Instalan y gestionan paquetes.

`sudo apt install htop` → Instala htop.

```
jose@JC-Jose:~$ sudo apt install htop
[sudo] password for jose:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libnl-3-200 libnl-genl-3-200
Suggested packages:
  lm-sensors strace
The following NEW packages will be installed:
  htop libnl-3-200 libnl-genl-3-200
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 238 kB of archives.
After this operation, 665 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu noble/main amd64 libnl-3-200 amd64 3.7.0-0.3build1 [55.6 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble/main amd64 libnl-genl-3-200 amd64 3.7.0-0.3build1 [12.1 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble/main amd64 htop amd64 3.3.0-4build1 [171 kB]
Fetched 238 kB in 1s (261 kB/s)
Selecting previously unselected package libnl-3-200:amd64.
(Reading database ... 40794 files and directories currently installed.)
Preparing to unpack .../libnl-3-200_3.7.0-0.3build1_amd64.deb ...
Unpacking libnl-3-200:amd64 (3.7.0-0.3build1) ...
Selecting previously unselected package libnl-genl-3-200:amd64.
Preparing to unpack .../libnl-genl-3-200_3.7.0-0.3build1_amd64.deb ...
Unpacking libnl-genl-3-200:amd64 (3.7.0-0.3build1) ...
Selecting previously unselected package htop.
Preparing to unpack .../htop_3.3.0-4build1_amd64.deb ...
Unpacking htop (3.3.0-4build1) ...
Setting up libnl-3-200:amd64 (3.7.0-0.3build1) ...
Setting up libnl-genl-3-200:amd64 (3.7.0-0.3build1) ...
Setting up htop (3.3.0-4build1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.3) ...
```

Monitoreo de recursos

free → Muestra memoria usada y disponible.

free -h

```
jose@PC-Jose:~$ free -h
```

	total	used	free	shared	buff/cache	available
Mem:	7.6Gi	521Mi	7.0Gi	3.5Mi	175Mi	7.1Gi
Swap:	2.0Gi	0B	2.0Gi			

df → Espacio en disco por particiones.

df -h

```
jose@PC-Jose:~$ df -h
```

Filesystem	Size	Used	Avail	Use%	Mounted on
none	3.8G	0	3.8G	0%	/usr/lib/modules/6.6.87.2-microsoft-standard-WSL2
none	3.8G	4.0K	3.8G	1%	/mnt/wsl
drivers	448G	375G	73G	84%	/usr/lib/wsl/drivers
/dev/sdd	1007G	1.6G	955G	1%	/
none	3.8G	84K	3.8G	1%	/mnt/wslg
none	3.8G	0	3.8G	0%	/usr/lib/wsl/lib
rootfs	3.8G	2.7M	3.8G	1%	/init
none	3.8G	556K	3.8G	1%	/run
none	3.8G	0	3.8G	0%	/run/lock
none	3.8G	0	3.8G	0%	/run/shm
none	3.8G	76K	3.8G	1%	/mnt/wslg/versions.txt
none	3.8G	76K	3.8G	1%	/mnt/wslg/doc
C:\	448G	375G	73G	84%	/mnt/c
tmpfs	3.8G	16K	3.8G	1%	/run/user/1000

du → Tamaño de carpetas y archivos.

du -sh /var/log/*

```
jose@PC-Jose:~$ du -sh /var/log/*
0      /var/log/README
20K    /var/log/alternatives.log
60K    /var/log/apt
8.0K   /var/log/auth.log
116K   /var/log/bootstrap.log
0      /var/log/btmp
4.0K   /var/log/dist-upgrade
36K    /var/log/dmesg
36K    /var/log/dmesg.0
24K    /var/log/dmesg.1.gz
12K    /var/log/dmesg.2.gz
344K   /var/log/dpkg.log
0      /var/log/faillog
4.0K   /var/log/fontconfig.log
70M    /var/log/journal
140K   /var/log/kern.log
4.0K   /var/log/landscape
0      /var/log/lastlog
du: cannot read directory '/var/log/private': Permission denied
4.0K   /var/log/private
572K   /var/log/syslog
0      /var/log/ubuntu-advantage-apt-hook.log
8.0K   /var/log/unattended-upgrades
12K    /var/log/wtmp
```

htop → Monitor interactivo de procesos.

htop

```

0[      0.0%] 4[      0.0%] 8[      0.0%] 12[      0.0%]
1[      0.0%] 5[      0.0%] 9[      0.0%] 13[      0.0%]
2[      0.0%] 6[      0.0%] 10[      0.0%] 14[      0.0%]
3[      0.0%] 7[      0.0%] 11[      0.0%] 15[      0.0%]

Mem[|||||] 383M/7.57G Tasks: 26, 17 thr, 0 kthr: 1 running
Swp[      ] 0K/2.00G Load average: 0.01 0.02 0.00
Uptime: 00:44:28

Main 1/0
PID USER      PRI  NI  VIRT   RES   SHR  S  CPU% MEM%   TIME+  Command
1 root        20    0 21772 12128 9184  S   0.0  0.2  0:00.51 /sbin/init
2 root        20    0 3060   1664  1664  S   0.0  0.0  0:00.00 /init
6 root        20    0 3076   1792  1792  S   0.0  0.0  0:00.00 plan9 --control-socket 7 --log-level 4 --server-fd 8 --pipe-fd 10 --log-truncate
7 root        20    0 3076   1792  1792  S   0.0  0.0  0:00.00 plan9 --control-socket 7 --log-level 4 --server-fd 8 --pipe-fd 10 --log-truncate
8 root        20    0 3060   1664  1664  S   0.0  0.0  0:00.00 /init
52 root       20    -1 66824 15276 14380  S   0.0  0.2  0:00.19 /usr/lib/systemd/systemd-journald
98 root        20    0 25136 6144   4864  S   0.0  0.1  0:00.24 /usr/lib/systemd/systemd-udev
158 systemd-rg 20    0 21452 12672 9096  S   0.0  0.2  0:00.10 /usr/lib/systemd/systemd-resolved
159 systemd-ti 20    0 91020 7680  6784  S   0.0  0.1  0:00.10 /usr/lib/systemd/systemd-timesyncd
179 systemd-ti 20    0 91020 7680  6784  S   0.0  0.1  0:00.08 /usr/lib/systemd/systemd-timesyncd
184 root        20    0 4236   2560  2304  S   0.0  0.0  0:00.00 /usr/sbin/cron -f -P
185 messagebus 20    0 9620   4992  4080  S   0.0  0.1  0:00.09 @dbus-daemon --system --address=systemd: --nofork --nopidfile --systemd-activation --sysl
197 root        20    0 17960 8448  7552  S   0.0  0.1  0:00.05 /usr/lib/systemd/systemd-logind
200 root        20    0 1714M 12544 10368  S   0.0  0.2  0:00.04 /usr/libexec/wsl-pro-service -vv
203 root        20    0 3160   1920  1792  S   0.0  0.0  0:00.00 /sbin/agetty -o -p -- \u --noclear - keep-baud - 115200,38400,9600 vt220
211 syslog      20    0 217M 5376 4352 S   0.0  0.1  0:00.02 /usr/sbin/rsyslogd -n -iNONE
212 root        20    0 3116 1792 1664 S   0.0  0.0  0:00.00 /sbin/agetty -o -p -- \u --noclear - linux
230 root        20    0 104M 22144 13056 S   0.0  0.3  0:00.07 /usr/bin/python3 /usr/share/unattended-upgrades/unattended-upgrade-shutdown --wait-for-si
232 root        20    0 1714M 12544 10368 S   0.0  0.2  0:00.00 /usr/libexec/wsl-pro-service -vv
233 root        20    0 1714M 12544 10368 S   0.0  0.2  0:00.00 /usr/libexec/wsl-pro-service -vv
234 root        20    0 1714M 12544 10368 S   0.0  0.2  0:00.00 /usr/libexec/wsl-pro-service -vv
235 root        20    0 1714M 12544 10368 S   0.0  0.2  0:00.00 /usr/libexec/wsl-pro-service -vv
236 root        20    0 1714M 12544 10368 S   0.0  0.2  0:00.00 /usr/libexec/wsl-pro-service -vv
237 syslog      20    0 217M 5376 4352 S   0.0  0.1  0:00.02 /usr/sbin/rsyslogd -n -iNONE
238 syslog      20    0 217M 5376 4352 S   0.0  0.1  0:00.00 /usr/sbin/rsyslogd -n -iNONE
239 syslog      20    0 217M 5376 4352 S   0.0  0.1  0:00.01 /usr/sbin/rsyslogd -n -iNONE
240 root        20    0 1714M 12544 10368 S   0.0  0.2  0:00.00 /usr/libexec/wsl-pro-service -vv
242 root        20    0 1714M 12544 10368 S   0.0  0.2  0:00.02 /usr/libexec/wsl-pro-service -vv
243 root        20    0 1714M 12544 10368 S   0.0  0.2  0:00.02 /usr/libexec/wsl-pro-service -vv
244 root        20    0 1714M 12544 10368 S   0.0  0.2  0:00.02 /usr/bin/python3 /usr/share/unattended-upgrades/unattended-upgrade-shutdown --wait-for-si
280 root        20    0 104M 22144 13056 S   0.0  0.3  0:00.00 /usr/bin/python3 /usr/share/unattended-upgrades/unattended-upgrade-shutdown --wait-for-si

F1Help F2Setup F3Search F4Filter F5Tree F6SortBy F7Nice F8Nice F9Kill F10Quit

```

Gestión de usuarios y grupos

adduser → Crear un usuario.

sudo adduser devops

```
jose@PC-Jose:~$ sudo adduser jose2
[sudo] password for jose:
info: Adding user `jose2' ...
info: Selecting UID/GID from range 1000 to 59999 ...
info: Adding new group `jose2' (1001) ...
info: Adding new user `jose2' (1001) with group `jose2 (1001)' ...
info: Creating home directory `/home/jose2' ...
info: Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for jose2
Enter the new value, or press ENTER for the default
    Full Name []: Jose2
    Room Number []: Jose2
    Work Phone []: Jose2
    Home Phone []: Jose2
    Other []: Jose2
Is the information correct? [Y/n] y
info: Adding new user `jose2' to supplemental / extra groups `users' ...
info: Adding user `jose2' to group `users' ...
```

usermod → Modificar usuario o agregar a grupos.

sudo usermod -aG docker devops

```
jose@PC-Jose:~$ sudo usermod -aG jose jose2
jose@PC-Jose:~$ |
```

groups → Ver a qué grupos pertenece un usuario.

groups devops

```
jose@PC-Jose:~$ groups jose2
jose2 : jose2 users jose
jose@PC-Jose:~$ |
```

Redes

ip → Ver interfaces de red.

ip a

```
jose@PC-Jose:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet 10.255.255.254/32 brd 10.255.255.254 scope global lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1492 qdisc mq state UP group default qlen 1000
    link/ether 00:15:5d:40:8c:31 brd ff:ff:ff:ff:ff:ff
    inet 172.28.24.241/20 brd 172.28.31.255 scope global eth0
        valid_lft forever preferred_lft forever
    inet6 fe80::215:5dff:fe40:8c31/64 scope link
        valid_lft forever preferred_lft forever
```

ping → Probar conectividad.

ping [google.com](https://www.google.com)

```
jose@PC-Jose:~$ ping google.com
PING google.com (142.251.132.174) 56(84) bytes of data:
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=1 ttl=116 time=42.7 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=2 ttl=116 time=72.8 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=3 ttl=116 time=83.4 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=4 ttl=116 time=29.4 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=5 ttl=116 time=28.3 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=6 ttl=116 time=12.8 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=7 ttl=116 time=17.5 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=8 ttl=116 time=86.3 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=9 ttl=116 time=20.4 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=10 ttl=116 time=41.8 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=11 ttl=116 time=93.6 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=12 ttl=116 time=29.4 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=13 ttl=116 time=35.5 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=14 ttl=116 time=20.7 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=15 ttl=116 time=29.4 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=16 ttl=116 time=15.3 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=17 ttl=116 time=16.5 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=18 ttl=116 time=24.1 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=19 ttl=116 time=10.9 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=20 ttl=116 time=17.3 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=21 ttl=116 time=16.6 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=22 ttl=116 time=142 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=23 ttl=116 time=9.73 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=24 ttl=116 time=109 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=25 ttl=116 time=70.1 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=26 ttl=116 time=37.1 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=27 ttl=116 time=56.0 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=28 ttl=116 time=10.8 ms
64 bytes from ncboga-ak-in-f14.1e100.net (142.251.132.174): icmp_seq=29 ttl=116 time=16.4 ms
^C
--- google.com ping statistics ---
29 packets transmitted, 29 received, 0% packet loss, time 27997ms
rtt min/avg/max/mdev = 9.734/41.217/141.509/33.394 ms
```

netstat → Ver puertos abiertos y conexiones.

netstat -tulnp

```
jose@PC-Jose:~$ netstat -tulnp
(No info could be read for "-p": geteuid()=1000 but you should be root.)
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Program name
tcp        0      0 10.255.255.254:53      0.0.0.0:*                LISTEN      -
tcp        0      0 127.0.0.54:53         0.0.0.0:*                LISTEN      -
tcp        0      0 127.0.0.53:53         0.0.0.0:*                LISTEN      -
udp        0      0 127.0.0.1:323         0.0.0.0:*                -          -
udp        0      0 127.0.0.54:53         0.0.0.0:*                -          -
udp        0      0 127.0.0.53:53         0.0.0.0:*                -          -
udp        0      0 10.255.255.254:53     0.0.0.0:*                -          -
udp6       0      0 :::1:323              :::*                    -          -
```

Compresión de archivos

tar → Comprimir/Descomprimir.
tar -czvf backup.tar.gz /home/usuario

```
jose@PC-Jose:~$ tar -czvf proyectos.tar.gz /home/jose/proyectos
tar: Removing leading '/' from member names
/home/jose/proyectos/
/home/jose/proyectos/ejemplojs/
/home/jose/proyectos/styles.css
/home/jose/proyectos/index.html
```

zip / unzip → Crear y extraer ZIPs.
zip -r proyecto.zip proyecto/

```
jose@PC-Jose:~$ zip -r proyectos.zip proyectos/
adding: proyectos/ (stored 0%)
adding: proyectos/ejemplojs/ (stored 0%)
adding: proyectos/styles.css (deflated 40%)
adding: proyectos/index.html (deflated 36%)
```

unzip proyecto.zip

```
jose@PC-Jose:~$ unzip proyectos.zip
Archive:  proyectos.zip
replace proyectos/styles.css? [y]es, [n]o, [A]ll, [N]one, [r]ename: r
new name: copia
  inflating: copia
replace proyectos/index.html? [y]es, [n]o, [A]ll, [N]one, [r]ename: y
  inflating: proyectos/index.html
```

◆ Comandos Avanzados (automatización y administración remota)

Procesos

ps aux | grep → Filtrar procesos por nombre.
ps aux | grep nginx

```
jose@PC-Jose:~$ ps aux | grep nginx
jose      1739  0.0  0.0  4088  1920 pts/0    S+   08:33   0:00 grep --color=auto nginx
```

kill → Matar procesos por nombre.
kill -9 python

```
jose@PC-Jose:~$ kill -9 python
jose@PC-Jose:~$ ps aux | grep python
root      230  0.0  0.2 106992 22144 ?        Ssl  07:18   0:00 /usr/bin/python3 /usr/share/unattended-upgrades/unattended-upgrade-shutdown --wait-for-si
gnal
jose      1746  0.0  0.0  4088  1920 pts/0    S+   08:35   0:00 grep --color=auto python
```

⚡ Personalización y productividad

alias → Crear atajos de comandos.

alias ll='ls -la'

```
jose@PC-Jose:~$ alias ll='ls -la'
jose@PC-Jose:~$ ll
total 64
drwxr-x--- 7 jose jose 4096 Aug 26 07:54 .
drwxr-xr-x 4 root root 4096 Aug 26 07:37 ..
-rw----- 1 jose jose  940 Aug 19 22:23 .bash_history
-rw-r--r-- 1 jose jose  220 Aug 12 10:00 .bash_logout
-rw-r--r-- 1 jose jose 3771 Aug 12 10:00 .bashrc
drwx----- 2 jose jose 4096 Aug 12 10:00 .cache
drwx----- 4 jose jose 4096 Aug 26 07:35 .config
drwxr-xr-x 2 jose jose 4096 Aug 19 06:46 .landscape
drwxr-xr-x 3 jose jose 4096 Aug 19 06:56 .local
-rw-r--r-- 1 jose jose    0 Aug 26 06:52 .motd_shown
-rw-r--r-- 1 jose jose  807 Aug 12 10:00 .profile
-rw-r--r-- 1 jose jose    0 Aug 12 10:01 .sudo_as_admin_successful
-rw-r--r-- 1 jose jose  447 Aug 19 07:27 copia
-rw-r--r-- 1 jose jose   91 Aug 19 07:39 ejemplosComandos.txt
-rw-r--r-- 1 jose jose   90 Aug 19 07:44 ejemplosComandos2.txt
drwxr-xr-x 3 jose jose 4096 Aug 26 07:54 proyectos
-rw-r--r-- 1 jose jose  760 Aug 26 07:50 proyectos.tar.gz
-rw-r--r-- 1 jose jose 1221 Aug 26 07:53 proyectos.zip
jose@PC-Jose:~$ |
```

history → Ver historial de comandos.

history

```
jose@PC-Jose:~$ history
 1 clear
 2 sudo apt upgrade && sudo apt upgrade -y
 3 df
 4 clear
 5 mkdir proyectos
 6 cd
 7 ls
 8 cd proyectos
 9 mkdir ejemplojs
10 cd ejemplojs/
11 .code
12 . code
13 ls
14 clear
15 cd proyectos/
16 cd ejemplojs/
17 code .
18 ls
```

!**<cmd>** → Ejecutar el último comando que empieza por **<cmd>**.

!ls

```
jose@PC-Jose:~$ !ls
ls
copia  ejemplosComandos.txt  ejemplosComandos2.txt  proyectos  proyectos.tar.gz  proyectos.zip
```


Automatización

crontab → Programar tareas automáticas.

crontab -e

Ejemplo: 0 2 * * * /usr/bin/backup.sh → corre un backup todos los días a las 2 AM.

```
jose@PC-Jose:~$ crontab -e
no crontab for jose - using an empty one

Select an editor. To change later, run 'select-editor'.
 1. /bin/nano      <---- easiest
 2. /usr/bin/vim.basic
 3. /usr/bin/vim.tiny
 4. /bin/ed

Choose 1-4 [1]: 1
crontab: installing new crontab
```

```
jose@PC-Jose:~$ crontab -e
crontab: installing new crontab
jose@PC-Jose:~$ crontab -l
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h  dom mon dow   command
0 2 * * * /usr/bin/backup.sh
```

Transferencia de archivos y conexión remota

scp → Copiar archivos entre servidores.

scp archivo.txt usuario@192.168.1.10:/home/usuario/

```
jose@PC-Jose:~$ scp jose@192.168.1.10:/home/jose/ejemplosComandos.txt /home/jose2
^Cjose@PC-Jose:~$ |
```

ssh → Conexión remota segura a servidores.

ssh usuario@ip_servidor

```
jose@PC-Jose:~$ ssh jose@192.168.1.10
hostname
ssh: connect to host 192.168.1.10 port 22: Connection timed out
jose@PC-Jose:~$ hostname
PC-Jose
```