

Sistemas Operacionais

Comandos Linux

Comandos mais usuais

1. ls

```
christian@NoteChris:/$ ls
bin  dev  home  lib  lib64  media  opt  root  sbin  srv  tmp  var
boot  etc  init  lib32  libx32  mnt  proc  run  snap  sys  usr
```

Faz uma lista de todos os arquivos do diretório;

2. ls -l

```
christian@NoteChris:/$ ls -l
total 632
lrwxrwxrwx 1 root root 7 Aug 19 2021 bin -> usr/bin
drwxr-xr-x 1 root root 512 Aug 19 2021 boot
drwxr-xr-x 1 root root 512 Sep 14 10:55 dev
drwxr-xr-x 1 root root 512 Sep 14 10:55 etc
drwxr-xr-x 1 root root 512 Sep 5 13:35 home
-rwxr-xr-x 1 root root 644432 Jul 6 21:29 init
lrwxrwxrwx 1 root root 7 Aug 19 2021 lib -> usr/lib
lrwxrwxrwx 1 root root 9 Aug 19 2021 lib32 -> usr/lib32
lrwxrwxrwx 1 root root 9 Aug 19 2021 lib64 -> usr/lib64
lrwxrwxrwx 1 root root 10 Aug 19 2021 libx32 -> usr/libx32
drwxr-xr-x 1 root root 512 Aug 19 2021 media
drwxr-xr-x 1 root root 512 Aug 23 10:28 mnt
drwxr-xr-x 1 root root 512 Aug 19 2021 opt
dr-xr-xr-x 9 root root 0 Sep 14 10:55 proc
drwx----- 1 root root 512 Aug 19 2021 root
drwxr-xr-x 1 root root 512 Sep 14 11:00 run
lrwxrwxrwx 1 root root 8 Aug 19 2021 sbin -> usr/sbin
drwxr-xr-x 1 root root 512 Aug 19 2021 snap
drwxr-xr-x 1 root root 512 Aug 19 2021 srv
dr-xr-xr-x 12 root root 0 Sep 14 10:55 sys
drwxrwxrwt 1 root root 512 Sep 5 13:49 tmp
drwxr-xr-x 1 root root 512 Aug 31 11:33 usr
drwxr-xr-x 1 root root 512 Aug 19 2021 var
```

Lista todos os tipos de arquivos e permissões;

3. df

```
christian@NoteChris:/$ df
Filesystem      1K-blocks      Used Available Use% Mounted on
rootfs          233777768 76587716 157190052  33% /
none            233777768 76587716 157190052  33% /dev
none            233777768 76587716 157190052  33% /run
none            233777768 76587716 157190052  33% /run/lock
none            233777768 76587716 157190052  33% /run/shm
none            233777768 76587716 157190052  33% /run/user
tmpfs           233777768 76587716 157190052  33% /sys/fs/cgroup
C:\             233777768 76587716 157190052  33% /mnt/c
```

Mostra o quanto espaço foi utilizado no disco rígido;

4. top

```
top - 11:21:35 up 26 min,  0 users,  load average: 0.52, 0.58, 0.59
Tasks:  4 total,   1 running,  3 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.0 us,  0.0 sy,  0.0 ni,100.0 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem : 16273.7 total, 11716.4 free,  4333.4 used,  224.0 buff/cache
MiB Swap: 28537.3 total, 28530.6 free,    6.8 used. 11809.8 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1	root	20	0	8952	328	284	S	0.0	0.0	0:00.10	init
7	root	20	0	8952	228	184	S	0.0	0.0	0:00.00	init
8	christi+	20	0	18076	3624	3524	S	0.0	0.0	0:00.24	bash
80	christi+	20	0	18944	2168	1520	R	0.0	0.0	0:00.01	top

Como se fosse um gerenciador de tarefas mostrando informações básicas de uso do sistema;

5. cd

```
christian@NoteChris:~$ cd /
christian@NoteChris:/$ _
```

Acessa uma determinada pasta;

6. mkdir

```
christian@NoteChris:/$ sudo mkdir Chris
[sudo] password for christian:
christian@NoteChris:/$ cd Chris
christian@NoteChris:/Chris$
```

Mk de “Make” (criar/fazer) Dir de “directory” (diretório), sendo assim criando um diretório;

7. rm

```
christian@NoteChris:/Chris$ cd
christian@NoteChris:~$ ls
christian@NoteChris:~$ sudo mkdir Chris2
christian@NoteChris:~$ ls
Chris2
christian@NoteChris:~$ cat
^C
christian@NoteChris:~$ cat > teste.txt
ls
^Z
[1]+  Stopped                  cat > teste.txt
christian@NoteChris:~$ ls
Chris2 teste.txt
christian@NoteChris:~$ rm
rm: missing operand
Try 'rm --help' for more information.
christian@NoteChris:~$ rm teste.txt
christian@NoteChris:~$ ls
Chris2
```

Remove um determinado arquivo;

8. rm -r

```
christian@NoteChris:~$ rm -r Chris2
rm: remove write-protected directory 'Chris2'?
christian@NoteChris:~$ _
```

Remove um diretório com conteúdo;

9. rmdir

```
christian@NoteChris:~$ rmdir Chris2
christian@NoteChris:~$ ls
christian@NoteChris:~$ _
```

Remove um diretório sem conteúdo;

10. cat

```
christian@NoteChris:~$ cat > teste.txt
ls
^Z
[1]+  Stopped                  cat > teste.txt
```

Abre um arquivo desejado;

Comandos de Controle e Acesso(2):

11. exit

```
christian@NoteChris:~$ exit
logout
There are stopped jobs.
```

Para todos os trabalhos e sai do usuário que está sendo usado;

12. logout

Fecha o Ubuntu parando todas atividades;

13. passwd

```
christian@NoteChris:~$ passwd
Changing password for christian.
Current password:
New password:
Retype new password:
You must choose a longer password
New password:
Retype new password:
Bad: new and old password must differ by more than just case
New password:
Retype new password:
passwd: password updated successfully
```

Dá permissão para a criação de uma nova senha;

14. ssh

```
christian@NoteChris:~$ ssh
usage: ssh [-46AaCfGgKkMNnqsTtVvXxYy] [-B bind_interface]
          [-b bind_address] [-c cipher_spec] [-D [bind_address:]port]
          [-E log_file] [-e escape_char] [-F configfile] [-I pkcs11]
          [-i identity_file] [-J [user@]host[:port]] [-L address]
          [-l login_name] [-m mac_spec] [-O ctl_cmd] [-o option] [-p port]
          [-Q query_option] [-R address] [-S ctl_path] [-W host:port]
          [-w local_tun[:remote_tun]] destination [command]
```

Faz uma conexão dentro de um servidor remoto, pedindo alguns detalhes antes de tentar entrar;

Comandos de Ajuda e Documentação(3)

15. apropos

```
christian@NoteChris:~$ apropos
apropos what?
christian@NoteChris:~$ apropos ls
_llseek (2) - reposition read/write file offset
add-shell (8) - add shells to the list of valid login shells
afs_syscall (2) - unimplemented system calls
assert (3) - abort the program if assertion is false
auth_destroy (3) - library routines for remote procedure calls
authnone_create (3) - library routines for remote procedure calls
authunix_create (3) - library routines for remote procedure calls
authunix_create_default (3) - library routines for remote procedure calls
backtrace_symbols (3) - support for application self-debugging
backtrace_symbols_fd (3) - support for application self-debugging
blockdev (8) - call block device ioctls from the command line
break (2) - unimplemented system calls
callrpc (3) - library routines for remote procedure calls
clnt_broadcast (3) - library routines for remote procedure calls
clnt_call (3) - library routines for remote procedure calls
clnt_control (3) - library routines for remote procedure calls
clnt_create (3) - library routines for remote procedure calls
clnt_destroy (3) - library routines for remote procedure calls
clnt_freeres (3) - library routines for remote procedure calls
clnt_geterr (3) - library routines for remote procedure calls
clnt_pcreateerror (3) - library routines for remote procedure calls
clnt_perrno (3) - library routines for remote procedure calls
clnt_perror (3) - library routines for remote procedure calls
clnt_spccreateerror (3) - library routines for remote procedure calls
clnt_sperrno (3) - library routines for remote procedure calls
clnt_sperror (3) - library routines for remote procedure calls
clntraw_create (3) - library routines for remote procedure calls
clnttcp_create (3) - library routines for remote procedure calls
clntudp_bufcreate (3) - library routines for remote procedure calls
clntudp_create (3) - library routines for remote procedure calls
console_ioctl (4) - ioctls for console terminal and virtual consoles
credentials (7) - process identifiers
dircolors (1) - color setup for ls
dlsym (3) - obtain address of a symbol in a shared object or executable
eatmydata (1) - transparently disable fsync() and other data-to-disk synchronization calls
endusershell (3) - get permitted user shells
false (1) - do nothing, unsuccessfully
fattach (2) - unimplemented system calls
fdetach (2) - unimplemented system calls
get_kernel_syms (2) - retrieve exported kernel and module symbols
```

Apropos ajuda na localização de um determinado código;

16.info

```
File: dir,      Node: Top,      This is the top of the INFO tree.

This is the Info main menu (aka directory node).
A few useful Info commands:

  'q' quits;
  'H' lists all Info commands;
  'h' starts the Info tutorial;
  'mTexinfo RET' visits the Texinfo manual, etc.

* Menu:

Basics
* Common options: (coreutils)Common options.
* Coreutils: (coreutils).      Core GNU (file, text, shell) utilities.
* Date input formats: (coreutils)Date input formats.
* Ed: (ed).                    The GNU line editor
* File permissions: (coreutils)File permissions.
                                Access modes.
* Finding files: (find).        Operating on files matching certain criteria

Compression
* Gzip: (gzip).                General (de)compression of files (lzw).

Editors
* nano: (nano).                Small and friendly text editor.

General Commands
* Screen: (screen).           Full-screen window manager.

GNU organization
* Maintaining Findutils: (find-maint).
                                Maintaining GNU findutils

GNU Utilities
* dirmngr-client: (gnupg).      X.509 CRL and OCSP client.
* dirmngr: (gnupg).            X.509 CRL and OCSP server.
* gpg-agent: (gnupg).          The secret key daemon.
* gpg2: (gnupg).               OpenPGP encryption and signing tool.
* gpgsm: (gnupg).             S/MIME encryption and signing tool.

Individual utilities
-----Info: (dir)Top, 180 lines --Top-----
Welcome to Info version 6.7.  Type H for help, h for tutorial.
```

Da uma informação geral de algum arquivo ou diretório;

17.man

```
HALT(8)                                halt                                HAL
NAME
    halt, poweroff, reboot - Halt, power-off or reboot the machine
SYNOPSIS
    halt [OPTIONS...]
    poweroff [OPTIONS...]
    reboot [OPTIONS...]
DESCRIPTION
    halt, poweroff, reboot may be used to halt, power-off, or reboot the machine. All three commands take the same options.
OPTIONS
    The following options are understood:
    --help
        Print a short help text and exit.
    --halt
        Halt the machine, regardless of which one of the three commands is invoked.
    -p, --poweroff
        Power-off the machine, regardless of which one of the three commands is invoked.
    --reboot
        Reboot the machine, regardless of which one of the three commands is invoked.
    -f, --force
        Force immediate halt, power-off, or reboot. When specified once, this results in an immediate but clean shutdown by the system manager. When specified twice, this results in an immediate shutdown without contacting the system manager. See the description of --force in systemctl(1) for more details.
    -w, --wtmp-only
        Only write wtmp shutdown entry, do not actually halt, power-off, reboot.
    -d, --no-wtmp
        Do not write wtmp shutdown entry.
    -n, --no-sync
        Don't sync hard disks/storage media before halt, power-off, reboot.
Manual page halt(8) line 1 (press h for help or q to quit)
```

Man de “manual”, sempre ajudando pessoas que não conhecem algum código;

18. whatis

```
christian@NoteChris:~$ whatis man
man (7)      - macros to format man pages
man (1)      - an interface to the system reference manuals
```

Descreve o que um comando faz ou é;

19. whereis

```
christian@NoteChris:~$ whereis man page
man: /usr/bin/man /usr/local/man /usr/share/man /usr/share/man/man1/man.1.gz /usr/share/man/man7/man.7
page:
```

Localiza a página de ajuda de algum código fonte;

Comandos de Edição de Texto(4)

20. nano

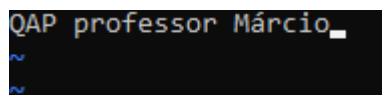
The nano editor is designed to emulate the functionality and ease-of-use of the UW Pico text editor. There are four main sections of the editor. The top line shows the program version, the current filename being edited, and whether or not the file has been modified. Next is the main editor window showing the file being edited. The status line is the third line from the bottom and shows important messages. The bottom two lines show the most commonly used shortcuts in the editor.

Shortcuts are written as follows: Control-key sequences are notated with a '^' and can be entered either by using the Ctrl key or pressing the Esc key twice. Meta-key sequences are notated with 'M-' and can be entered using either the Alt, Cmd, or Esc key, depending on your keyboard setup. Also, pressing Esc twice and then typing a three-digit decimal number from 000 to 255 will enter the character with the corresponding value. The following keystrokes are available in the main editor window. Alternative keys are shown in parentheses:

^G	(F1)	Display this help text
^X	(F2)	Close the current buffer / Exit from nano
^O	(F3)	Write the current buffer (or the marked region) to disk
^R	(Ins)	Insert another file into current buffer (or into new buffer)
^W	(F6)	Search forward for a string or a regular expression
^\ ^K	(M-R) (F9)	Replace a string or a regular expression Cut current line (or marked region) and store it in cutbuffer
^U	(F10)	Paste the contents of cutbuffer at current cursor position
^J	(F4)	Justify the current paragraph
^T	(F12)	Invoke the spell checker, if available
^C	(F11)	Display the position of the cursor
^_ M-U	(M-G) M-U	Go to line and column number Undo the last operation
M-E		Redo the last undone operation
M-A	(^6)	Mark text starting from the cursor position
M-6	(M-^)	Copy current line (or marked region) and store it in cutbuffer
M-]		Go to the matching bracket

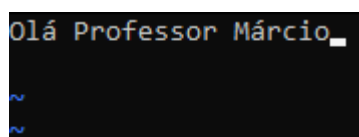
Editor de texto com orientação de tela;

21.vi



Editor de texto que usa a tela inteira (bloco de notas);

22.vim



Editor de texto melhorado que usa a tela inteira (bloco de notas);

Comandos de Gestão de Arquivos e Diretórios (5)

23. chmod

```
christian@NoteChris:/$ cd
christian@NoteChris:~$ cat > texto1.txt
^C
christian@NoteChris:~$ ls
texto1.txt
christian@NoteChris:~$ ls -l
total 0
-rw-r--r-- 1 christian christian 0 Sep 14 13:28 texto1.txt
christian@NoteChris:~$ chmod ug+rw texto1.txt
christian@NoteChris:~$ ls -l
total 0
-rw-rw-r-- 1 christian christian 0 Sep 14 13:28 texto1.txt
```

Muda a proteção total de uma pasta ou arquivo;

24. cmp

```
christian@NoteChris:/mnt/c/Users/Public$ cmp texto1.txt text2.txt
texto1.txt text2.txt differ: byte 1, line 1
```

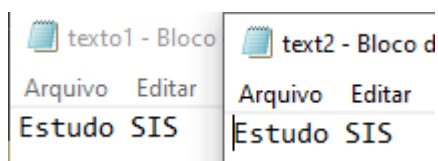
Compara dois arquivos;

25. comm

```
christian@NoteChris:/mnt/c/Users/Public$ comm texto1.txt text2.txt
Estudo SIS
      Meu nome é Chris
```

Seleciona linhas comuns de dois arquivos;

26. cp



Copia um arquivo para o outro;

27. diff

```
christian@NoteChris:/mnt/c/Users/Public$ diff texto1.txt text2.txt
1c1
< SIS é a nossa formação acadêmica
\ No newline at end of file
---
> Gosto da matéria de SOS
\ No newline at end of file
```

Compara dois arquivos de classificação ASCII;

28. file

```
christian@NoteChris:/mnt/c/Users/Public$ file texto1.txt
texto1.txt: UTF-8 Unicode text, with no line terminators
```

Mostra informação sobre o tipo de arquivo;

29. grep

```
DESCRIPTION
grep searches for PATTERNS in each FILE. PATTERNS is one or more patterns separated by newline characters, and grep prints each line that match
pattern. Typically PATTERNS should be quoted when grep is used in a shell command.

A FILE of "-" stands for standard input. If no FILE is given, recursive searches examine the working directory, and nonrecursive searches read stan
dard input.

In addition, the variant programs egrep, fgrep and rgrep are the same as grep -E, grep -F, and grep -r, respectively. These variants are deprecated,
and are provided for backward compatibility.
```

```
christian@NoteChris:/mnt/c/Users/Public$ grep -i "i" texto1.txt
SIS é a nossa formação acadêmica
Sis
```

Cria um filtro com relação ao que o usuário pede, como por exemplo na imagem, o filtro da letra "i" dentro dos dois blocos de nota/arquivo .txt;

30. gzip

```
christian@NoteChris:/mnt/c/Users/Public$ gzip texto1.txt
christian@NoteChris:/mnt/c/Users/Public$ ls
AccountPictures  Desktop  Documents  Downloads  Libraries  Music  Pictures  Videos  desktop.ini  text2.txt  texto1.txt
```

Comprime ou expande o arquivo;

31. ls

```
christian@NoteChris:/mnt/c/Users/Public$ ls
COMMAND PID TID TASKCMD USER FD TYPE DEVICE SIZE NODE NAME
init 1 root cwd DIR 0,2 512 1970324837366315 /
init 1 root rtd DIR 0,2 512 1970324837366315 /
init 1 root txt REG 0,2 644432 1407374883955046 /init
init 1 root mem REG 0,0 401766 /init (path dev=0,2, inode=1407374883955046)
init 1 root NOFD /proc/1/fd (opendir: Permission denied)
init 1 6 init root cwd DIR 0,2 512 1970324837366315 /
init 1 6 init root rtd DIR 0,2 512 1970324837366315 /
init 1 6 init root txt REG 0,2 644432 1407374883955046 /init
init 1 6 init root mem REG 0,0 401766 /init (path dev=0,2, inode=1407374883955046)
init 1 6 init root NOFD /proc/1/task/6/fd (opendir: Permission denied)
init 251 root cwd DIR 0,2 512 1970324837366315 /
init 251 root rtd DIR 0,2 512 1970324837366315 /
init 251 root txt REG 0,2 644432 1407374883955046 /init
init 251 root mem REG 0,0 401766 /init (path dev=0,2, inode=1407374883955046)
init 251 root NOFD /proc/251/fd (opendir: Permission denied)
bash 252 christian cwd DIR 0,14 512 281474976712286 /mnt/c/Users/Public
bash 252 christian rtd DIR 0,2 512 1970324837366315 /
bash 252 christian txt REG 0,2 1183448 1125899907561547 /usr/bin/bash
bash 252 christian mem REG 0,0 748560 /usr/lib/x86_64-linux-gnu/libnss_files-2.31.so (path dev=0,2, inode=562949954169872)
bash 252 christian mem REG 0,0 728773 /usr/lib/locale/C.UTF-8/LC_CTYPE (path dev=0,2, inode=562949954150085)
bash 252 christian mem REG 0,0 728772 /usr/lib/locale/C.UTF-8/LC_COLLATE (path dev=0,2, inode=562949954150084)
bash 252 christian mem REG 0,0 725758 /usr/lib/locale/locale-archive (path dev=0,2, inode=1407374884279038)
bash 252 christian mem REG 0,0 748552 /usr/lib/x86_64-linux-gnu/libc-2.31.so (path dev=0,2, inode=562949954169864)
bash 252 christian mem REG 0,0 748553 /usr/lib/x86_64-linux-gnu/libdl-2.31.so (path dev=0,2, inode=562949954169865)
bash 252 christian mem REG 0,0 728779 /usr/lib/locale/C.UTF-8/LC_NUMERIC (path dev=0,2, inode=562949954150091)
bash 252 christian mem REG 0,0 736138 /usr/lib/x86_64-linux-gnu/libtinfo.so.6.2 (path dev=0,2, inode=562949954157450)
bash 252 christian mem REG 0,0 728782 /usr/lib/locale/C.UTF-8/LC_TIME (path dev=0,2, inode=562949954150094)
bash 252 christian mem REG 0,0 728777 /usr/lib/locale/C.UTF-8/LC_MONETARY (path dev=0,2, inode=562949954150089)
bash 252 christian mem REG 0,0 728776 /usr/lib/locale/C.UTF-8/LC_MESSAGES/SYS_LC_MESSAGES (path dev=0,2, inode=562949954150086)
bash 252 christian mem REG 0,0 728780 /usr/lib/locale/C.UTF-8/LC_PAPER (path dev=0,2, inode=562949954150092)
bash 252 christian mem REG 0,0 728778 /usr/lib/locale/C.UTF-8/LC_NAME (path dev=0,2, inode=562949954150090)
bash 252 christian mem REG 0,0 728771 /usr/lib/locale/C.UTF-8/LC_ADDRESS (path dev=0,2, inode=562949954150083)
bash 252 christian mem REG 0,0 728781 /usr/lib/locale/C.UTF-8/LC_TELEPHONE (path dev=0,2, inode=562949954150093)
bash 252 christian mem REG 0,0 748819 /usr/lib/x86_64-linux-gnu/gconv/gconv-modules.cache (path dev=0,2, inode=2814749774594)
bash 252 christian mem REG 0,0 748547 /usr/lib/x86_64-linux-gnu/ld-2.31.so (path dev=0,2, inode=5348024558251011)
bash 252 christian mem REG 0,0 728775 /usr/lib/locale/C.UTF-8/LC_MEASUREMENT (path dev=0,2, inode=562949954150087)
bash 252 christian mem REG 0,0 728774 /usr/lib/locale/C.UTF-8/LC_IDENTIFICATION (path dev=0,2, inode=562949954150086)
bash 252 christian mem REG 0,0 718923 /usr/bin/bash (path dev=0,2, inode=1125899907561547)
bash 252 christian 0u CHR 4,1 2814749767208938 /dev/tty1
bash 252 christian 255u CHR 4,1 2814749767208938 /dev/tty1
bash 252 christian 2u CHR 4,1 2814749767208938 /dev/tty1
bash 252 christian 1u CHR 4,1 2814749767208938 /dev/tty1
```

Cria uma lista com os arquivos abertos;

32. mv

```
christian@NoteChris:/mnt/c/Users/Public$ mv SIS "texto1.txt"
christian@NoteChris:/mnt/c/Users/Public$ ls
AccountPictures  Desktop  Documents  Downloads  Libraries  Music  Pictures  Videos  desktop.ini  text2.txt  texto1.txt  texto1.txt
```

Renomeia ou move arquivos ou diretórios;

33. stat

```
christian@NoteChris:/mnt/c/Users/Public$ stat texto1.txt
File: texto1.txt
Size: 512          Blocks: 0          IO Block: 512    directory
Device: eh/14d   Inode: 1407374883745154  Links: 1
Access: (0777/drwxrwxrwx)  Uid: ( 1000/christian)   Gid: ( 1000/christian)
Access: 2023-09-14 14:28:05.615773600 -0300
Modify: 2023-09-14 14:27:01.597565200 -0300
Change: 2023-09-14 14:27:48.622902600 -0300
Birth: -
```

Mostra o status de um arquivo;

34. sort

```
christian@NoteChris:/mnt/c/Users/Public$ sort texto1.txt text2.txt
Gosto da matéria de SOS
OI
```

Mostra o a ordem de dois ou mais arquivos em relação aos dados;

35. wc

```
christian@NoteChris:/mnt/c/Users/Public$ wc text2.txt
0 5 24 text2.txt
```

Conta linhas dentro de um arquivo .txt;

Comandos de Transferência de Arquivos (6)

36. ftp

Permite a transfêrencia de arquivos de vários hosts numa rede;

Comandos de Notícias ou Rede (7)

37. netstat

```
christian@NoteChris:/mnt/c/Users/Public$ netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address          State
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags               Type                   State                    I-Node    Path
```

Mostra o status de uma rede;

38. ifconfig

```
christian@NoteChris:/mnt/c/Users/Public$ ifconfig
eth2: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.20.128.1 netmask 255.255.240.0 broadcast 172.20.143.255
    inet6 fe80::ffee:1680:82ff:96fd prefixlen 64 scopeid 0xfd<compat,link,site,host>
    ether 00:15:5d:dd:9a:5f (Ethernet)
    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

eth3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.56.1 netmask 255.255.255.0 broadcast 192.168.56.255
    inet6 fe80::7b00:52cd:4927:694a prefixlen 64 scopeid 0xfd<compat,link,site,host>
    ether 0a:00:27:00:00:0f (Ethernet)
    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

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 1500
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0xfe<compat,link,site,host>
    loop (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

wifi0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.18.32.173 netmask 255.255.240.0 broadcast 10.18.47.255
    inet6 fe80::39cb:e207:34f0:74da prefixlen 64 scopeid 0xfd<compat,link,site,host>
    ether 64:32:a8:02:4e:be (Ethernet)
    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
```

Mostra o ip da nossa máquina;

39.ping

```
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=65 ttl=116 time=2.92 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=66 ttl=116 time=4.64 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=67 ttl=116 time=4.38 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=68 ttl=116 time=5.63 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=69 ttl=116 time=2.77 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=70 ttl=116 time=4.64 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=71 ttl=116 time=4.96 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=72 ttl=116 time=3.79 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=73 ttl=116 time=4.78 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=74 ttl=116 time=6.84 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=75 ttl=116 time=5.66 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=76 ttl=116 time=3.60 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=77 ttl=116 time=3.99 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=78 ttl=116 time=5.25 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=79 ttl=116 time=4.09 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=80 ttl=116 time=3.61 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=81 ttl=116 time=3.35 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=82 ttl=116 time=3.32 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=83 ttl=116 time=4.25 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=84 ttl=116 time=2.86 ms
64 bytes from gru06s60-in-f14.1e100.net (142.250.218.14): icmp_seq=85 ttl=116 time=4.96 ms
```

```
--- google.com ping statistics ---
188 packets transmitted, 188 received, 0% packet loss, time 187180ms
rtt min/avg/max/mdev = 2.673/3.742/13.231/1.203 ms
```

Mostra o ping de um determinado host

