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Estou usando o docker desktop para windows por meio de wsl com a imagem do ubuntu, assim, alguns comandos relacionados à interface visual e à mudança de nome não fazem sentido no meu contexto.

```
# ls
bin boot dev etc home lib lib32 lib64 libx32 media mnt opt proc root run sbin srv sys tmp usr var
```

lista os arquivos no diretório

Comando com opções:

```
bin boot dev etc home lib lib32 lib64 libx32 media mnt opt proc
# ls -lF
total 60
lrwxrwxrwx 1 root root 7 Mar 1 02:03 bin -> usr/bin/
drwxr-xr-x 2 root root 4096 Apr 18 2022 boot/
drwxr-xr-x 5 root root 360 Mar 8 22:43 dev/
drwxr-xr-x 1 root root 4096 Mar 8 01:15 etc/
drwxr-xr-x 2 root root 4096 Apr 18 2022 home/
lrwxrwxrwx 1 root root 7 Mar 1 02:03 lib -> usr/lib/
lrwxrwxrwx 1 root root 9 Mar 1 02:03 lib32 -> usr/lib32/
lrwxrwxrwx 1 root root 9 Mar 1 02:03 lib64 -> usr/lib64/
lrwxrwxrwx 1 root root 10 Mar 1 02:03 libx32 -> usr/libx32/
drwxr-xr-x 2 root root 4096 Mar 1 02:03 media/
drwxr-xr-x 2 root root 4096 Mar 1 02:03 mnt/
drwxr-xr-x 2 root root 4096 Mar 1 02:03 opt/
dr-xr-xr-x 1795 root root 0 Mar 8 22:43 proc/
drwx----- 1 root root 4096 Mar 8 01:17 root/
drwxr-xr-x 5 root root 4096 Mar 1 02:06 run/
lrwxrwxrwx 1 root root 8 Mar 1 02:03 sbin -> usr/sbin/
drwxr-xr-x 2 root root 4096 Mar 1 02:03 srv/
dr-xr-xr-x 11 root root 0 Mar 8 22:43 sys/
drwxrwxrwt 1 root root 4096 Mar 8 01:15 tmp/
drwxr-xr-x 1 root root 4096 Mar 1 02:03 usr/
drwxr-xr-x 1 root root 4096 Mar 1 02:06 var/
#
```

Mais de uma opção

```
drwxr-xr-x 1 root root 4096 Mar 1 02:00 var /
# ls -a -l
total 68
drwxr-xr-x 1 root root 4096 Mar 8 01:13 .
drwxr-xr-x 1 root root 4096 Mar 8 01:13 ..
-rwxr-xr-x 1 root root 0 Mar 8 01:13 .dockerenv
lrwxrwxrwx 1 root root 7 Mar 1 02:03 bin -> usr/bin
drwxr-xr-x 2 root root 4096 Apr 18 2022 boot
drwxr-xr-x 5 root root 360 Mar 8 22:43 dev
drwxr-xr-x 1 root root 4096 Mar 8 01:15 etc
drwxr-xr-x 1 root root 4096 Mar 8 23:19 home
lrwxrwxrwx 1 root root 7 Mar 1 02:03 lib -> usr/lib
lrwxrwxrwx 1 root root 9 Mar 1 02:03 lib32 -> usr/lib32
lrwxrwxrwx 1 root root 9 Mar 1 02:03 lib64 -> usr/lib64
lrwxrwxrwx 1 root root 10 Mar 1 02:03 libx32 -> usr/libx32
drwxr-xr-x 2 root root 4096 Mar 1 02:03 media
drwxr-xr-x 2 root root 4096 Mar 1 02:03 mnt
drwxr-xr-x 2 root root 4096 Mar 1 02:03 opt
dr-xr-xr-x 2259 root root 0 Mar 8 22:43 proc
drwx----- 1 root root 4096 Mar 8 23:19 root
drwxr-xr-x 5 root root 4096 Mar 1 02:06 run
lrwxrwxrwx 1 root root 8 Mar 1 02:03/sbin -> usr/sbin
drwxr-xr-x 2 root root 4096 Mar 1 02:03 srv
dr-xr-xr-x 11 root root 0 Mar 8 22:43 sys
drwxrwxrwt 1 root root 4096 Mar 8 01:15 tmp
drwxr-xr-x 1 root root 4096 Mar 1 02:03 usr
drwxr-xr-x 1 root root 4096 Mar 1 02:06 var
#
```

```
# ls -all
total 68
drwxr-xr-x  1 root root 4096 Mar  8 01:13 .
drwxr-xr-x  1 root root 4096 Mar  8 01:13 ..
-rwxr-xr-x  1 root root   0 Mar  8 01:13 .dockerenv
lrwxrwxrwx  1 root root   7 Mar  1 02:03 bin -> usr/bin
drwxr-xr-x  2 root root 4096 Apr 18  2022 boot
drwxr-xr-x  5 root root  360 Mar  8 22:43 dev
drwxr-xr-x  1 root root 4096 Mar  8 01:15 etc
drwxr-xr-x  1 root root 4096 Mar  8 23:19 home
lrwxrwxrwx  1 root root   7 Mar  1 02:03 lib -> usr/lib
lrwxrwxrwx  1 root root   9 Mar  1 02:03 lib32 -> usr/lib32
lrwxrwxrwx  1 root root   9 Mar  1 02:03 lib64 -> usr/lib64
lrwxrwxrwx  1 root root  10 Mar  1 02:03 libx32 -> usr/libx32
drwxr-xr-x  2 root root 4096 Mar  1 02:03 media
drwxr-xr-x  2 root root 4096 Mar  1 02:03 mnt
drwxr-xr-x  2 root root 4096 Mar  1 02:03 opt
dr-xr-xr-x 2279 root root   0 Mar  8 22:43 proc
drwx-----  1 root root 4096 Mar  8 23:19 root
drwxr-xr-x  5 root root 4096 Mar  1 02:06 run
lrwxrwxrwx  1 root root   8 Mar  1 02:03 sbin -> usr/sbin
drwxr-xr-x  2 root root 4096 Mar  1 02:03 srv
dr-xr-xr-x 11 root root   0 Mar  8 22:43 sys
drwxrwxrwt  1 root root 4096 Mar  8 01:15 tmp
drwxr-xr-x  1 root root 4096 Mar  1 02:03 usr
drwxr-xr-x  1 root root 4096 Mar  1 02:06 var
#
```

```
# pwd
/
# cd bin
# pwd
/bin
#
```

```
cd: cd [-L|[-P [-e]] [-@]] [dir]
Change the shell working directory.

Change the current directory to DIR. The default DIR is the value of the
HOME shell variable.

The variable CDPATH defines the search path for the directory containing
DIR. Alternative directory names in CDPATH are separated by a colon (:).
A null directory name is the same as the current directory. If DIR begins
with a slash (/), then CDPATH is not used.

If the directory is not found, and the shell option 'cdable_vars' is set,
the word is assumed to be a variable name. If that variable has a value,
its value is used for DIR.

Options:
-L      force symbolic links to be followed: resolve symbolic
        links in DIR after processing instances of '..'
-P      use the physical directory structure without following
        symbolic links: resolve symbolic links in DIR before
        processing instances of '..'
-e      if the -P option is supplied, and the current working
        directory cannot be determined successfully, exit with
        a non-zero status
-@      on systems that support it, present a file with extended
        attributes as a directory containing the file attributes

The default is to follow symbolic links, as if '-L' were specified.
'..' is processed by removing the immediately previous pathname component
```

Cd - change directory

```
root@2a12a34f50fc:/# grep -- -a /etc/hosts
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# echo $SHELL
/bin/bash
```

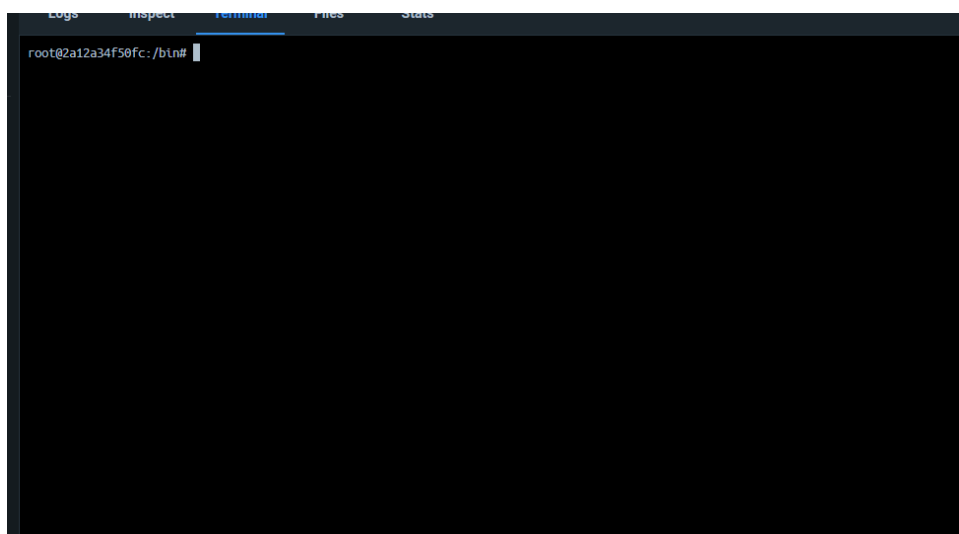
Descobrimos shell

```
# /etc/shells: valid login shells
/bin/sh
/bin/bash
/usr/bin/bash
/bin/rbash
/usr/bin/rbash
/usr/bin/sh
/bin/dash
/usr/bin/dash
```

Shells instaladas

cp	cpio	cpio	cpio	cpio	cpio	cpio	cpio	cpio
root@2a12a34f50fc:/bin# ls								
addpart	comm	dpkg-trigger	help2tags	lisp	pathchk	scriptive	tabs	vdirc
apt	cp	du	hostname	lsipc	perl	scriptreplay	tab	vi
apt-cache	csplit	echo	hostname	lslocks	perl5.34.0	sdiff	tail	view
apt-cdrom	cut	editor	l386	lslogins	pgrep	sed	tar	vin
apt-config	dash	egrep	iconv	lsns	pidof	select-editor	taskset	vin.basic
apt-get	date	env	id	man	pidwait	sensible-browser	tee	vindiff
apt-key	dd	ex	info	nawk	pldd	sensible-editor	tempfile	vintutor
apt-mark	deb-systemd-helper	expand	infocap	ncooke	pkill	sensible-pager	test	vnstat
arch	deb-systemd-lookup	expr	install	nd5sum	pldd	seq	tic	w
awk	debconf	factor	ionice	nd5sum.textutils	pnop	setarch	timeout	wall
b2sum	debconf-apt-progress	fallog	ipcm	msg	pr	setpriv	tload	watch
base32	debconf-communicate	fallog	ipcm	mkfif	printenv	setuid	toe	wc
base64	debconf-copydb	fallog	ipcm	mkfif	printf	setterm	top	wcctl
basename	debconf-escape	false	ischroot	mkfif	prlimit	sg	touch	whereis
basenc	debconf-set-selections	fgrep	join	mktemp	ps	sh	tput	which
bash	debconf-show	find	kill	more	ptx	shasum	tr	which.debian
bashbug	delpart	find	last	mount	pwd	sha224sum	true	who
captaininfo	df	findmnt	lastb	mountpoint	pwdx	sha256sum	truncate	whoami
cat	diff	flock	lastlog	nv	rbash	sha384sum	tset	x86_64
chage	diff3	fnt	ldd	namet	readlink	sha512sum	tsort	xargs
chattr	dir	fold	link	nawk	realpath	shred	tty	xod
chcon	dircolors	free	linux32	ncp	renice	shuf	tzselect	yes
chgrp	dirname	getconf	linux64	nice	reset	skill	uclampset	ypdomainname
chmod	dnsmasq	getent	ln	nlsdomainname	resizepart	slabtop	unmount	zcat
chown	dnsmasqdomainname	getopt	locale	nl	rev	sleep	uname	zcp
chown	dnsmasqdomainname	passwd	locale-check	nmap	rgrep	snice	uncompress	zdiff
chown	dnsmasqdomainname	passwd	localedef	nmap	rm	sort	uncompress	zdiff

Localização dos comandos



Limpendo a tela

```
root@2a12a34f50fc:/bin# echo teste
teste
root@2a12a34f50fc:/bin#
```

```
root@2a12a34f50fc:/bin# echo teste
teste
root@2a12a34f50fc:/bin# echo 'teste'
teste
root@2a12a34f50fc:/bin# echo "teste"
teste
root@2a12a34f50fc:/bin# echo -e "string1\tstring2\nstring3"
string1\tstring2\nstring3
root@2a12a34f50fc:/bin# echo -e "string1\tstring2\nstring3"
string1 string2
string3
root@2a12a34f50fc:/bin#
```

Mostra mensagens no terminal

```
root@2a12a34f50fc:/bin#  
(reverse-i-search)`':
```

Encontrar comandos no terminal

```
root@2a12a34f50fc:/bin# history  
1  ls  
2  vim  
3  vim  
4  apt-get update  
5  apt install vim  
6  vim  
7  pwd --version  
8  pwd -v  
9  apt-uptade pwd  
10 apt -update pwd  
11 apt update pwd  
12 apt update  
13 cd --help  
14 grep  
15 grep --help  
16 greep -- -a /etc/hosts  
17 grep -- -a /etc/hosts  
18 echo $SHELL  
19 apt /etc/hosts
```

Lista histórico de comandos

```
32 echo teste  
33 echo 'teste'  
34 echo "teste"  
35 echo -e "string1\tstring2\nstring3"  
36 echo -e "string1\tstring2\nstring3"  
37 history  
root@2a12a34f50fc:/bin# !1  
ls  
'['  
addpart  
apt  
apt-cache  
apt-cdrom  
apt-config  
apt-get  
apt-key  
apt-mark  
arch  
awk  
b2sum  
comm  
cp  
csplit  
cut  
dash  
date  
dd  
deb-systemd-helper  
deb-systemd-invoke  
debconf  
debconf-apt-progress  
debconf-communicate  
dpkg-trigger  
du  
echo  
editor  
egrep  
env  
ex  
expand  
expr  
factor  
faillog  
help2tags  
hostid  
hostname  
i386  
iconv  
id  
infocmp  
infotocap  
install  
ionice  
lpcmk  
lpcrm  
lsipc  
lslocks  
lslogins  
lsnm  
lsns  
man  
nawk  
nccookie  
nd5sum  
nd5sum.textutils  
msg  
msg  
mkdir  
pathchk  
perl  
perl5.34.0  
pgrep  
pidof  
pidwait  
pinky  
pkill  
pldd  
pnop  
pr  
printenv  
scriptlive  
scriptreplay  
sdiff  
sed  
select-editor  
sensible-browser  
sensible-editor  
sensible-pager  
seq  
setarch  
setpriv  
setuid  
tabs  
tac  
tail  
tar  
taskset  
tee  
tempfile  
test  
tic  
timeout  
tload  
toe  
vdi  
vi  
vi  
vi  
vi  
vi  
vms  
w  
wa  
wc
```

```
bash: history: help: numeric argument required  
root@2a12a34f50fc:/bin# history | grep help  
13 cd --help  
15 grep --help  
39 history help  
40 history | grep help  
root@2a12a34f50fc:/bin#
```

Encontra comandos utilizando palavra chave

```
39 history | grep help
40 history | grep help
root@2a12a34f50fc:/bin# history -c
root@2a12a34f50fc:/bin# history
1 history
root@2a12a34f50fc:/bin#
```

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Limpa histórico

```
root@2a12a34f50fc:/bin# echo $HISTSIZE
1000
root@2a12a34f50fc:/bin#
```

Printa o tamanho do histórico

```
bash: export: `50': not a valid identifier
root@2a12a34f50fc:/bin# export HISTSIZE=50
root@2a12a34f50fc:/bin# echo $HISTSIZE
50
root@2a12a34f50fc:/bin#
```

Alterando o histsize

```
root@2a12a34f50fc:/bin# cat ~/.bash_history
ls
vim
vim
apt-get update
apt install vim
vim
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# exit
exit
# /bin/bash
```

```
root@2a12a34f50fc:/# ls
bin  dev  home  lib32  libx32  mnt  proc  run  srv  tmp  var
boot  etc  lib  lib64  media  opt  root  sbin  sys  usr
```

```
root@2a12a34f50fc:/# ls -l
```

```
bin
boot
dev
etc
home
lib
lib32
lib64
libx32
media
mnt
opt
proc
root
run
sbin
srv
sys
tmp
usr
var
```

```
root@2a12a34f50fc:/# ls -l
```

```
total 60
```

```
lrwxrwxrwx    1 root root    7 Mar  1 02:03 bin -> usr/bin
drwxr-xr-x    2 root root 4096 Apr 18 2022 boot
drwxr-xr-x    5 root root 360 Mar  8 22:43 dev
drwxr-xr-x    1 root root 4096 Mar  8 01:15 etc
drwxr-xr-x    1 root root 4096 Mar  8 23:19 home
lrwxrwxrwx    1 root root    7 Mar  1 02:03 lib -> usr/lib
lrwxrwxrwx    1 root root    9 Mar  1 02:03 lib32 -> usr/lib32
lrwxrwxrwx    1 root root    9 Mar  1 02:03 lib64 -> usr/lib64
lrwxrwxrwx    1 root root   10 Mar  1 02:03 libx32 -> usr/libx32
drwxr-xr-x    2 root root 4096 Mar  1 02:03 media
drwxr-xr-x    2 root root 4096 Mar  1 02:03 mnt
drwxr-xr-x    2 root root 4096 Mar  1 02:03 opt
dr-xr-xr-x 3618 root root    0 Mar  8 22:43 proc
drwx-----   1 root root 4096 Mar  8 23:19 root
drwxr-xr-x    5 root root 4096 Mar  1 02:06 run
lrwxrwxrwx    1 root root    8 Mar  1 02:03 sbin -> usr/sbin
drwxr-xr-x    2 root root 4096 Mar  1 02:03 srv
dr-xr-xr-x   11 root root    0 Mar  8 22:43 sys
drwxrwxrwt    1 root root 4096 Mar  8 23:57 tmp
drwxr-xr-x    1 root root 4096 Mar  1 02:03 usr
drwxr-xr-x    1 root root 4096 Mar  1 02:06 var
```

```
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# ls -ld /bin
```

```
lrwxrwxrwx 1 root root 7 Mar  1 02:03 /bin -> usr/bin
```

```
root@2a12a34f50fc:/#
```



```

drwxr-xr-x 1 root root 4096 Mar  8 01:13 .
drwxr-xr-x 1 root root 4096 Mar  8 01:13 ..
-rwxr-xr-x 1 root root  0 Mar  8 01:13 .dockerenv
lrwxrwxrwx 1 root root  7 Mar  1 02:03 bin -> usr/bin
drwxr-xr-x 2 root root 4096 Apr 18  2022 boot
drwxr-xr-x 5 root root 360 Mar  8 22:43 dev
drwxr-xr-x 1 root root 4096 Mar  8 01:15 etc
drwxr-xr-x 1 root root 4096 Mar  8 23:19 home
lrwxrwxrwx 1 root root  7 Mar  1 02:03 lib -> usr/lib
lrwxrwxrwx 1 root root  9 Mar  1 02:03 lib32 -> usr/lib32
lrwxrwxrwx 1 root root  9 Mar  1 02:03 lib64 -> usr/lib64
lrwxrwxrwx 1 root root 10 Mar  1 02:03 libx32 -> usr/libx32
drwxr-xr-x 2 root root 4096 Mar  1 02:03 media
drwxr-xr-x 2 root root 4096 Mar  1 02:03 mnt
drwxr-xr-x 2 root root 4096 Mar  1 02:03 opt
dr-xr-xr-x 4463 root root  0 Mar  8 22:43 proc
drwx----- 1 root root 4096 Mar  8 23:19 root
drwxr-xr-x 5 root root 4096 Mar  1 02:06 run
lrwxrwxrwx 1 root root  8 Mar  1 02:03/sbin -> usr/sbin
drwxr-xr-x 2 root root 4096 Mar  1 02:03 srv
dr-xr-xr-x 11 root root  0 Mar  8 22:43 sys
drwxrwxrwt 1 root root 4096 Mar  8 23:57 tmp
drwxr-xr-x 1 root root 4096 Mar  1 02:03 usr
drwxr-xr-x 1 root root 4096 Mar  1 02:06 var
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# ls -ld .*
drwxr-xr-x 1 root root 4096 Mar  8 01:13 ..
-rwxr-xr-x 1 root root  0 Mar  8 01:13 .dockerenv
root@2a12a34f50fc:/#

```

```

total 60
0 bin  0 dev  4 home 0 lib32 0 libx32 4 mnt  0 proc  4 run  4 srv  4 tmp  8 var
4 boot 8 etc  0 lib  0 lib64 4 media  4 opt  4 root  0/sbin 0 sys  8 usr

```

```
root@2a12a34f50fc:/# ls -alF
total 68
drwxr-xr-x  1 root root 4096 Mar  8 01:13 ./
drwxr-xr-x  1 root root 4096 Mar  8 01:13 ../
-rwxr-xr-x  1 root root    0 Mar  8 01:13 .dockerenv*
lrwxrwxrwx  1 root root    7 Mar  1 02:03 bin -> usr/bin/
drwxr-xr-x  2 root root 4096 Apr 18 2022 boot/
drwxr-xr-x  5 root root 360 Mar  8 22:43 dev/
drwxr-xr-x  1 root root 4096 Mar  8 01:15 etc/
drwxr-xr-x  1 root root 4096 Mar  8 23:19 home/
lrwxrwxrwx  1 root root    7 Mar  1 02:03 lib -> usr/lib/
lrwxrwxrwx  1 root root    9 Mar  1 02:03 lib32 -> usr/lib32/
lrwxrwxrwx  1 root root    9 Mar  1 02:03 lib64 -> usr/lib64/
lrwxrwxrwx  1 root root   10 Mar  1 02:03 libx32 -> usr/libx32/
drwxr-xr-x  2 root root 4096 Mar  1 02:03 media/
drwxr-xr-x  2 root root 4096 Mar  1 02:03 mnt/
drwxr-xr-x  2 root root 4096 Mar  1 02:03 opt/
dr-xr-xr-x 4698 root root    0 Mar  8 22:43 proc/
drwx-----  1 root root 4096 Mar  8 23:19 root/
drwxr-xr-x  5 root root 4096 Mar  1 02:06 run/
lrwxrwxrwx  1 root root    8 Mar  1 02:03/sbin -> usr/sbin/
drwxr-xr-x  2 root root 4096 Mar  1 02:03 srv/
dr-xr-xr-x 11 root root    0 Mar  8 22:43 sys/
drwxrwxrwt  1 root root 4096 Mar  8 23:57 tmp/
drwxr-xr-x  1 root root 4096 Mar  1 02:03 usr/
drwxr-xr-x  1 root root 4096 Mar  1 02:06 var/
```

```
/etc/selinux:
semanage.conf

/etc/skel:

/etc/sysctl.d:
10-console-messages.conf 10-magic-sysrq.conf 10-zero-page.conf
10-ipv6-privacy.conf 10-network-security.conf README.sysctl
10-kernel-hardening.conf 10-ptrace.conf

/etc/systemd:
system user

/etc/systemd/system:
multi-user.target.wants timers.target.wants

/etc/systemd/system/multi-user.target.wants:
e2scrub_reap.service

/etc/systemd/system/timers.target.wants:
apt-daily-upgrade.timer dpkg-db-backup.timer fstrim.timer
apt-daily.timer e2scrub_all.timer motd-news.timer

/etc/systemd/user:

/etc/terminfo:
README

/etc/update-motd.d:
00-header 10-help-text 50-motd-news 60-unminimize

/etc/vim:
vimrc
```

```
root@2a12a34f50fc:/# df
bin dev home lib32 libx32 mnt proc run srv tmp var
boot etc lib lib64 media opt root sbin sys usr
root@2a12a34f50fc:/# cd home
root@2a12a34f50fc:/home#
```

```
root@2a12a34f50fc:/# cd home
root@2a12a34f50fc:/home# echo ~
/root
root@2a12a34f50fc:/home#
```

```
root@2a12a34f50fc:/home# cd ..
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/home# pwd
/home
```

```
root@2a12a34f50fc:/home# cd /home
root@2a12a34f50fc:/home# ls
ls
root@2a12a34f50fc:/home#
```

Copiando o ls para o home

```
bash: rename: command not found
root@2a12a34f50fc:/home# touch arthur.txt
root@2a12a34f50fc:/home# ls
arthur.txt  ls
root@2a12a34f50fc:/home#
```

RAM 2.06 GB CPU 0.13% Not connected to Hub

```
bash: rename: command not found
root@2a12a34f50fc:/home# mv arthur.txt reis.txt
root@2a12a34f50fc:/home# ls
ls reis.txt
root@2a12a34f50fc:/home#
```

```
root@2a12a34f50fc:/home# ls
ls reis.txt
root@2a12a34f50fc:/home# rm reis.txt
root@2a12a34f50fc:/home# s
bash: s: command not found
root@2a12a34f50fc:/home# ls
ls
root@2a12a34f50fc:/home#
```

RAM 2.06 GB CPU 0.13% Not connected to Hub

```
root@2a12a34f50fc:/home# ls
ls pasta
root@2a12a34f50fc:/home# ls -pF
ls* pasta/
root@2a12a34f50fc:/home# touch arthur.txt
root@2a12a34f50fc:/home# ls
arthur.txt  ls pasta
root@2a12a34f50fc:/home# touch arthur.txt
root@2a12a34f50fc:/home# ls -pF
arthur.txt  ls* pasta/
root@2a12a34f50fc:/home# cd pasta
root@2a12a34f50fc:/home/pasta# touch reis.txt
root@2a12a34f50fc:/home/pasta# cd ..
root@2a12a34f50fc:/home# rm pasta/
rm: cannot remove 'pasta/': Is a directory
root@2a12a34f50fc:/home# rm -R pasta/
root@2a12a34f50fc:/home# ls
arthur.txt  ls
root@2a12a34f50fc:/home#
```

```
arthur.txt  ls
root@2a12a34f50fc:/home# mkdir pasta pasta2 pasta3
root@2a12a34f50fc:/home# ls
arthur.txt  ls pasta pasta2 pasta3
root@2a12a34f50fc:/home# mkdir pasta/pastapasta/pastapastapasta
mkdir: cannot create directory 'pasta/pastapasta/pastapastapasta': No such file or directory
root@2a12a34f50fc:/home# mkdir -p pasta/pastapasta/pastapastapa
root@2a12a34f50fc:/home# cd pasta
root@2a12a34f50fc:/home/pasta# cd pastapasta/
root@2a12a34f50fc:/home/pasta/pastapasta# cd pastapastapa/
root@2a12a34f50fc:/home/pasta/pastapasta/pastapastapa#
```



```

-rw-r--r-- 1 root root 0 81 Mar 23 2022 xatli.com
root@2a12a34f50fc:/# touch arq1
root@2a12a34f50fc:/# echo 'laranja'>>arq1
root@2a12a34f50fc:/# echo arq1
arq1
root@2a12a34f50fc:/# echo 'arq1'
arq1
root@2a12a34f50fc:/# echo 'cat arq1'
cat arq1
laranja
root@2a12a34f50fc:/# echo `cat arq1`
laranja
root@2a12a34f50fc:/# ln -s arq1 arq1-soft
root@2a12a34f50fc:/# ls
arq1      bin    dev    home  lib32  libx32  mnt  proc  run  srv  tmp  var
arq1-soft boot  etc    lib   lib64  media  opt  root  sbin sys  usr
root@2a12a34f50fc:/#

```

```

drwxr-xr-x 1 root root 4096 Mar 11 02:06 var
root@2a12a34f50fc:/# ls -l arq*
-rw-r--r-- 1 root root 8 Mar 12 17:40 arq1
lrwxrwxrwx 1 root root 4 Mar 12 17:44 arq1-soft -> arq1
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# cat arq1
laranja
root@2a12a34f50fc:/# cat arq1-soft
laranja
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# cat arq1-soft
laranja
root@2a12a34f50fc:/# mv arq1 arq2
root@2a12a34f50fc:/# cat arq1-soft
cat: arq1-soft: No such file or directory
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# cat arq1-soft
cat: arq1-soft: No such file or directory
root@2a12a34f50fc:/# ls -l arq1-soft
lrwxrwxrwx 1 root root 4 Mar 12 17:44 arq1-soft -> arq1
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# touch arq1
root@2a12a34f50fc:/# ls
arq1      arq2  boot  etc  lib  lib64  media  opt  root  sbin  sys  usr
arq1-soft bin  dev  home lib32 libx32 mnt  proc  run  srv  tmp  var
root@2a12a34f50fc:/# rm arq1
root@2a12a34f50fc:/# ls
arq1-soft bin  dev  home lib32 libx32 mnt  proc  run  srv  tmp  var
arq2      boot  etc  lib  lib64  media  opt  root  sbin  sys  usr
root@2a12a34f50fc:/# rm arq1-soft
root@2a12a34f50fc:/# ls
arq2      boot  etc  lib  lib64  media  opt  root  sbin  sys  usr
bin  dev  home lib32 libx32 mnt  proc  run  srv  tmp  var
root@2a12a34f50fc:/# touch arq1
root@2a12a34f50fc:/# echo "Eu amo a Laurinha">> arq1
root@2a12a34f50fc:/# cat arq1
Eu amo a Laurinha
root@2a12a34f50fc:/#

```

```

-rw-r--r-- 2 root root 18 Mar 12 17:49 arq1
root@2a12a34f50fc:/# ls -l arq1*
-rw-r--r-- 2 root root 18 Mar 12 17:49 arq1
-rw-r--r-- 2 root root 18 Mar 12 17:49 arq1-hard
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# touch arq1
root@2a12a34f50fc:/# echo "Eu amo a Laurinha">> arq1
root@2a12a34f50fc:/# cat arq1
Eu amo a Laurinha
root@2a12a34f50fc:/# ln arq1 arq1-hard
root@2a12a34f50fc:/# cat arq1
arq1      arq1-hard
root@2a12a34f50fc:/# cat arq1-hard
Eu amo a Laurinha
root@2a12a34f50fc:/# ls -l arq1
-rw-r--r-- 2 root root 18 Mar 12 17:49 arq1
root@2a12a34f50fc:/# ls -l arq1*
-rw-r--r-- 2 root root 18 Mar 12 17:49 arq1
-rw-r--r-- 2 root root 18 Mar 12 17:49 arq1-hard
root@2a12a34f50fc:/# mv arq1 arq2
root@2a12a34f50fc:/# cat arq1-hard
Eu amo a Laurinha
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# echo 'Fala galera'
Fala galera
root@2a12a34f50fc:/# echo 'Fala\ugalera'
Fala\ugalera
root@2a12a34f50fc:/# echo -en 'Fala\ugalera'
Fala  galeraroot@2a12a34f50fc:/#

```

```
root@2a12a34f50fc:/# echo 'Fala\tgaleria'
Fala\tgaleria
root@2a12a34f50fc:/# echo -en 'Fala\tgaleria'
Fala\tgaleriaroot@2a12a34f50fc:/# cat arq1-hard
Eu amo a Laurinha
```

```
root@2a12a34f50fc:/# seq 0 10 > arq2.txt
root@2a12a34f50fc:/# cat arq1
arq1-hard arq1.txt
root@2a12a34f50fc:/# cat arq1.txt arq2.txt
1
2
3
4
5
6
7
8
9
10
root@2a12a34f50fc:/#
```

```
cut: 10: No such file or directory
root@2a12a34f50fc:/# echo 'Arthur Reis Bello' | cut -c 1-10
Arthur Rei
root@2a12a34f50fc:/#
```

```
2.4
2.5
2.6
2.7
2.8
root@2a12a34f50fc:/# seq 1.1 0.1 2.86
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
root@2a12a34f50fc:/#
```

2.8

```
root@2a12a34f50fc:/# echo -en 'Arthur\tReis'
Arthur Reisroot@2a12a34f50fc:/# echo -en 'Arthur\tReis\n'
Arthur Reis
root@2a12a34f50fc:/# echo -en 'Arthur\tReis\n' | expand -t 1
Arthur Reis
root@2a12a34f50fc:/# echo -en 'Arthur\tReis\n' | expand -t 13
Arthur      Reis
root@2a12a34f50fc:/#
```

ArthurMReis

```
root@2a12a34f50fc:/# echo -en 'Arthur\tReis\n' | tr '\t' "M"
ArthurMReis
root@2a12a34f50fc:/#
```

ArthurMReis

```
root@2a12a34f50fc:/# echo -en 'Arthur  Reis\n' | tr -s ' '
Arthur Reis
root@2a12a34f50fc:/#
```

Arthur Reis

```
root@2a12a34f50fc:/# echo -en 'Arthur  Reis\n' | tr 'A-Z' 'a-z'
arthur  reis
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# fmt -w10 texto.txt
```

```
Antes da
chegada
dos
colonizadores
portugueses,
no
século
XVI (os
primeiros
relatos
dão
conta de
expedições
que
subiram
o Rio
Jequitinhonha
e São
Francisco)
```

```
,
Diamantina,
como toda
a região
do atual
estado
de Minas
Gerais,
era
ocupada
por povos
indígenas
do tronco
linguístico
root@2a12a34f50fc:/#
```



```

root@2a12a34f50fc:/# cat lista.txt | grep alexandro
cat: lista.txt: No such file or directory
root@2a12a34f50fc:/# cat texto.txt | grep alexandro
RJ Rio de Janeiro : alexandro
root@2a12a34f50fc:/# cat texto.txt | grep chegada
Antes da chegada dos colonizadores portugueses, no século XVI (os primeiros relatos dão conta de expedições que subiram
como toda a região do atual estado de Minas Gerais, era ocupada por povos indígenas do tronco linguístico
root@2a12a34f50fc:/#

```

RAM 1.95 GB CPU 0.13% Not connected to Hub

```

a de expedições que subiram o Rio Jequitinhonha e
região do atual estado de Minas Gerais, era ocupada
root@2a12a34f50fc:/# grep '[0-9]' texto.txt
SP Campinas : andre :(074) 2233 -1111
MG Belo Horizonte : marta :010 1222 0011
MG Diamantina : lucas :2
root@2a12a34f50fc:/#

```

RAM 1.95 GB Not connected to Hub

```

na Diamantina : lucas :2
root@2a12a34f50fc:/# grep '[0-9]\{2,\}' texto.txt
SP Campinas : andre :(074) 2233 -1111
MG Belo Horizonte : marta :010 1222 0011
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# head cidades.txt
Abadia de Goiás ( GO )
Abadia dos Dourados ( MG )
Abadiania ( GO )
Abaete ( MG )
Abaetetuba ( PA )
Abaíara ( CE )
Abaíra ( BA )
Abare ( BA )
Abatia ( PR )
Abdon Batista ( SC )
root@2a12a34f50fc:/# heda -2 cidades.txt
bash: heda: command not found
root@2a12a34f50fc:/# head -2 cidades.txt
Abadia de Goiás ( GO )
Abadia dos Dourados ( MG )
root@2a12a34f50fc:/#

```

```
Abatia ( PR )
Abdon Batista ( SC )
root@2a12a34f50fc:/# heda -2 cidades.txt
bash: heda: command not found
root@2a12a34f50fc:/# head -2 cidades.txt
Abadia de Goias ( GO )
Abadia dos Dourados ( MG )
root@2a12a34f50fc:/# tail cidades.txt
Abadia dos Dourados ( MG )
Abadiania ( GO )
Abaete ( MG )
Abaetetuba ( PA )
Abaiara ( CE )
Abaira ( BA )
Abare ( BA )
Abatia ( PR )
Abdon Batista ( SC )

root@2a12a34f50fc:/# tail -2 cidades.txt
Abdon Batista ( SC )

root@2a12a34f50fc:/#
```

RAM 1.06 GB CPU 0.46% Not connected to Hub

```
Processing triggers for libc-bin (2.35-0ubuntu3.1) ..
root@2a12a34f50fc:/# file texto.txt
texto.txt: Unicode text, UTF-8 text
root@2a12a34f50fc:/#
```

RAM 2.01 GB Not connected to Hub

```
root@2a12a34f50fc:/# wget -q http://www.gutenberg.org/files/4300/4300-0.txt
root@2a12a34f50fc:/# file 4300-0.txt
4300-0.txt: Unicode text, UTF-8 (with BOM) text, with CRLF line terminators
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# nl cidades.txt
 1 Abadia de Goias ( GO )
 2 Abadia dos Dourados ( MG )
 3 Abadiania ( GO )
 4 Abaete ( MG )
 5 Abaetetuba ( PA )
 6 Abaiara ( CE )
 7 Abaira ( BA )
 8 Abare ( BA )
 9 Abatia ( PR )
10 Abdon Batista ( SC )

root@2a12a34f50fc:/#
```

```
notas.txtroot@2a12a34f50fc:/# echo -en '\n' >> notas.txt
root@2a12a34f50fc:/# cat notas.txt
20
23
root@2a12a34f50fc:/# cat nomes.txt
arthur
laura
root@2a12a34f50fc:/# paste nomes.txt notas.txt
arthur 20
laura 23
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# cat nomes.txt | rev
ruhtra
arual
root@2a12a34f50fc:/#
```

```
uva
root@2a12a34f50fc:/# cat nomes.txt | sort -n
abacate
arthur
graviola
laura
limao
maca
mamao
pera
uva
root@2a12a34f50fc:/#
```

```
uva
root@2a12a34f50fc:/# wc nomes.txt
 9  9 56 nomes.txt
root@2a12a34f50fc:/#
```

```
editor
vim.basic
root@2a12a34f50fc:/# compgen -c | head -10
egrep
fgrep
grep
l
la
ll
ls
if
then
else
root@2a12a34f50fc:/#
```

```
else
root@2a12a34f50fc:/# whoami
root
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# pwd
/
root@2a12a34f50fc:/#
```

RAM 2.02 GB CPU 0.09% Not

```

/
root@2a12a34f50fc:/# cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
_apt:x:100:65534::/nonexistent:/usr/sbin/nologin

```

```

nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
_apt:x:100:65534::/nonexistent:/usr/sbin/nologin
root@2a12a34f50fc:/# id
uid=0(root) gid=0(root) groups=0(root)
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/etc# pwd
/etc
root@2a12a34f50fc:/etc# passwd
New password:
Retype new password:
passwd: password updated successfully
root@2a12a34f50fc:/etc#

```

RAM 2.02 GB Not connected to Hub

```

root@2a12a34f50fc:/etc# users
root@2a12a34f50fc:/etc# users
root@2a12a34f50fc:/etc#

```

RAM 2.02 GB Not connected to Hub

```

Setting up finger (0.17-17) ...
root@2a12a34f50fc:/etc# finger
No one logged on.
root@2a12a34f50fc:/etc#

```

RAM 2.03 GB CPU 0.59% Not connected to Hub

24°C

```

root@2a12a34f50fc:/etc# cd ..
root@2a12a34f50fc:/# free

```

	total	used	free	shared	buff/cache	available
Mem:	8072884	867416	5900088	1436	1305380	6966012
Swap:	2097152	0	2097152			

```

root@2a12a34f50fc:/#

```

```
Swap:          2097152          0
root@2a12a34f50fc:/# su -
root@2a12a34f50fc:~#
```

```
-bash: uname-s: command not found
root@2a12a34f50fc:~# uname -s
Linux
root@2a12a34f50fc:~#
```

```
Linux
root@2a12a34f50fc:~# uname -r
5.10.16.3-microsoft-standard-WSL2
root@2a12a34f50fc:~#
```

```
5.10.16.3-microsoft-standard-WSL2
root@2a12a34f50fc:~# uname -n
2a12a34f50fc
root@2a12a34f50fc:~#
```

```
2a12a34f50fc
root@2a12a34f50fc:~# uname -a
Linux 2a12a34f50fc 5.10.16.3-microsoft-standard-WSL2 #1 SMP Fri Apr 2 22:23:49 UTC 2021 x86_
64 x86_64 x86_64 GNU/Linux
root@2a12a34f50fc:~#
```

```
64 x86_64 x86_64 GNU/Linux
root@2a12a34f50fc:~# ls --version
ls (GNU coreutils) 8.32
Copyright (C) 2020 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Written by Richard M. Stallman and David Mackenzie.
root@2a12a34f50fc:~#
```

```
root@2a12a34f50fc:~# echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/sn
ap/bin
root@2a12a34f50fc:~#
```

```
root@2a12a34f50fc:~# timeout 5 ping www.ufvjm.edu.br
PING www.ufvjm.edu.br (200.131.252.165) 56(84) bytes of data:
64 bytes from 200.131.252.165 (200.131.252.165): icmp_seq=1 ttl=36 time=30.5 ms
64 bytes from 200.131.252.165 (200.131.252.165): icmp_seq=2 ttl=36 time=33.5 ms
64 bytes from 200.131.252.165 (200.131.252.165): icmp_seq=3 ttl=36 time=31.5 ms
64 bytes from 200.131.252.165 (200.131.252.165): icmp_seq=4 ttl=36 time=33.2 ms
64 bytes from 200.131.252.165 (200.131.252.165): icmp_seq=5 ttl=36 time=31.6 ms
root@2a12a34f50fc:~#
```

```
root@2a12a34f50fc:~# w
21:40:15 up 4:00, 0 users, load average: 0.01, 0.02, 0.00
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU WHAT
root@2a12a34f50fc:~#
```

```
USER      TTY      FROM      LOGIN@
root@2a12a34f50fc:~# whereis gcc
gcc: /usr/share/gcc
root@2a12a34f50fc:~#
```

```
bash: which: command not found
root@2a12a34f50fc:/# which ls
/usr/bin/ls
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# hostname; date; ls;
2a12a34f50fc
Sun Mar 12 21:45:33 UTC 2023
4300-0.txt  arq2      cidades.txt  lib      media      opt  sbin      tmp
arq.txt     arq2.txt  dev          lib32    mnt        proc  srv       usr
arq1-hard   bin       etc          lib64    nomes.txt  root  sys       var
arq1.txt    boot     home        libx32   notas.txt  run   texto.txt
root@2a12a34f50fc:/#
```

```
[1]+  Excl 127          emacs
root@2a12a34f50fc:/# emacs &
[1] 1786
root@2a12a34f50fc:/# kill
kill: usage: kill [-s sigspec | -p pid]
```

```
root@2a12a34f50fc:/# ps -aef
UID          PID    PPID  C STIME TTY          TIME CMD
root           1        0  0  21:42 pts/0      00:00:00 /bin/bash
root           9        0  0  21:42 pts/1      00:00:00 /bin/sh
root          15        9  0  21:42 pts/1      00:00:00 /bin/bash
root         1786       15  0  21:53 pts/1      00:00:00 emacs
root         1789       15  0  21:54 pts/1      00:00:00 ps -aef
root@2a12a34f50fc:/#
```

```
1793 pts/1    R+      0:00 ps -aef -r HOSTNAME=2a12a34f50fc PWD=/ HOME=/root LS_COLORS=rs=0:
root@2a12a34f50fc:/# ps -aef -r | head -5
PID TTY      STAT     TIME COMMAND
1794 pts/1    R+      0:00 ps -aef -r HOSTNAME=2a12a34f50fc PWD=/ HOME=/root LS_COLORS=rs=0:
di=01;34:ln=01;36:mh=00;pi=40;33:so=01;35:do=01;35:bd=40;33;01:cd=40;33;01:or=40;31;01:mi=00
:su=37;41:sg=30;43:ca=30;41:tw=30;42:ow=34;42:st=37;44:ex=01;32:*.tar=01;31:*.tgz=01;31:*.ar
c=01;31:*.arj=01;31:*.taz=01;31:*.lha=01;31:*.lz4=01;31:*.lzh=01;31:*.lzma=01;31:*.tlz=01;31
:*.txz=01;31:*.tzo=01;31:*.t7z=01;31:*.zip=01;31:*.z=01;31:*.dz=01;31:*.gz=01;31:*.lrz=01;31
:*.lz=01;31:*.lzo=01;31:*.xz=01;31:*.zst=01;31:*.tzt=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=01;
31:*.tbz2=01;31:*.tz=01;31:*.deb=01;31:*.rpm=01;31:*.jar=01;31:*.war=01;31:*.ear=01;31:*.sar
=01;31:*.rar=01;31:*.alz=01;31:*.ace=01;31:*.zoo=01;31:*.cpio=01;31:*.7z=01;31:*.rz=01;31:*.
cab=01;31:*.wim=01;31:*.swm=01;31:*.dwm=01;31:*.esd=01;31:*.jpg=01;35:*.jpeg=01;35:*.mjpg=01
;35:*.mjpeg=01;35:*.gif=01;35:*.bmp=01;35:*.pbm=01;35:*.pgm=01;35:*.ppm=01;35:*.tga=01;35:*.
xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35:*.png=01;35:*.svg=01;35:*.svgz=01;35:*.mng=01
;35:*.pcx=01;35:*.mov=01;35:*.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;35:*.webm=01;35:*.
webp=01;35:*.ogm=01;35:*.mp4=01;35:*.m4v=01;35:*.mp4v=01;35:*.vob=01;35:*.qt=01;35:*.nuv=01;
35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc=01;35:*.avi=01;35:*.fli=01;35:*.flv
=01;35:*.gl=01;35:*.dl=01;35:*.xcf=01;35:*.xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.o
gv=01;35:*.ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.m4a=00;36:*.mid=00;36:*.midi=00;3
6:*.mka=00;36:*.mp3=00;36:*.mpc=00;36:*.ogg=00;36:*.ra=00;36:*.wav=00;36:*.oga=00;36:*.opus
=00;36:*.spx=00;36:*.xspf=00;36: TERM=xterm SHLVL=0 PATH=/usr/local/sbin:/usr/local/bin:/usr/
sbin:/usr/bin:/sbin:/bin _=/usr/bin/ps
root@2a12a34f50fc:/#
```

```
top - 21:58:42 up 4:18, 0 users, load average: 0.00, 0.20, 0.15
Tasks: 5 total, 1 running, 3 sleeping, 1 stopped, 0 zombie
%Cpu(s): 0.1 us, 0.0 sy, 0.0 ni, 99.9 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 7883.7 total, 5306.2 free, 879.6 used, 1697.9 buff/cache
MiB Swap: 2048.0 total, 2048.0 free, 0.0 used, 6733.9 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1	root	20	0	4620	3752	3204	S	0.0	0.0	0:00.03	bash
9	root	20	0	2884	964	876	S	0.0	0.0	0:00.01	sh
15	root	20	0	5136	4392	3276	S	0.0	0.1	0:00.05	bash
1786	root	20	0	180172	30524	20664	T	0.0	0.4	0:00.00	emacs
1796	root	20	0	7308	3408	2848	R	0.0	0.0	0:00.00	top

```
jobs: usage: jobs [-lnprs] [jobspec ...] or jobs -x command [args]
root@2a12a34f50fc:/# ls -l
total 1648
-rw-r--r-- 1 root root 1586336 Mar 1 2021 4300-0.txt
-rw-r--r-- 1 root root 0 Mar 12 18:13 arq.txt
-rw-r--r-- 2 root root 18 Mar 12 17:49 arq1-hard
-rw-r--r-- 1 root root 10 Mar 12 18:13 arq1.txt
-rw-r--r-- 2 root root 18 Mar 12 17:49 arq2
-rw-r--r-- 1 root root 11 Mar 12 18:13 arq2.txt
lrwxrwxrwx 1 root root 7 Mar 1 02:03 bin -> usr/bin
drwxr-xr-x 2 root root 4096 Apr 18 2022 boot
-rw-r--r-- 1 root root 177 Mar 12 20:49 cidades.txt
drwxr-xr-x 5 root root 360 Mar 12 21:42 dev
drwxr-xr-x 1 root root 4096 Mar 12 21:52 etc
drwxr-xr-x 1 root root 4096 Mar 9 01:21 home
lrwxrwxrwx 1 root root 7 Mar 1 02:03 lib -> usr/lib
lrwxrwxrwx 1 root root 9 Mar 1 02:03 lib32 -> usr/lib32
lrwxrwxrwx 1 root root 9 Mar 1 02:03 lib64 -> usr/lib64
lrwxrwxrwx 1 root root 10 Mar 1 02:03 libx32 -> usr/libx32
drwxr-xr-x 2 root root 4096 Mar 1 02:03 media
drwxr-xr-x 2 root root 4096 Mar 1 02:03 mnt
-rw-r--r-- 1 root root 56 Mar 12 21:10 nomes.txt
-rw-r--r-- 1 root root 6 Mar 12 21:08 notas.txt
drwxr-xr-x 2 root root 4096 Mar 1 02:03 opt
dr-xr-xr-x 9760 root root 0 Mar 12 21:42 proc
drwx----- 1 root root 4096 Mar 12 21:58 root
drwxr-xr-x 1 root root 4096 Mar 12 21:51 run
lrwxrwxrwx 1 root root 8 Mar 1 02:03/sbin -> usr/sbin
drwxr-xr-x 2 root root 4096 Mar 1 02:03 srv
dr-xr-xr-x 11 root root 0 Mar 12 21:42 sys
-rw-r--r-- 1 root root 481 Mar 12 20:29 texto.txt
drwxrwxrwt 1 root root 4096 Mar 12 21:52 tmp
drwxr-xr-x 1 root root 4096 Mar 1 02:03 usr
drwxr-xr-x 1 root root 4096 Mar 1 02:06 var
root@2a12a34f50fc:/#
```



```
root@2a12a34f50fc:/# adduser aluno
Adding user `aluno' ...
Adding new group `aluno' (1000) ...
Adding new user `aluno' (1000) with group `aluno' ...
Creating home directory `/home/aluno' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for aluno
Enter the new value, or press ENTER for the default
    Full Name []: Arthur Reis Bello
    Room Number []: 1
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n] y
root@2a12a34f50fc:/#
```

```
systemd-timesync:x:104:105:systemd Time Synchronization,,,:/run/systemd:/usr
aluno:x:1000:1000:Arthur Reis Bello,1,,:/home/aluno:/bin/bash
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# cat /etc/hosts
127.0.0.1    localhost
::1        localhost ip6-localhost ip6-loopback
fe00::0    ip6-localnet
ff00::0    ip6-mcastprefix
ff02::1    ip6-allnodes
ff02::2    ip6-allrouters
172.17.0.2    2a12a34f50fc
root@2a12a34f50fc:/#
```

```
172.17.0.2    2a12a34f50fc
root@2a12a34f50fc:/# arp -a
? (172.17.0.1) at 02:42:d2:94:79:f5 [ether] on eth0
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.17.0.2 netmask 255.255.0.0 broadcast 172.17.255.255
    ether 02:42:ac:11:00:02 txqueuelen 0 (Ethernet)
    RX packets 59368 bytes 87536026 (87.5 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 39889 bytes 2182881 (2.1 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    loop txqueuelen 1000 (Local Loopback)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
root@2a12a34f50fc:/# ifconfig eno1
eno1: error fetching interface information: Device not found
root@2a12a34f50fc:/# ifconfig eno1 down
eno1: ERROR while getting interface flags: No such device
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# ifconfig eno1 up
eno1: ERROR while getting interface flags: No such device
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# ping 10.1.212.1
PING 10.1.212.1 (10.1.212.1) 56(84) bytes of data.
```

```

root@2a12a34f50fc:/# ping google.com
PING google.com (142.251.128.142) 56(84) bytes of data:
64 bytes from 142.251.128.142 (142.251.128.142): icmp_seq=1 ttl=36 time=22.2 ms
64 bytes from 142.251.128.142 (142.251.128.142): icmp_seq=2 ttl=36 time=21.8 ms
64 bytes from 142.251.128.142 (142.251.128.142): icmp_seq=3 ttl=36 time=20.8 ms
64 bytes from 142.251.128.142 (142.251.128.142): icmp_seq=4 ttl=36 time=20.0 ms
64 bytes from 142.251.128.142 (142.251.128.142): icmp_seq=5 ttl=36 time=18.0 ms
64 bytes from 142.251.128.142 (142.251.128.142): icmp_seq=6 ttl=36 time=19.8 ms
64 bytes from 142.251.128.142 (142.251.128.142): icmp_seq=7 ttl=36 time=22.4 ms
64 bytes from 142.251.128.142 (142.251.128.142): icmp_seq=8 ttl=36 time=20.8 ms
64 bytes from 142.251.128.142 (142.251.128.142): icmp_seq=9 ttl=36 time=20.5 ms
64 bytes from 142.251.128.142 (142.251.128.142): icmp_seq=10 ttl=36 time=19.4 ms
^C
--- google.com ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9015ms
rtt min/avg/max/mdev = 18.040/20.576/22.413/1.276 ms
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# host google.com
google.com has address 216.58.222.14
google.com has IPv6 address 2800:3f0:4001:822::200e
google.com has IPv6 address ::ffff:216.58.222.14
google.com mail is handled by 10 smtp.google.com.
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# dig google.com

; <<>> DiG 9.18.1-1ubuntu1.3-Ubuntu <<>> google.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 22769
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
; COOKIE: b6e03be322e5d9c1 (echoed)
;; QUESTION SECTION:
;google.com.                IN      A

;; ANSWER SECTION:
google.com.                 0       IN      A      142.250.218.78

;; Query time: 40 msec
;; SERVER: 192.168.65.7#53(192.168.65.7) (UDP)
;; WHEN: Sun Mar 12 22:50:29 UTC 2023
;; MSG SIZE rcvd: 77

root@2a12a34f50fc:/#

```

```

; <<>> DiG 9.18.1-1ubuntu1.3-Ubuntu <<>> google.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 22769
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
; COOKIE: b6e03be322e5d9c1 (echoed)
;; QUESTION SECTION:
;google.com.                IN      A

;; ANSWER SECTION:
google.com.                0      IN      A      142.250.218.78

;; Query time: 40 msec
;; SERVER: 192.168.65.7#53(192.168.65.7) (UDP)
;; WHEN: Sun Mar 12 22:50:29 UTC 2023
;; MSG SIZE rcvd: 77

root@2a12a34f50fc:/# nslookup google.com
Server:          192.168.65.7
Address:         192.168.65.7#53

Non-authoritative answer:
Name:   google.com
Address: 142.250.218.78
Name:   google.com
Address: 2800:3f0:4001:828::200e
Name:   google.com
Address: ::ffff:142.250.218.78

root@2a12a34f50fc:/#

```

```

can't exec
root@2a12a34f50fc:/# traceroute google.com
traceroute to google.com (142.250.218.238), 30 hops max, 60 byte packets
 1  172.17.0.1 (172.17.0.1)  1.543 ms  0.997 ms  0.972 ms
 2  192.168.65.5 (192.168.65.5)  0.895 ms  0.778 ms  0.758 ms
 3  * * *
 4  * * *
 5  * * *
 6  * * *
 7  * * *
 8  *

```

```
0 packets to unknown port received
0 packet receive errors
133 packets sent
0 receive buffer errors
0 send buffer errors
UdpLite:
TcpExt:
  10 TCP sockets finished time wait in fast timer
  1213 packet headers predicted
  20 acknowledgments not containing data payload received
  TCPOrigDataSent: 20
  TCPDelivered: 30
IpExt:
  InOctets: 1858279
  OutOctets: 65668
  InNoECTPkts: 1363
Sctp:
  0 Current Associations
  0 Active Associations
  0 Passive Associations
  0 Number of Aborted
  0 Number of Graceful Terminations
  0 Number of Out of Blue packets
  0 Number of Packets with invalid Checksum
  0 Number of control chunks sent
  0 Number of ordered chunks sent
  0 Number of Unordered chunks sent
  0 Number of control chunks received
  0 Number of ordered chunks received
  0 Number of Unordered chunks received
  0 Number of messages fragmented
  0 Number of messages reassembled
  0 Number of SCTP packets sent
  0 Number of SCTP packets received
root@2a12a34f50fc:/#
```

RAM 2.46 GB Not connected to Hub

```
root@2a12a34f50fc:/# netstat -i
Kernel Interface table
Iface      MTU      RX-OK RX-ERR RX-DRP RX-OVR    TX-OK TX-ERR TX-DRP TX-OVR Flg
eth0       1500     1396   0      0 0      1375   0      0      0 BMRU
lo         65536     0      0      0 0        0      0      0      0 LRU
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# nmap ufmq.br
Starting Nmap 7.80 ( https://nmap.org ) at 2023-03-12 23:05 UTC
Nmap scan report for ufmq.br (150.164.76.8)
Host is up (0.0057s latency).
Other addresses for ufmq.br (not scanned): ::ffff:150.164.76.8
Not shown: 997 filtered ports
PORT      STATE SERVICE
22/tcp    open  ssh
80/tcp    open  http
443/tcp   open  https

Nmap done: 1 IP address (1 host up) scanned in 5.59 seconds
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# nmap -v localhost
Starting Nmap 7.80 ( https://nmap.org ) at 2023-03-12 23:06 UTC
Initiating SYN Stealth Scan at 23:06
Scanning localhost (127.0.0.1) [1000 ports]
Completed SYN Stealth Scan at 23:06, 0.06s elapsed (1000 total ports)
Nmap scan report for localhost (127.0.0.1)
Host is up (0.0000010s latency).
Other addresses for localhost (not scanned): ::1
All 1000 scanned ports on localhost (127.0.0.1) are closed

Read data files from: /usr/bin/../share/nmap
Nmap done: 1 IP address (1 host up) scanned in 0.15 seconds
    Raw packets sent: 1000 (44.000KB) | Rcvd: 2000 (84.000KB)
root@2a12a34f50fc:/#
```

```
Nmap done: 1 IP address (1 host up) scanned in 0.15 seconds
    Raw packets sent: 1000 (44.000KB) | Rcvd: 2000 (84.000KB)
root@2a12a34f50fc:/# route
Kernel IP routing table

```

Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
default	172.17.0.1	0.0.0.0	UG	0	0	0	eth0
172.17.0.0	0.0.0.0	255.255.0.0	U	0	0	0	eth0

```
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# wget --recursive vivas.eng.br
--2023-03-12 23:54:23-- http://vivas.eng.br/
Resolving vivas.eng.br (vivas.eng.br)... failed: Name or service not known.
wget: unable to resolve host address 'vivas.eng.br'
root@2a12a34f50fc:/# telnet http://endless.horse/
telnet: could not resolve http://endless.horse//telnet: Name or service not known
root@2a12a34f50fc:/# telnet endless.horse
Trying 104.236.181.76...
Trying ::ffff:104.236.181.76...
telnet: Unable to connect to remote host: Connection refused
root@2a12a34f50fc:/# apt update
Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Hit:2 http://archive.ubuntu.com/ubuntu jammy InRelease
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:4 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [107 kB]
Fetched 336 kB in 4s (81.0 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
1 package can be upgraded. Run 'apt list --upgradable' to see it.
```

```

Calculating upgrade... Done
The following packages will be upgraded:
  libudev1
1 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 76.9 kB of archives.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libudev1 amd64 249.11-0ubuntu3.7 [76.9 kB]
Fetched 76.9 kB in 2s (42.3 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
(Reading database ... 32771 files and directories currently installed.)
Preparing to unpack .../libudev1_249.11-0ubuntu3.7_amd64.deb ...
Unpacking libudev1:amd64 (249.11-0ubuntu3.7) over (249.11-0ubuntu3.6) ...
Setting up libudev1:amd64 (249.11-0ubuntu3.7) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
root@2a12a34f50fc:/# apt remove vim
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libpython3.10 libsodium23 vim-common vim-runtime xxd
Use 'apt autoremove' to remove them.
The following packages will be REMOVED:
  vim
0 upgraded, 0 newly installed, 1 to remove and 0 not upgraded.
After this operation, 4011 kB disk space will be freed.
Do you want to continue? [Y/n] y
(Reading database ... 32771 files and directories currently installed.)
Removing vim (2:8.2.3995-1ubuntu2.3) ...
update-alternatives: using /usr/bin/emacs to provide /usr/bin/editor (editor) in auto mode
update-alternatives: warning: skip creation of /usr/share/man/man1/editor.1.gz because associated file /usr/share/man/man1/emacs.emacs.1.gz (of link group editor) doesn't exist
root@2a12a34f50fc:/#

```

```

Processing triggers for dbus (1.12.20-2ubuntu4.1) ...
root@2a12a34f50fc:/# dnf install lshw
/usr/lib/python3/dist-packages/dnf/const.py:22: DeprecationWarning: The distutils package is deprecated and slated for removal in Python 3.12. Use setuptools or check PEP 632 for potential alternatives
  import distutils.sysconfig
/usr/lib/python3/dist-packages/dnf/const.py:22: DeprecationWarning: The distutils.sysconfig module is deprecated, use sysconfig instead
  import distutils.sysconfig
Unable to detect release version (use '--releasever' to specify release version)
Error: There are no enabled repositories in "/etc/yum.repos.d", "/etc/yum/repos.d", "/etc/distro.repos.d".
root@2a12a34f50fc:/#

```

```

ERROR: Can't open /etc/passwd:
root@2a12a34f50fc:/# uname -a
Linux 2a12a34f50fc 5.10.16.3-microsoft-standard-WSL2 #1 SMP Fri Apr 2 22:23:49 UTC 2021 x86_64 x86_64 GNU/Linux
root@2a12a34f50fc:/#

```

```

root@2a12a34f50fc:/# uname -a
Linux 2a12a34f50fc 5.10.16.3-microsoft-standard-WSL2 #1 SMP Fri Apr 2 22:23:49 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux
root@2a12a34f50fc:/# uname -s
Linux
root@2a12a34f50fc:/# uname -n
2a12a34f50fc
root@2a12a34f50fc:/# uname -r
5.10.16.3-microsoft-standard-WSL2
root@2a12a34f50fc:/# uname -v
#1 SMP Fri Apr 2 22:23:49 UTC 2021
root@2a12a34f50fc:/#

```

```
#1 SMP Fri Apr 22 22:23:49 UTC 2021
root@2a12a34f50fc:/# head -n1 /etc/issue
Ubuntu 22.04.2 LTS \n \l
root@2a12a34f50fc:/#
```

```
root@2a12a34f50fc:/# lscpu
Architecture:          x86_64
CPU op-mode(s):        32-bit, 64-bit
Address sizes:          39 bits physical, 48 bits virtual
Byte Order:             Little Endian
CPU(s):                 12
  On-line CPU(s) list:  0-11
Vendor ID:              GenuineIntel
Model name:             12th Gen Intel(R) Core(TM) i5-12400F
CPU family:             6
Model:                  151
Thread(s) per core:    2
Core(s) per socket:    6
Socket(s):              1
Stepping:               5
BogoMIPS:               4992.00
Flags:                  fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca
                        se36 clflush mmx fxsr sse sse2 ss ht syscall nx pdpe1gb r
                        onstant_tsc rep_good nopl xtopology tsc_reliable nonstop_
                        pni pclmulqdq vmx ssse3 fma cx16 pcid sse4_1 sse4_2 x2api
                        pcnt tsc_deadline_timer aes xsave avx f16c rdrand hypervi
                        m abm 3dnowprefetch invpcid_single ssbd ibrs ibpb stibp i
                        ed tpr_shadow vmmi ept vpid ept_ad fsgsbase tsc_adjust br
                        ep bmi2 erms invpcid rdseed adx smap clflushopt clwb sha_
                        t xsavec xgetbv1 xsaves umip waitpkg gfni vaes vpclmulqdq
                        dirr movdir64b fsrm serialize flush_l1d arch_capabilities
Virtualization features:
  Virtualization:       VT-x
  Hypervisor vendor:    Microsoft
  Virtualization type:  full
```