

**UNIVERSIDADE FEDERAL DE UBERLÂNDIA  
FACOM - FACULDADE DE COMPUTAÇÃO**

MAYCON ALVES GOMES

**Atividade 1**

Comandos básicos do Linux

**Uberlândia - MG  
Agosto - 2023**

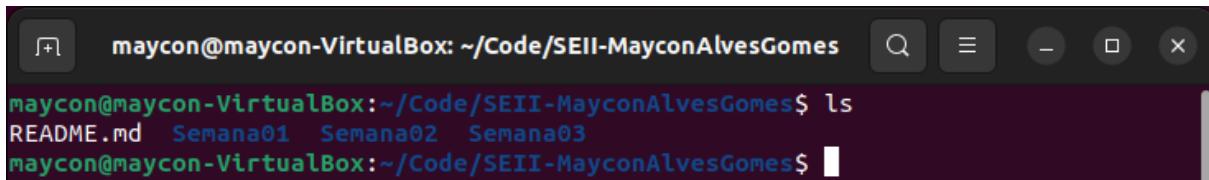
## SUMÁRIO

1 ls	4
2 man	4
3 clear	4
4 mkdir	5
5 cd	5
6 pwd	5
7 whoami	5
8 Redirecionadores “>>”	6
9 Criar e acessar pasta com nome composto	6
10 Exemplo	6
11 touch	6
12 nano - editar arquivo de texto	7
13 cat	7
14 mv	7
15 cp	8
16 find	8
17 head & tail	8
18 less	9
19 rm	9
20 rmdir	10
21 rm -rf	10
22 hostname	10
23 `hostname -l`	10
24 ip a	11
25 grep	11
26 ping	11
27 free -h & free -m	12
28 top	12
29 htop	13
30 ps	14
31 ps aux	14
32 kill	15
33 df -h	16
34 ncdt	16
35 uname	17
36 lscpu & lsusb	17
37 history	19
Lista de todos os comandos usados no terminal.	19
38 echo	19
39 wc	19
40 piping	20

<b>41 sort</b>	<b>20</b>
<b>42 uniq</b>	<b>20</b>
<b>43 Expansions</b>	<b>21</b>
<b>44 diff</b>	<b>21</b>
<b>45 find</b>	<b>22</b>
<b>46 grep</b>	<b>22</b>
<b>47 du</b>	<b>23</b>
<b>48 df</b>	<b>23</b>
<b>49 ps</b>	<b>24</b>
<b>50 top</b>	<b>24</b>
<b>51 kill</b>	<b>25</b>
<b>52 killall</b>	<b>26</b>
<b>53 jobs, bg, and fg</b>	<b>27</b>
<b>54 gzip</b>	<b>29</b>
<b>55 gunzip</b>	<b>29</b>
<b>56 tar</b>	<b>30</b>
<b>57 nano</b>	<b>30</b>
<b>58 alias</b>	<b>30</b>
<b>59 xargs</b>	<b>31</b>
<b>60 ln</b>	<b>31</b>
<b>61 who</b>	<b>31</b>
<b>62 su</b>	<b>32</b>
<b>63 sudo</b>	<b>32</b>
<b>64 passwd</b>	<b>32</b>
<b>65 chown</b>	<b>32</b>
<b>66 Understanding permissions</b>	<b>33</b>
<b>67 chmod</b>	<b>34</b>
<b>68 Estruturação do “Linux File System”</b>	<b>35</b>

## 1 ls

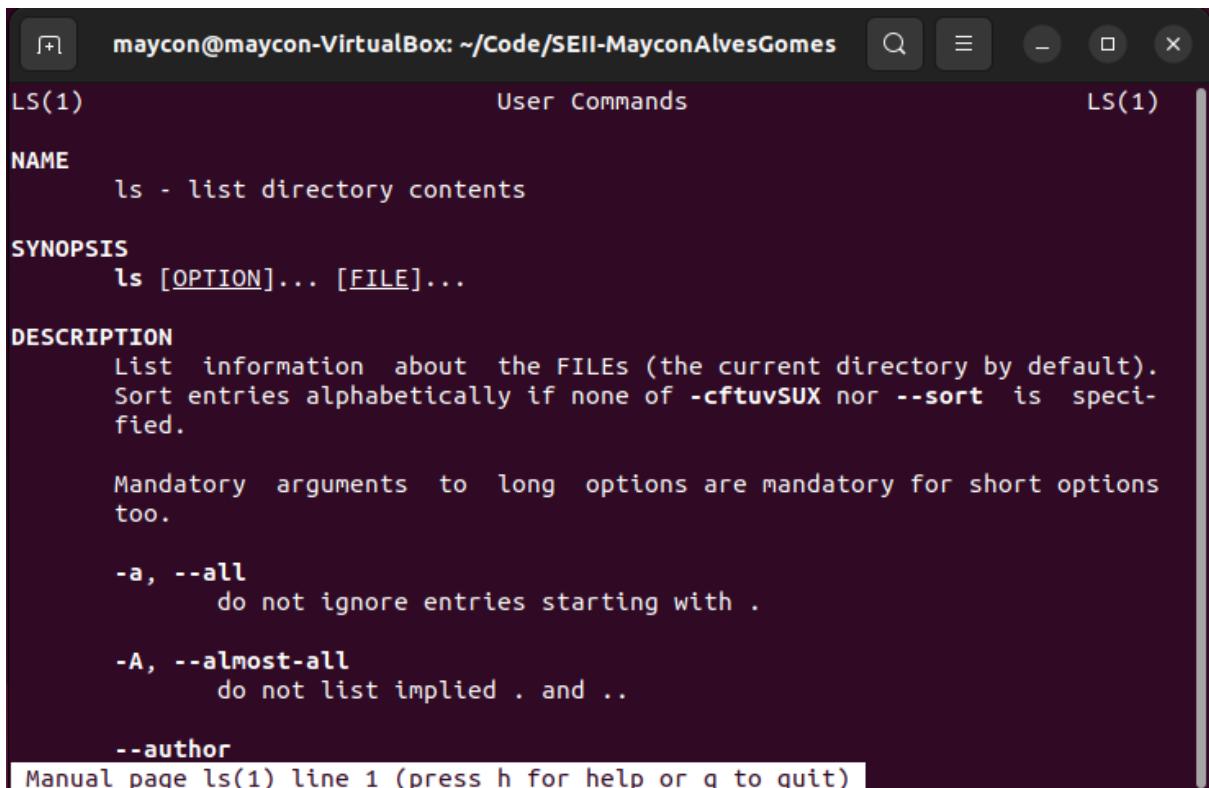
Usado para visualizar uma lista do conteúdo de um diretório.



```
maycon@maycon-VirtualBox: ~/Code/SEII-MayconAlvesGomes$ ls
README.md  Semana01  Semana02  Semana03
maycon@maycon-VirtualBox: ~/Code/SEII-MayconAlvesGomes$
```

## 2 man

Descreve o que faz um determinado comando. Ex.: "man ls".



```
maycon@maycon-VirtualBox: ~/Code/SEII-MayconAlvesGomes$ man ls
LS(1)                               User Commands               LS(1)

NAME
    ls - list directory contents

SYNOPSIS
    ls [OPTION]... [FILE]...

DESCRIPTION
    List information about the FILEs (the current directory by default).
    Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.

    Mandatory arguments to long options are mandatory for short options too.

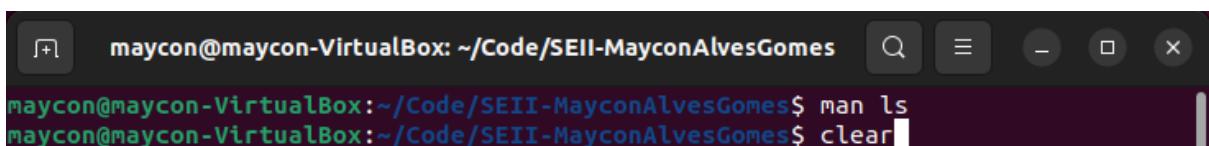
    -a, --all
        do not ignore entries starting with .

    -A, --almost-all
        do not list implied . and ..

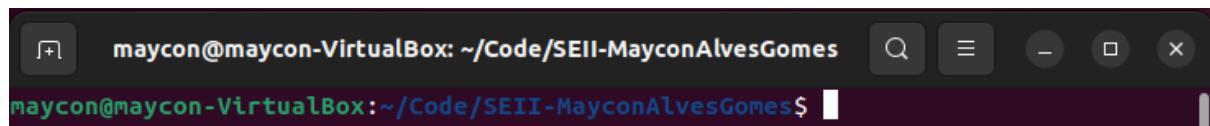
    --author
Manual page ls(1) line 1 (press h for help or q to quit)
```

## 3 clear

Limpa as informações da tela do terminal.



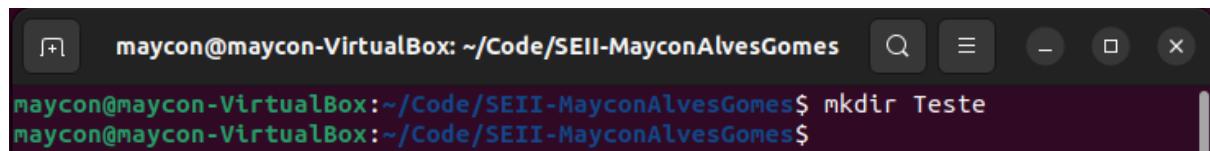
```
maycon@maycon-VirtualBox: ~/Code/SEII-MayconAlvesGomes$ man ls
maycon@maycon-VirtualBox: ~/Code/SEII-MayconAlvesGomes$ clear
```



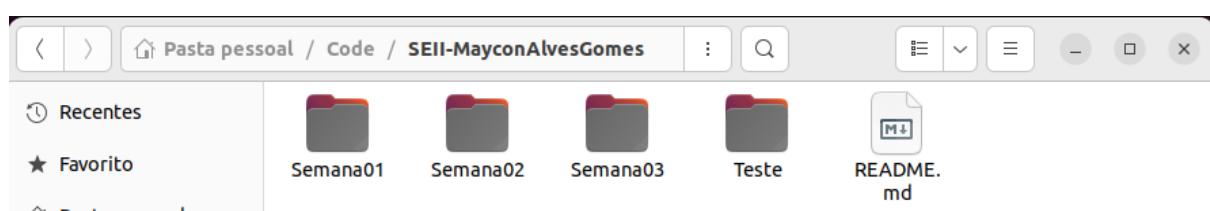
```
maycon@maycon-VirtualBox: ~/Code/SEII-MayconAlvesGomes$
```

#### 4 mkdir

Cria um diretório na pasta corrente.

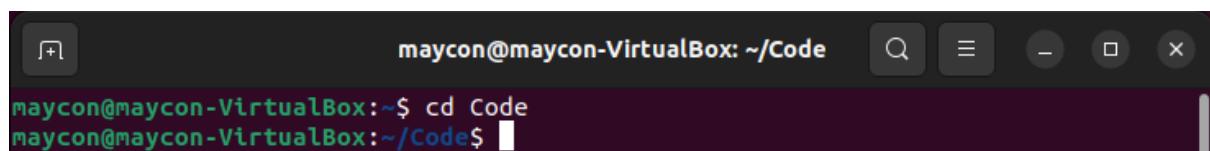


```
maycon@maycon-VirtualBox: ~/Code/SEII-MayconAlvesGomes$ mkdir Teste
maycon@maycon-VirtualBox: ~/Code/SEII-MayconAlvesGomes$
```



#### 5 cd

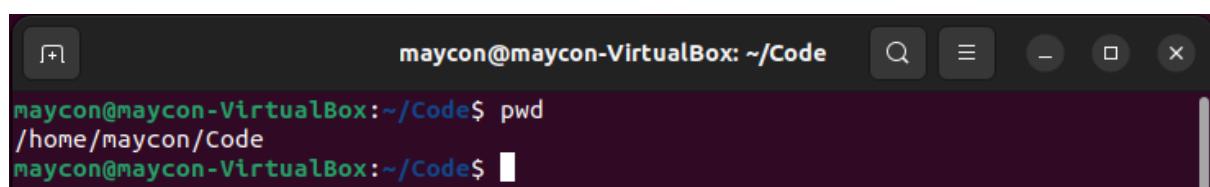
Acessa um diretório cujo caminho foi informado. O comando cd sem argumento faz o terminal acessar o diretório raiz.



```
maycon@maycon-VirtualBox: ~$ cd Code
maycon@maycon-VirtualBox:~/Code$
```

#### 6 pwd

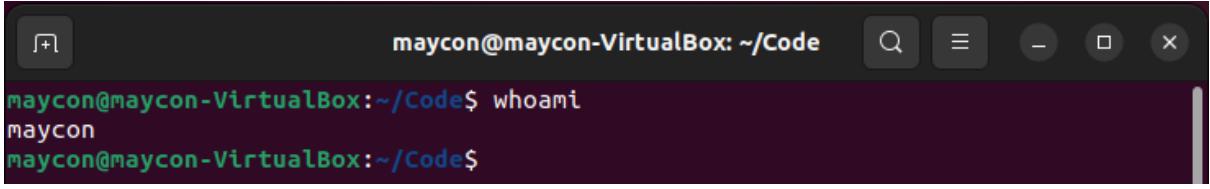
Informa o caminho do diretório corrente.



```
maycon@maycon-VirtualBox:~/Code$ pwd
/home/maycon/Code
maycon@maycon-VirtualBox:~/Code$
```

#### 7 whoami

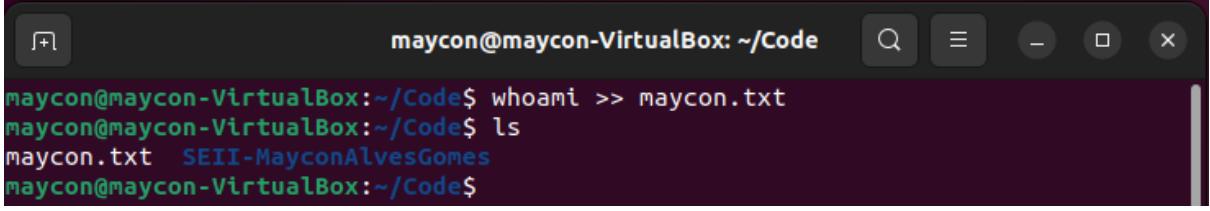
Informa o usuário atual.



```
maycon@maycon-VirtualBox:~/Code$ whoami
maycon
maycon@maycon-VirtualBox:~/Code$
```

## 8 Redirecionadores “>>”

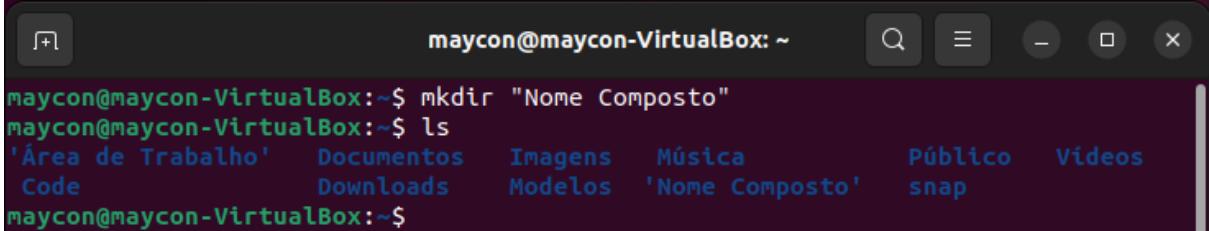
Pode ser usado para transferir o resultado de um comando à um arquivo de texto, por exemplo.



```
maycon@maycon-VirtualBox:~/Code$ whoami >> maycon.txt
maycon@maycon-VirtualBox:~/Code$ ls
maycon.txt  SEII-MayconAlvesGomes
maycon@maycon-VirtualBox:~/Code$
```

## 9 Criar e acessar pasta com nome composto

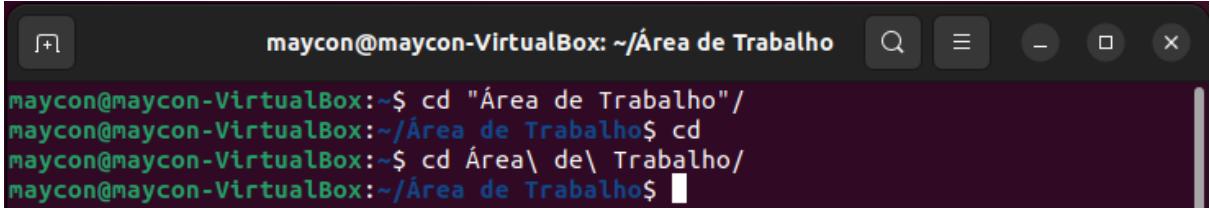
Basta utilizar aspas simples ou duplas.



```
maycon@maycon-VirtualBox:~$ mkdir "Nome Composto"
maycon@maycon-VirtualBox:~$ ls
'Área de Trabalho'  Documentos  Imagens  Música      Público   Vídeos
  Code            Downloads  Modelos  'Nome Composto'  snap
maycon@maycon-VirtualBox:~$
```

## 10 Exemplo

Podemos acessar pastas com nomes compostos das seguintes formas:



```
maycon@maycon-VirtualBox:~/Área de Trabalho$ cd "Área de Trabalho"/
maycon@maycon-VirtualBox:~/Área de Trabalho$ cd
maycon@maycon-VirtualBox:~/Área\ de\ Trabalho/
maycon@maycon-VirtualBox:~/Área de Trabalho$
```

## 11 touch

Pode ser usado para criar um arquivo txt em branco, apesar de ter sido criado para mudar a timestamps de um arquivo.

```
maycon@maycon-VirtualBox: ~/Nome Composto$ touch Texto.txt
maycon@maycon-VirtualBox: ~/Nome Composto$ ls
Texto.txt
maycon@maycon-VirtualBox: ~/Nome Composto$
```

## 12 nano - editar arquivo de texto

Editar arquivos de texto pelo terminal.

```
maycon@maycon-VirtualBox: ~/Nome Composto$ nano Texto.txt
GNU nano 6.2
afsfadfasdf
adffadfasdasfd

afdsfdad
fdafs
dfdd
```

## 13 cat

Concatena arquivos e printa na tela.

```
maycon@maycon-VirtualBox: ~/Nome Composto$ cat Texto.txt
Hello World!
maycon@maycon-VirtualBox: ~/Nome Composto$
```

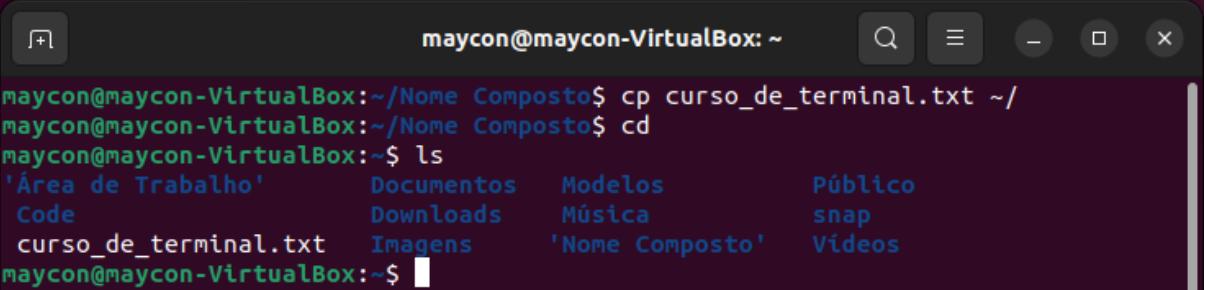
## 14 mv

Renomeia arquivos.

```
maycon@maycon-VirtualBox: ~/Nome Composto$ mv Texto.txt curso_de_terminal.txt
maycon@maycon-VirtualBox: ~/Nome Composto$ ls
curso_de_terminal.txt
maycon@maycon-VirtualBox: ~/Nome Composto$
```

## 15 cp

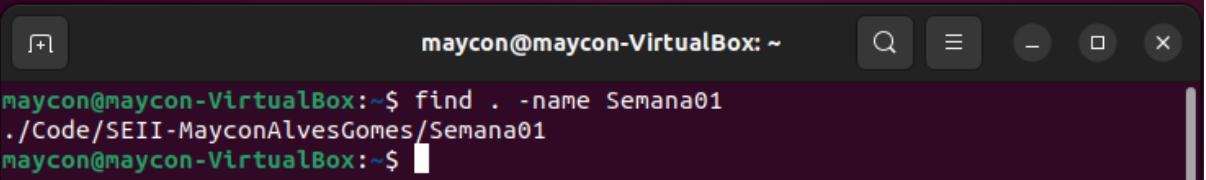
Copia um arquivo para uma determinada pasta informada.



```
maycon@maycon-VirtualBox:~/Nome Composto$ cp curso_de_terminal.txt ~/  
maycon@maycon-VirtualBox:~/Nome Composto$ cd  
maycon@maycon-VirtualBox:~$ ls  
'Área de Trabalho' Documentos Modelos Público  
Code Downloads Música snap  
curso_de_terminal.txt Imagens 'Nome Composto' Vídeos  
maycon@maycon-VirtualBox:~$
```

## 16 find

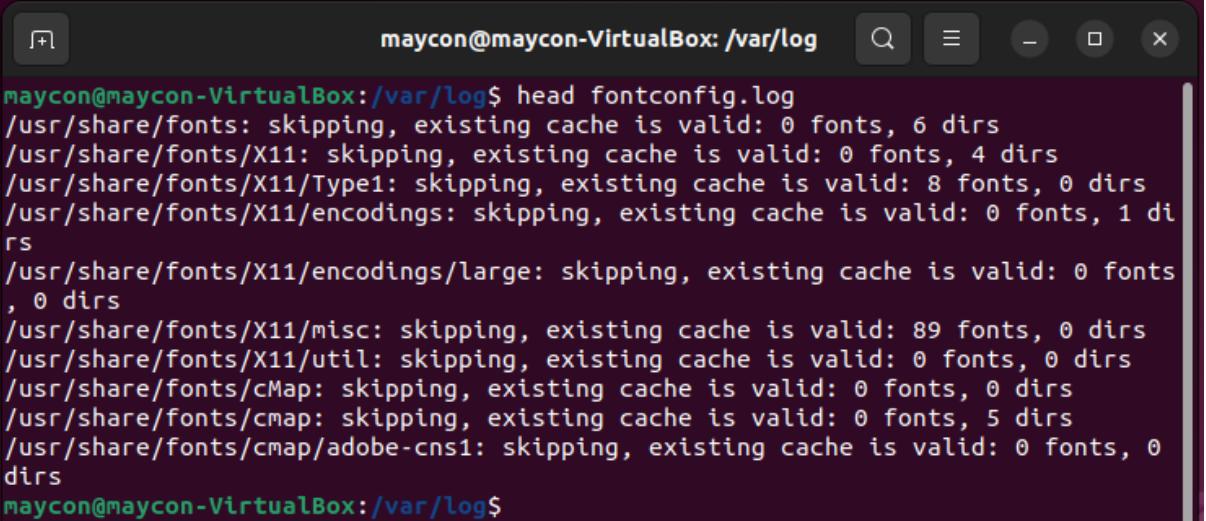
Informa o caminho até um determinado arquivo.



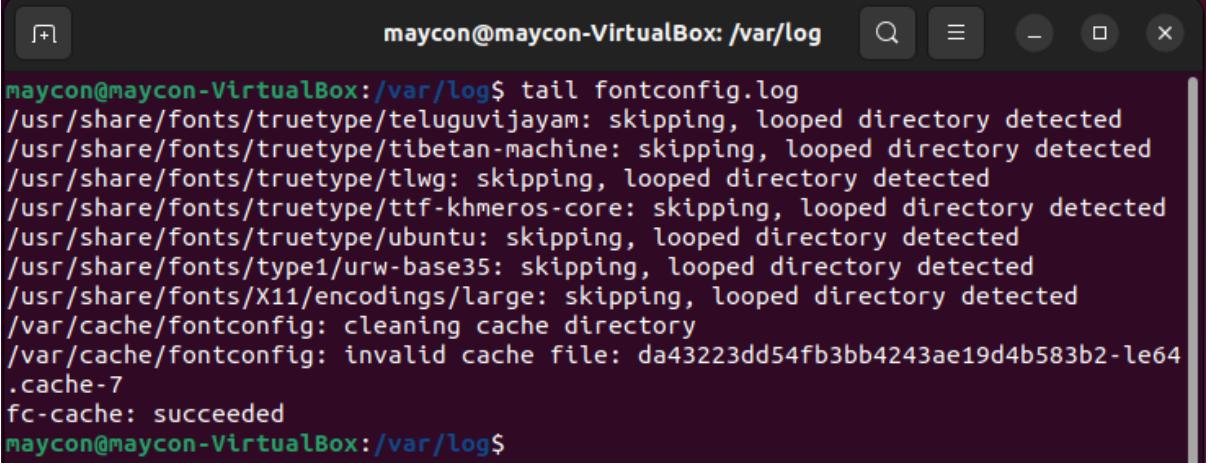
```
maycon@maycon-VirtualBox:~$ find . -name Semana01  
./Code/SEII-MayconAlvesGomes/Semana01  
maycon@maycon-VirtualBox:~$
```

## 17 head & tail

Os comandos “head” e “tail” informar, respectivamente, as primeiras e as últimas linhas de um arquivo.



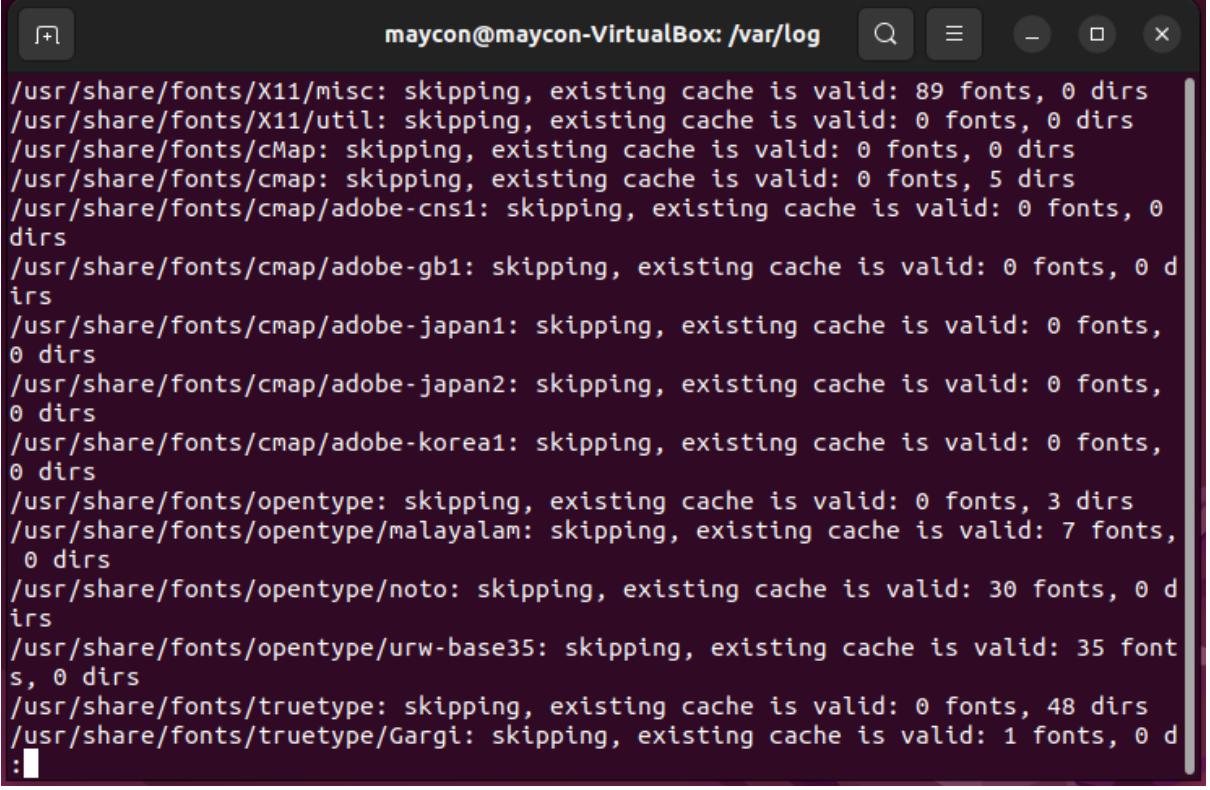
```
maycon@maycon-VirtualBox:/var/log$ head fontconfig.log  
/usr/share/fonts: skipping, existing cache is valid: 0 fonts, 6 dirs  
/usr/share/fonts/X11: skipping, existing cache is valid: 0 fonts, 4 dirs  
/usr/share/fonts/X11/Type1: skipping, existing cache is valid: 8 fonts, 0 dirs  
/usr/share/fonts/X11/encodings: skipping, existing cache is valid: 0 fonts, 1 di  
rs  
/usr/share/fonts/X11/encodings/large: skipping, existing cache is valid: 0 fonts  
, 0 dirs  
/usr/share/fonts/X11/misc: skipping, existing cache is valid: 89 fonts, 0 dirs  
/usr/share/fonts/X11/util: skipping, existing cache is valid: 0 fonts, 0 dirs  
/usr/share/fonts/cMap: skipping, existing cache is valid: 0 fonts, 0 dirs  
/usr/share/fonts/cmap: skipping, existing cache is valid: 0 fonts, 5 dirs  
/usr/share/fonts/cmap/adobe-cns1: skipping, existing cache is valid: 0 fonts, 0  
dirs  
maycon@maycon-VirtualBox:/var/log$
```



```
maycon@maycon-VirtualBox:~/var/log$ tail fontconfig.log
/usr/share/fonts/truetype/teluguvijayam: skipping, looped directory detected
/usr/share/fonts/truetype/tibetan-machine: skipping, looped directory detected
/usr/share/fonts/truetype/tlwg: skipping, looped directory detected
/usr/share/fonts/truetype/ttf-khmeros-core: skipping, looped directory detected
/usr/share/fonts/truetype/ubuntu: skipping, looped directory detected
/usr/share/fonts/type1/urw-base35: skipping, looped directory detected
/usr/share/fonts/X11/encodings/large: skipping, looped directory detected
/var/cache/fontconfig: cleaning cache directory
/var/cache/fontconfig: invalid cache file: da43223dd54fb3bb4243ae19d4b583b2-le64
.cache-7
fc-cache: succeeded
maycon@maycon-VirtualBox:~/var/log$
```

## 18 less

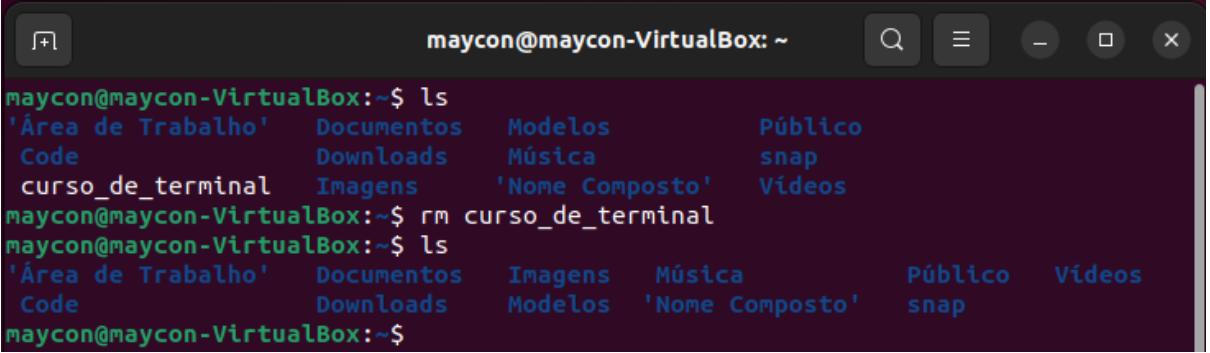
Carrega um arquivo aos poucos, conforme o usuário vai descendo as linhas no terminal.



```
maycon@maycon-VirtualBox:~/var/log$ less fontconfig.log
/usr/share/fonts/X11/misc: skipping, existing cache is valid: 89 fonts, 0 dirs
/usr/share/fonts/X11/util: skipping, existing cache is valid: 0 fonts, 0 dirs
/usr/share/fonts/cMap: skipping, existing cache is valid: 0 fonts, 0 dirs
/usr/share/fonts/cmap: skipping, existing cache is valid: 0 fonts, 5 dirs
/usr/share/fonts/cmap/adobe-cns1: skipping, existing cache is valid: 0 fonts, 0 dirs
/usr/share/fonts/cmap/adobe-gb1: skipping, existing cache is valid: 0 fonts, 0 dirs
/usr/share/fonts/cmap/adobe-japan1: skipping, existing cache is valid: 0 fonts, 0 dirs
/usr/share/fonts/cmap/adobe-japan2: skipping, existing cache is valid: 0 fonts, 0 dirs
/usr/share/fonts/cmap/adobe-korea1: skipping, existing cache is valid: 0 fonts, 0 dirs
/usr/share/fonts/opentype: skipping, existing cache is valid: 0 fonts, 3 dirs
/usr/share/fonts/opentype/malayalam: skipping, existing cache is valid: 7 fonts, 0 dirs
/usr/share/fonts/opentype/noto: skipping, existing cache is valid: 30 fonts, 0 dirs
/usr/share/fonts/opentype/urw-base35: skipping, existing cache is valid: 35 fonts, 0 dirs
/usr/share/fonts/truetype: skipping, existing cache is valid: 0 fonts, 48 dirs
/usr/share/fonts/truetype/Gargi: skipping, existing cache is valid: 1 fonts, 0 dirs
:|
```

## 19 rm

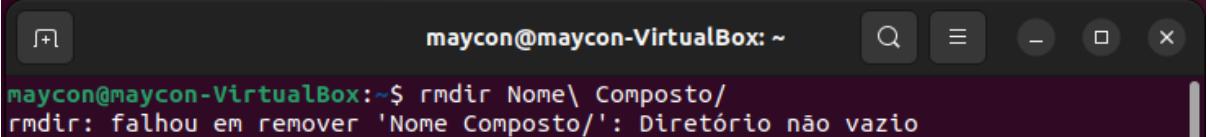
Remover arquivos.



```
maycon@maycon-VirtualBox:~$ ls
'Área de Trabalho' Documentos Modelos      PÚblico
Code           Downloads Música       snap
curso_de_terminal   Imagens 'Nome Composto' Vídeos
maycon@maycon-VirtualBox:~$ rm curso_de_terminal
maycon@maycon-VirtualBox:~$ ls
'Área de Trabalho' Documentos   Imagens  Música      PÚblico  Vídeos
Code           Downloads   Modelos  'Nome Composto'  snap
maycon@maycon-VirtualBox:~$
```

## 20 rmdir

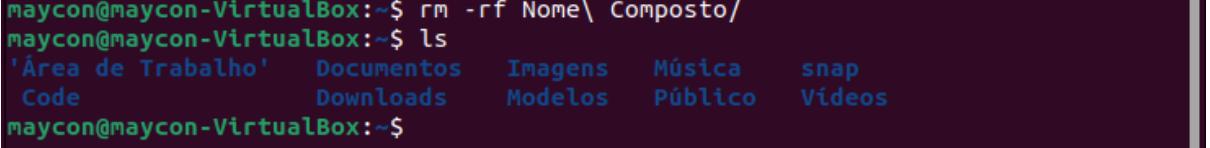
Remove um diretório vazio.



```
maycon@maycon-VirtualBox:~$ rmdir Nome\ Composto/
rmdir: falhou em remover 'Nome Composto/': Diretório não vazio
```

## 21 rm -rf

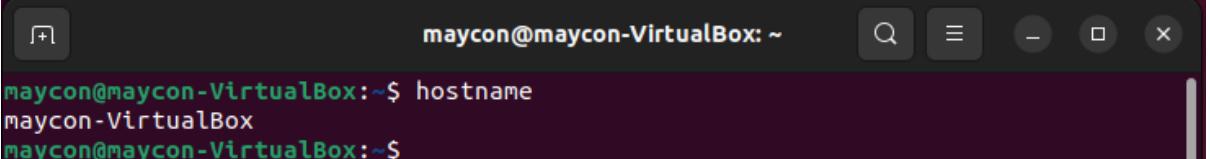
O argumento -rf, usado no comando rm, faz apagar um arquivo de forma recursiva e forçada. Ex.: pasta contendo arquivos, do exemplo anterior.



```
maycon@maycon-VirtualBox:~$ rm -rf Nome\ Composto/
maycon@maycon-VirtualBox:~$ ls
'Área de Trabalho' Documentos   Imagens  Música    snap
Code           Downloads   Modelos  PÚblico  Vídeos
maycon@maycon-VirtualBox:~$
```

## 22 hostname

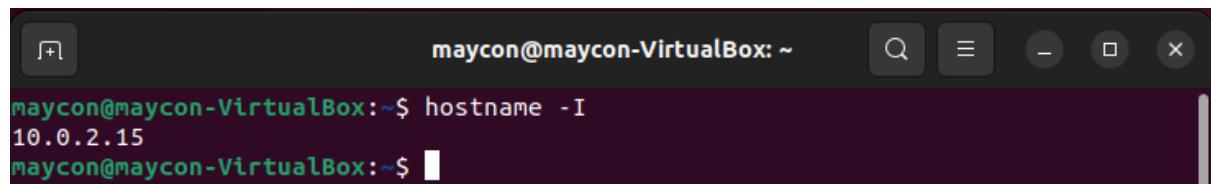
Informa o nome da máquina.



```
maycon@maycon-VirtualBox:~$ hostname
maycon-VirtualBox
maycon@maycon-VirtualBox:~$
```

## 23 `hostname -l`

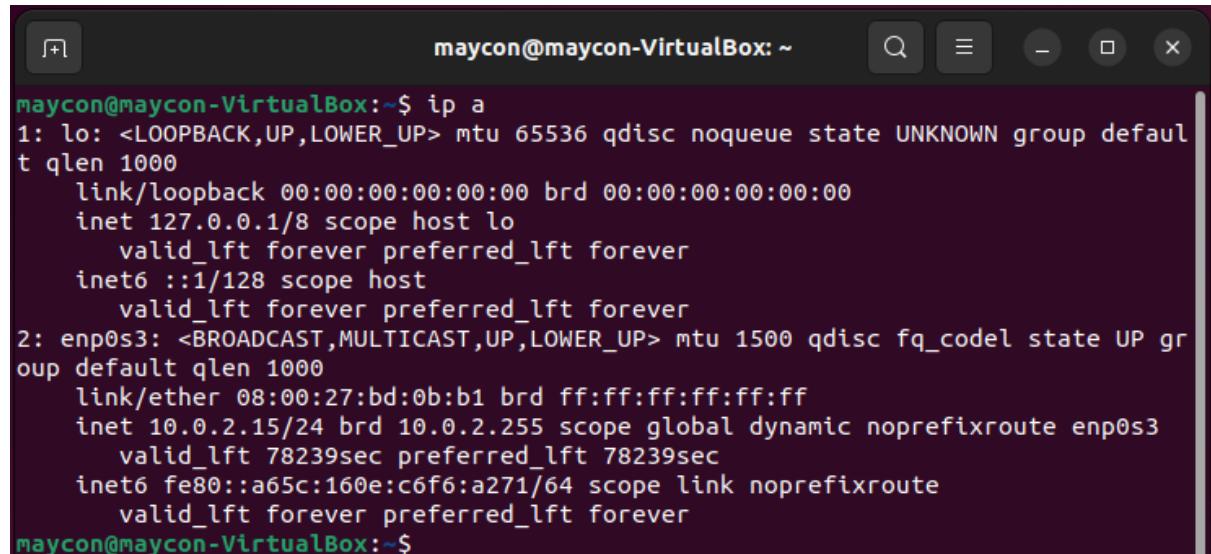
Printa o IP da máquina.



```
maycon@maycon-VirtualBox:~$ hostname -I  
10.0.2.15  
maycon@maycon-VirtualBox:~$
```

## 24 ip a

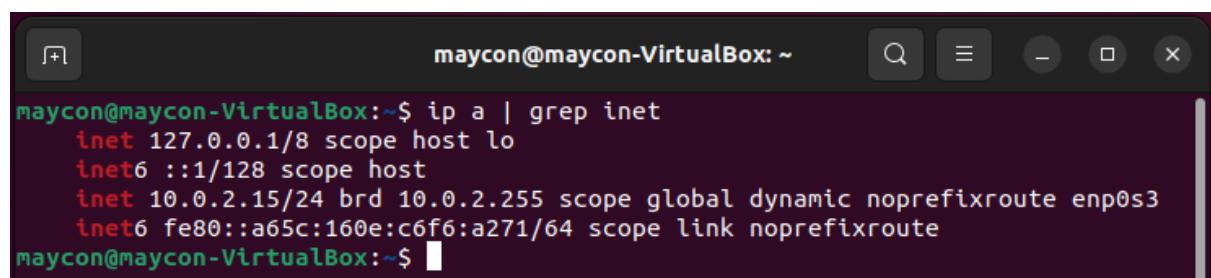
Informa todos os detalhes de cada uma de suas interfaces de rede.



```
maycon@maycon-VirtualBox:~$ 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  
    inet6 ::1/128 scope host  
        valid_lft forever preferred_lft forever  
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000  
    link/ether 08:00:27:bd:0b:b1 brd ff:ff:ff:ff:ff:ff  
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3  
        valid_lft 78239sec preferred_lft 78239sec  
    inet6 fe80::a65c:160e:c6f6:a271/64 scope link noprefixroute  
        valid_lft forever preferred_lft forever  
maycon@maycon-VirtualBox:~$
```

## 25 grep

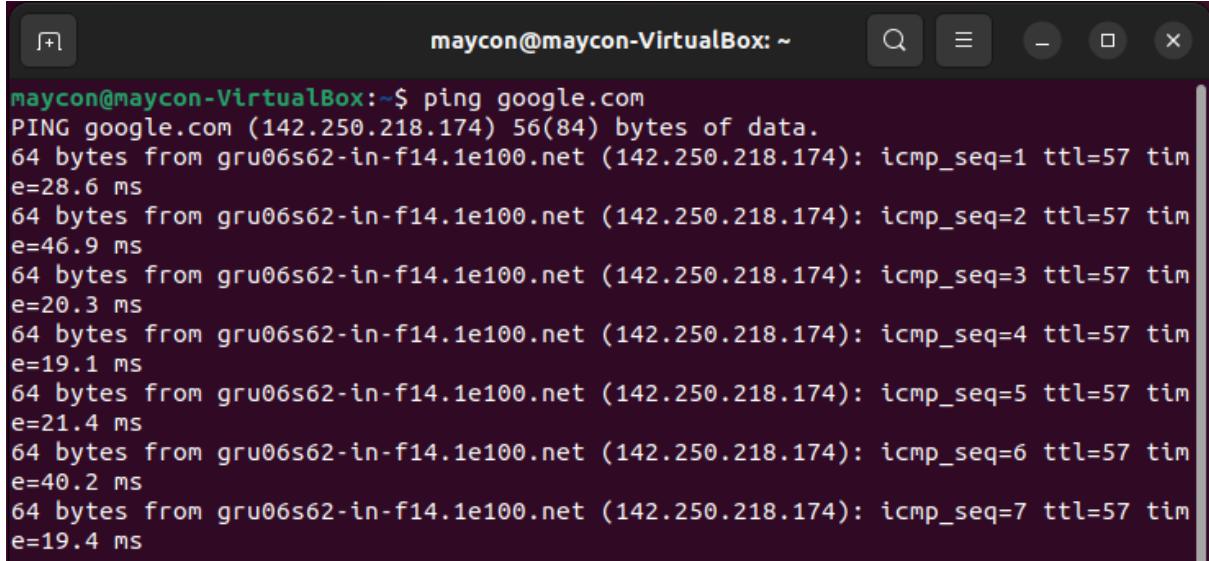
Filtre informações da saída de um comando.



```
maycon@maycon-VirtualBox:~$ ip a | grep inet  
    inet 127.0.0.1/8 scope host lo  
    inet6 ::1/128 scope host  
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3  
    inet6 fe80::a65c:160e:c6f6:a271/64 scope link noprefixroute  
maycon@maycon-VirtualBox:~$
```

## 26 ping

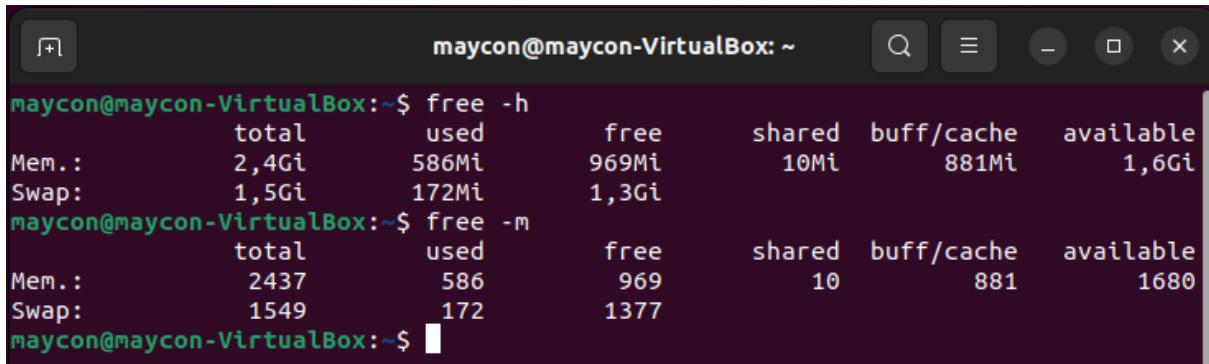
Printa o teste de ping para um dado servidor.



```
maycon@maycon-VirtualBox:~$ ping google.com
PING google.com (142.250.218.174) 56(84) bytes of data.
64 bytes from gru06s62-in-f14.1e100.net (142.250.218.174): icmp_seq=1 ttl=57 time=28.6 ms
64 bytes from gru06s62-in-f14.1e100.net (142.250.218.174): icmp_seq=2 ttl=57 time=46.9 ms
64 bytes from gru06s62-in-f14.1e100.net (142.250.218.174): icmp_seq=3 ttl=57 time=20.3 ms
64 bytes from gru06s62-in-f14.1e100.net (142.250.218.174): icmp_seq=4 ttl=57 time=19.1 ms
64 bytes from gru06s62-in-f14.1e100.net (142.250.218.174): icmp_seq=5 ttl=57 time=21.4 ms
64 bytes from gru06s62-in-f14.1e100.net (142.250.218.174): icmp_seq=6 ttl=57 time=40.2 ms
64 bytes from gru06s62-in-f14.1e100.net (142.250.218.174): icmp_seq=7 ttl=57 time=19.4 ms
```

## 27 free -h & free -m

Exibe informações sobre a memória, onde -h lista as informações em escalas mais legíveis para seres humanos com as respectivas unidades de medidas.



```
maycon@maycon-VirtualBox:~$ free -h
              total        used        free      shared  buff/cache   available
Mem.:       2,4Gi       586Mi     969Mi        10Mi     881Mi       1,6Gi
Swap:       1,5Gi       172Mi     1,3Gi
maycon@maycon-VirtualBox:~$ free -m
              total        used        free      shared  buff/cache   available
Mem.:       2437         586        969         10        881       1680
Swap:       1549         172       1377
maycon@maycon-VirtualBox:~$
```

## 28 top

Exibe o monitoramento do sistema em tempo real.

```

top - 20:04:07 up 2:25, 1 user, load average: 0,13, 0,03, 0,01
Tarefas: 176 total, 1 em exec., 175 dormindo, 0 parado, 0 zumbi
%Cpu(s): 2,5 us, 1,8 sy, 0,0 ni, 95,8 id, 0,0 wa, 0,0 hi, 0,0 si, 0,0 st
MB mem : 2437,6 total, 968,9 livre, 584,7 usados, 884,0 buff/cache
MB swap: 1550,0 total, 1377,0 livre, 173,0 usados, 1682,5 mem dispon.

PID USUARIO PR NI VIRT RES SHR S %CPU %MEM TEMPO+ COMANDO
 941 maycon 20 0 3943812 123576 51784 S 3,6 5,0 2:57.84 gnome-s+
2687 maycon 20 0 572604 32412 21124 S 1,3 1,3 0:22.79 gnome-t+
6179 maycon 20 0 21948 4096 3328 R 0,7 0,2 0:00.46 top
 499 systemd+ 20 0 14824 2688 1920 S 0,3 0,1 0:20.38 systemd+
2353 maycon 20 0 2806504 47408 31900 S 0,3 1,9 0:05.01 gjs
 1 root 20 0 167872 9444 4580 S 0,0 0,4 0:02.44 systemd
 2 root 20 0 0 0 0 S 0,0 0,0 0:00.00 kthreadd
 3 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 rcu_gp
 4 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 rcu_par+
 5 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 slub_fl+
 6 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 netns
 8 root 0 -20 0 0 0 I 0,0 0,0 0:05.15 kworker+
10 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 mm_perc+
11 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
12 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
13 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
14 root 20 0 0 0 0 S 0,0 0,0 0:02.37 ksoftirq+

```

## 29 htop

Faz o mesmo que o comando top, porém de forma mais organizada e colorida, além de contar atalhos com funções.

A screenshot of a terminal window titled "maycon@maycon-VirtualBox: ~". The window displays system statistics at the top: CPU usage (3.4%), memory usage (589M/2.38G), swap usage (172M/1.51G), tasks (117, 256 thr; 1 running), load average (0.62 0.18 0.06), and uptime (02:27:23). Below this is a detailed process list from the htop command, showing columns for PID, USER, PRI, NI, VIRT, RES, SHR, S, CPU%, MEM%, TIME+, and Command. The processes listed include various system daemons like systemd, cron, and acpid, along with user sessions. At the bottom of the window, there is a footer with function keys: F1Help, F2Setup, F3Search, F4Filter, F5Tree, F6SortBy, F7Nice -, F8Nice +, F9Kill, and F10Quit.

PID	USER	PRI	NI	VIRT	RES	SHR	S	CPU%	MEM%	TIME+	Command
6333	maycon	20	0	19640	4608	3584	R	2.0	0.2	0:00.26	htop
2687	maycon	20	0	559M	32540	21252	S	0.7	1.3	0:23.45	/usr/libexec/gn
1	root	20	0	163M	9444	4580	S	0.0	0.4	0:02.45	/sbin/init spla
178	root	19	-1	48120	12676	11268	S	0.0	0.5	0:00.69	/lib/systemd/sy
230	root	20	0	27260	3456	1280	S	0.0	0.1	0:00.56	/lib/systemd/sy
499	systemd-o	20	0	14824	2688	1920	S	0.0	0.1	0:20.64	/lib/systemd/sy
501	systemd-r	20	0	25924	6368	2944	S	0.0	0.3	0:01.56	/lib/systemd/sy
502	systemd-t	20	0	89376	3072	2176	S	0.0	0.1	0:00.15	/lib/systemd/sy
506	systemd-t	20	0	89376	3072	2176	S	0.0	0.1	0:00.00	/lib/systemd/sy
546	root	20	0	243M	4272	3376	S	0.0	0.2	0:00.41	/usr/libexec/ac
547	root	20	0	2812	1152	1024	S	0.0	0.0	0:00.45	/usr/sbin/acpid
550	avahi	20	0	7628	2304	1920	S	0.0	0.1	0:00.08	avahi-daemon: r
551	root	20	0	18148	1280	1152	S	0.0	0.1	0:00.02	/usr/sbin/cron
552	messagebu	20	0	10896	4096	2048	S	0.0	0.2	0:01.12	@dbus-daemon --
553	root	20	0	264M	7640	5208	S	0.0	0.3	0:00.73	/usr/sbin/Netwo
574	root	20	0	49812	9728	3840	S	0.0	0.4	0:00.18	/usr/bin/python
575	root	20	0	231M	6572	3940	S	0.0	0.3	0:00.30	/usr/libexec/po

30 ps

Lista os processos da atual instância do terminal.

A screenshot of a terminal window titled "maycon@maycon-VirtualBox: ~\$". The window displays the output of the ps command, which shows two processes: a bash session (PID 2705) and a ps session (PID 6346).

```
maycon@maycon-VirtualBox:~$ ps
  PID TTY      TIME CMD
 2705 pts/0    00:00:00 bash
 6346 pts/0    00:00:00 ps
maycon@maycon-VirtualBox:~$
```

31 ps aux

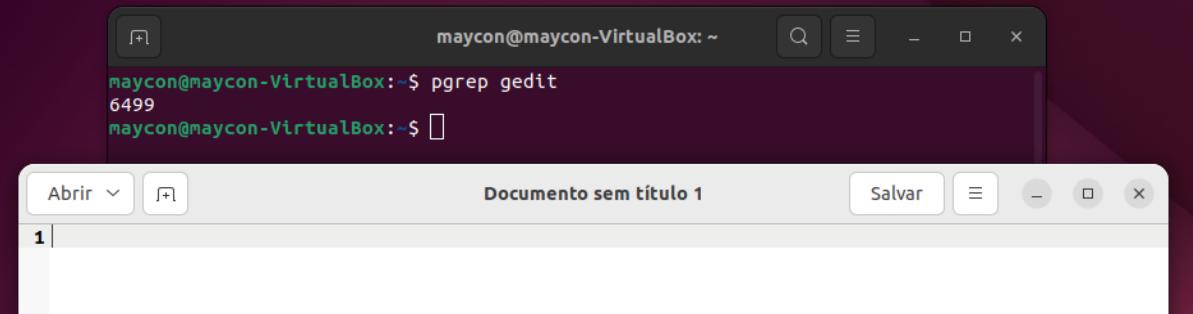
Lista todos os processos.

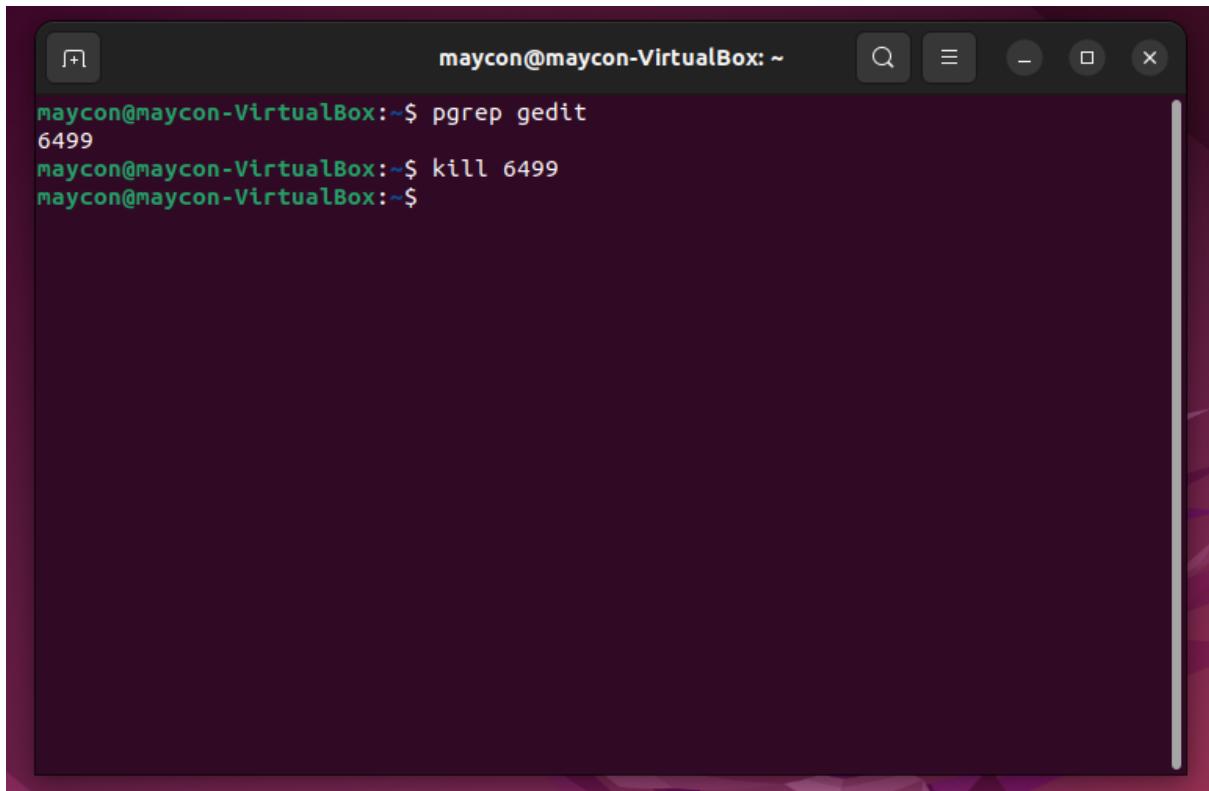
```
maycon@maycon-VirtualBox:~$ ps aux
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START  TIME COMMAND
root      1  0.0  0.3 167872  9444 ?        Ss   17:38  0:02 /sbin/init sp
root      2  0.0  0.0     0     0 ?        S    17:38  0:00 [kthreadd]
root      3  0.0  0.0     0     0 ?        I<  17:38  0:00 [rcu_gp]
root      4  0.0  0.0     0     0 ?        I<  17:38  0:00 [rcu_par_gp]
root      5  0.0  0.0     0     0 ?        I<  17:38  0:00 [slub_flushwq]
root      6  0.0  0.0     0     0 ?        I<  17:38  0:00 [netns]
root      8  0.0  0.0     0     0 ?        I<  17:38  0:05 [kworker/0:0H]
root     10  0.0  0.0     0     0 ?        I<  17:38  0:00 [mm_percpu_wq]
root     11  0.0  0.0     0     0 ?        I    17:38  0:00 [rcu_tasks_kt]
root     12  0.0  0.0     0     0 ?        I    17:38  0:00 [rcu_tasks_ru]
root     13  0.0  0.0     0     0 ?        I    17:38  0:00 [rcu_tasks_tr]
root     14  0.0  0.0     0     0 ?        S    17:38  0:02 [ksoftirqd/0]
root     15  0.0  0.0     0     0 ?        I    17:38  0:04 [rcu_preempt]
root     16  0.0  0.0     0     0 ?        S    17:38  0:00 [migration/0]
root     17  0.0  0.0     0     0 ?        S    17:38  0:00 [idle_inject/]
root     19  0.0  0.0     0     0 ?        S    17:38  0:00 [cpuhp/0]
root     20  0.0  0.0     0     0 ?        S    17:38  0:00 [kdevtmpfs]
root     21  0.0  0.0     0     0 ?        I<  17:38  0:00 [inet_frag_wq]
root     22  0.0  0.0     0     0 ?        S    17:38  0:00 [kaudittd]
root     23  0.0  0.0     0     0 ?        S    17:38  0:00 [khungtaskd]
root     24  0.0  0.0     0     0 ?        S    17:38  0:00 [oom_reaper]
root     27  0.0  0.0     0     0 ?        I<  17:38  0:00 [writeback]
```

## 32 kill

Envia sinal à um processo, como por exemplo, para encerrá-lo.

```
maycon@maycon-VirtualBox:~$ pgrep gedit
6499
maycon@maycon-VirtualBox:~$
```

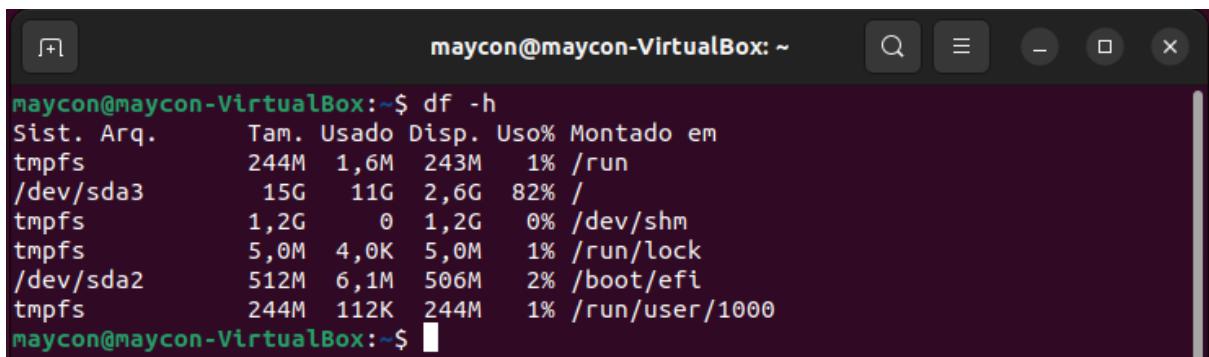




```
maycon@maycon-VirtualBox:~$ pgrep gedit
6499
maycon@maycon-VirtualBox:~$ kill 6499
maycon@maycon-VirtualBox:~$
```

### 33 df -h

Informações sobre a memória em números humanos.



```
maycon@maycon-VirtualBox:~$ df -h
Sist. Arq.      Tam. Usado Disp. Uso% Montado em
tmpfs           244M   1,6M  243M   1% /run
/dev/sda3        15G   11G  2,6G  82% /
tmpfs           1,2G     0  1,2G   0% /dev/shm
tmpfs           5,0M  4,0K  5,0M   1% /run/lock
/dev/sda2        512M  6,1M  506M   2% /boot/efi
tmpfs           244M  112K  244M   1% /run/user/1000
maycon@maycon-VirtualBox:~$
```

### 34 ncdu

Escaneia o disco e informa onde estão as pastas com maior ocupação de memória.

maycon@maycon-VirtualBox: ~

```
ncdu 1.15.1 ~ Use the arrow keys to navigate, press ? for help
-- /home/maycon --
235,0 MiB [#####] /snap
 15,2 MiB [ ] /.cache
 652,0 KiB [ ] /.local
 252,0 KiB [ ] /Code
 184,0 KiB [ ] /.config
 20,0 KiB [ ] /.ssh
e 4,0 KiB [ ] /Área de Trabalho
e 4,0 KiB [ ] /Vídeos
e 4,0 KiB [ ] /Público
e 4,0 KiB [ ] /Música
e 4,0 KiB [ ] /Modelos
e 4,0 KiB [ ] /Imagens
e 4,0 KiB [ ] /Downloads
e 4,0 KiB [ ] /Documentos
4,0 KiB [ ] .bashrc
4,0 KiB [ ] .bash_history
4,0 KiB [ ] .profile
4,0 KiB [ ] .bash_logout
4,0 KiB [ ] .gitconfig
4,0 KiB [ ] .lessht
0,0 B [ ] .sudo_as_admin_successful
Total disk usage: 251,3 MiB Apparent size: 242,3 MiB Items: 5843
```

### 35 uname

Informações sobre o kernel do sistema.

maycon@maycon-VirtualBox: ~\$ uname

```
Linux
maycon@maycon-VirtualBox: ~$ uname -r
6.2.0-26-generic
maycon@maycon-VirtualBox: ~$
```

### 36 lscpu & lsusb

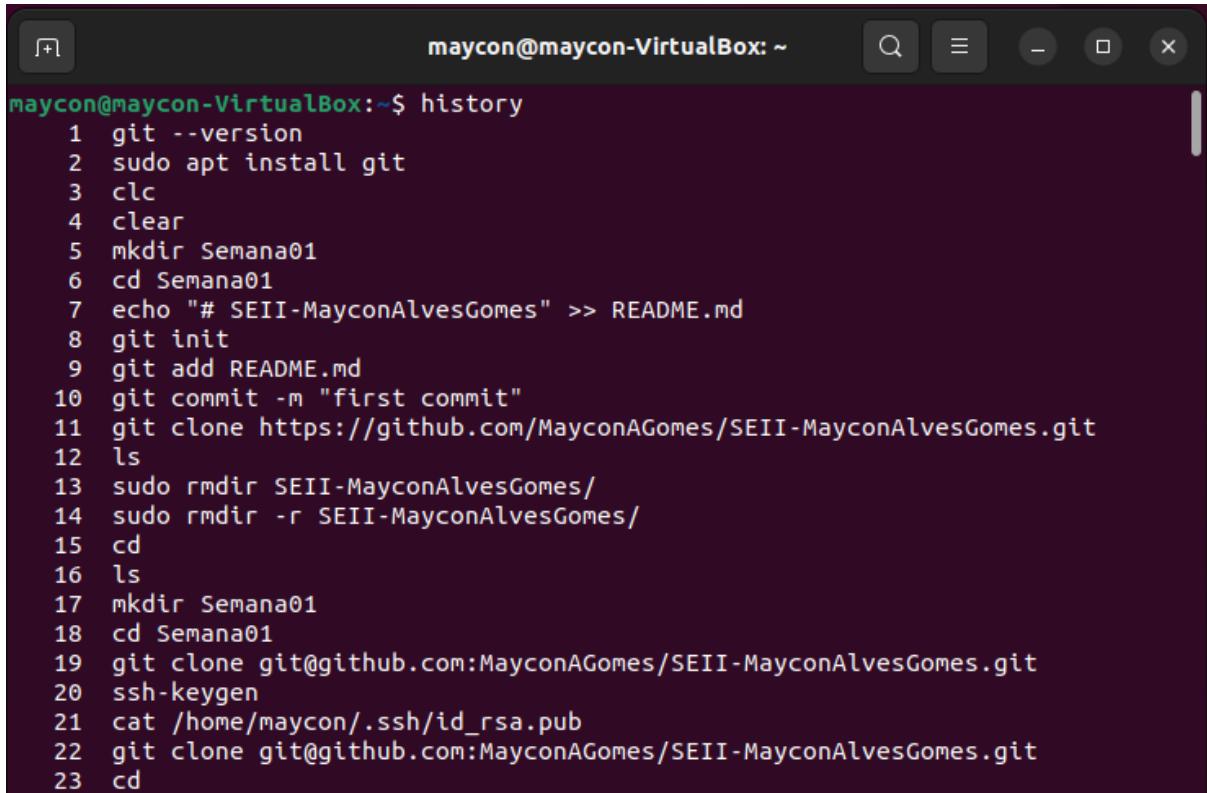
“lscpu” → informações sobre a cpu. “lsusb” → informações sobre as entradas usb.

```
maycon@maycon-VirtualBox:~$ lscpu
Arquitetura:          x86_64
Modo(s) operacional da CPU: 32-bit, 64-bit
Address sizes:        39 bits physical, 48 bits virtual
Ordem dos bytes:      Little Endian
CPU(s):               1
Lista de CPU(s) on-line: 0
ID de fornecedor:    GenuineIntel
Nome do modelo:       Intel(R) Core(TM) i5-7200U CPU @ 2.50GHz
Família da CPU:      6
Modelo:                142
Thread(s) per núcleo: 1
Núcleo(s) por soquete: 1
Soquete(s):           1
Step:                  9
BogoMIPS:             5424.00
Opções:               fpu vme de pse tsc msr pae mce cx8 apic sep mtrr p
                      ge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht
                      syscall nx rdtscp lm constant_tsc rep_good nopl x
                      topology nonstop_tsc cpuid tsc_known_freq pni pclm
                      ulqdq monitor ssse3 cx16 pcid sse4_1 sse4_2 x2apic
                      movbe popcnt aes xsave avx rdrand hypervisor lahf
                      _lm abm 3dnowprefetch invpcid_single pt1 fsgsbase
                      avx2 invpcid rdseed clflushopt md_clear flush_l1d
```

```
maycon@maycon-VirtualBox:~$ lsusb
Bus 001 Device 002: ID 80ee:0021 VirtualBox USB Tablet
Bus 001 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
maycon@maycon-VirtualBox:~$
```

## 37 history

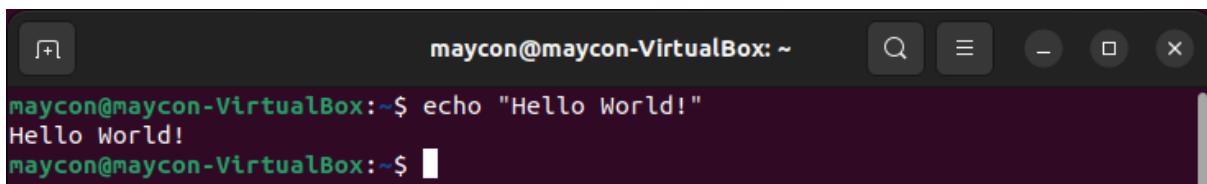
Lista de todos os comandos usados no terminal.



```
maycon@maycon-VirtualBox:~$ history
1 git --version
2 sudo apt install git
3 clc
4 clear
5 mkdir Semana01
6 cd Semana01
7 echo "# SEII-MayconAlvesGomes" >> README.md
8 git init
9 git add README.md
10 git commit -m "first commit"
11 git clone https://github.com/MayconAGomes/SEII-MayconAlvesGomes.git
12 ls
13 sudo rmdir SEII-MayconAlvesGomes/
14 sudo rmdir -r SEII-MayconAlvesGomes/
15 cd
16 ls
17 mkdir Semana01
18 cd Semana01
19 git clone git@github.com:MayconAGomes/SEII-MayconAlvesGomes.git
20 ssh-keygen
21 cat /home/maycon/.ssh/id_rsa.pub
22 git clone git@github.com:MayconAGomes/SEII-MayconAlvesGomes.git
23 cd
```

## 38 echo

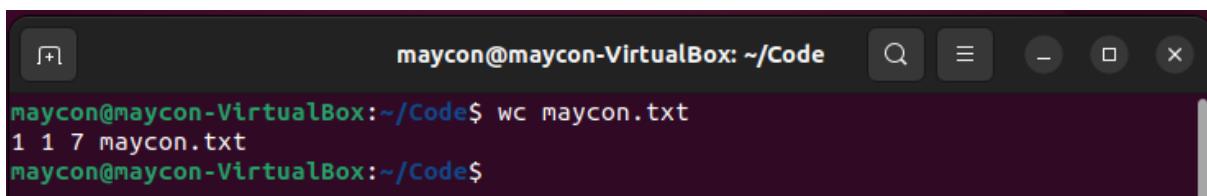
Printa na tela o argumento repassado.



```
maycon@maycon-VirtualBox:~$ echo "Hello World!"
Hello World!
maycon@maycon-VirtualBox:~$
```

## 39 wc

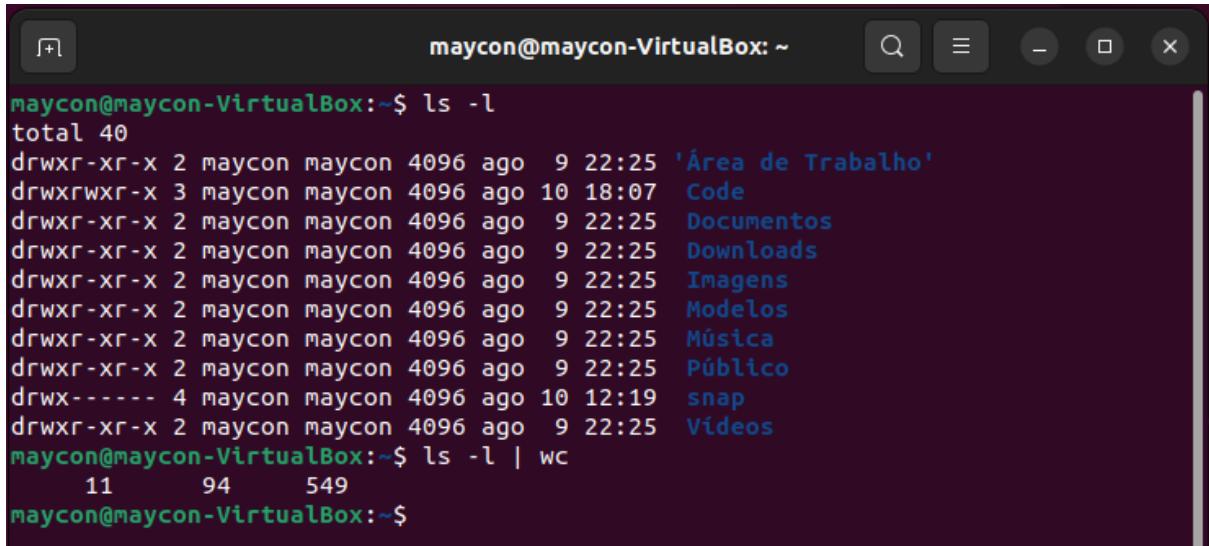
Retorna informações importantes sobre um arquivo. Em um arquivo de texto, informa o número de linhas, palavras e bytes, nesta ordem.



```
maycon@maycon-VirtualBox:~/Code$ wc maycon.txt
1 1 7 maycon.txt
maycon@maycon-VirtualBox:~/Code$
```

## 40 piping

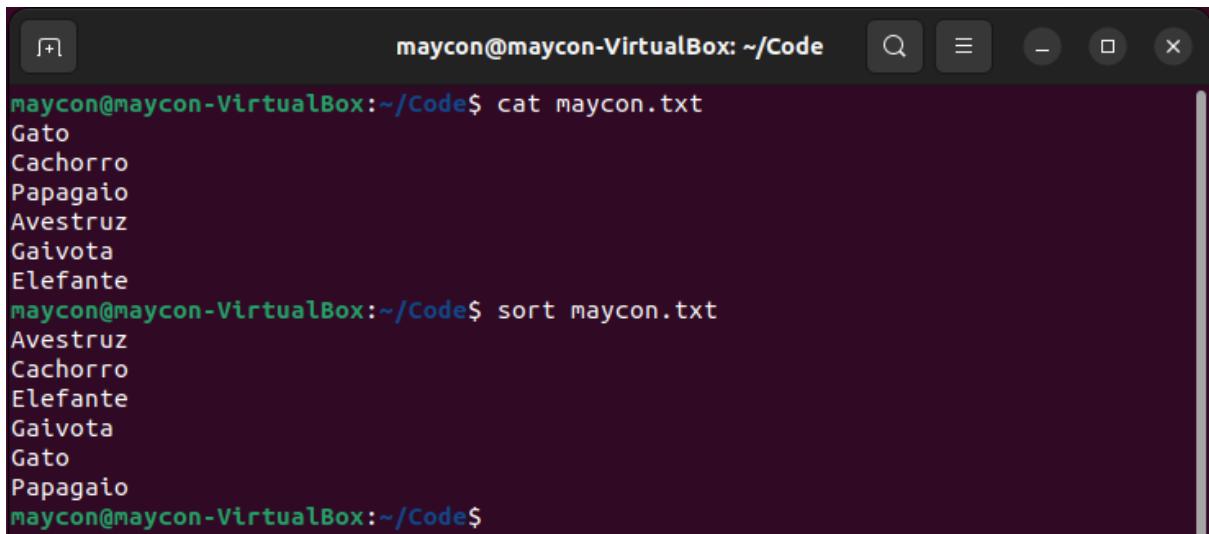
Técnica para canalizar a saída de um comando para ser a entrada do outro.



```
maycon@maycon-VirtualBox:~$ ls -l
total 40
drwxr-xr-x 2 maycon maycon 4096 ago  9 22:25 'Área de Trabalho'
drwxrwxr-x 3 maycon maycon 4096 ago 10 18:07 Code
drwxr-xr-x 2 maycon maycon 4096 ago  9 22:25 Documentos
drwxr-xr-x 2 maycon maycon 4096 ago  9 22:25 Downloads
drwxr-xr-x 2 maycon maycon 4096 ago  9 22:25 Imagens
drwxr-xr-x 2 maycon maycon 4096 ago  9 22:25 Modelos
drwxr-xr-x 2 maycon maycon 4096 ago  9 22:25 Música
drwxr-xr-x 2 maycon maycon 4096 ago  9 22:25 Público
drwx----- 4 maycon maycon 4096 ago 10 12:19 snap
drwxr-xr-x 2 maycon maycon 4096 ago  9 22:25 Vídeos
maycon@maycon-VirtualBox:~$ ls -l | wc
      11      94      549
maycon@maycon-VirtualBox:~$
```

## 41 sort

Organiza informações de um arquivo em determinada ordem, que por padrão é a alfabética.



```
maycon@maycon-VirtualBox:~/Code$ cat maycon.txt
Gato
Cachorro
Papagaio
Avestruz
Gaivota
Elefante
maycon@maycon-VirtualBox:~/Code$ sort maycon.txt
Avestruz
Cachorro
Elefante
Gaivota
Gato
Papagaio
maycon@maycon-VirtualBox:~/Code$
```

## 42 uniq

Remove informações duplicadas adjacentes.

```
maycon@maycon-VirtualBox:~/Code$ cat maycon.txt
Gato
Gato
Cachorro
Papagaio
Cachorro
Avestruz
Gaivota
Elefante
Elefante
maycon@maycon-VirtualBox:~/Code$ uniq maycon.txt
Gato
Cachorro
Papagaio
Cachorro
Avestruz
Gaivota
Elefante
maycon@maycon-VirtualBox:~/Code$ sort maycon.txt | uniq
Avestruz
Cachorro
Elefante
Gaivota
Gato
Papagaio
maycon@maycon-VirtualBox:~/Code$
```

## 43 Expansions

São uma espécie de abreviações que o shell usa para abreviar comandos. Abaixo temos o que é substituído no lugar dessas abreviações.

```
maycon@maycon-VirtualBox:~/Code$ echo ~
/home/maycon
maycon@maycon-VirtualBox:~/Code$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/snap/bin
maycon@maycon-VirtualBox:~/Code$
```

## 44 diff

Exibe a diferença entre dois arquivos.

```
maycon@maycon-VirtualBox:~/Code$ cat maycon.txt
Gato
Gato
Cachorro
Papagaio
Cachorro
Avestruz
Gaivota
Elefante
Elefante
maycon@maycon-VirtualBox:~/Code$ cat maycon2.txt
Cachorro
Gato
Avestruz
Leão
Girafa
Elefante
maycon@maycon-VirtualBox:~/Code$ diff maycon.txt maycon2.txt
1,4d0
< Gato
< Gato
< Cachorro
< Papagaio
5a2
> Gato
7,8c4,5
< Gaivota
< Elefante
---
> Leão
> Girafa
maycon@maycon-VirtualBox:~/Code$
```

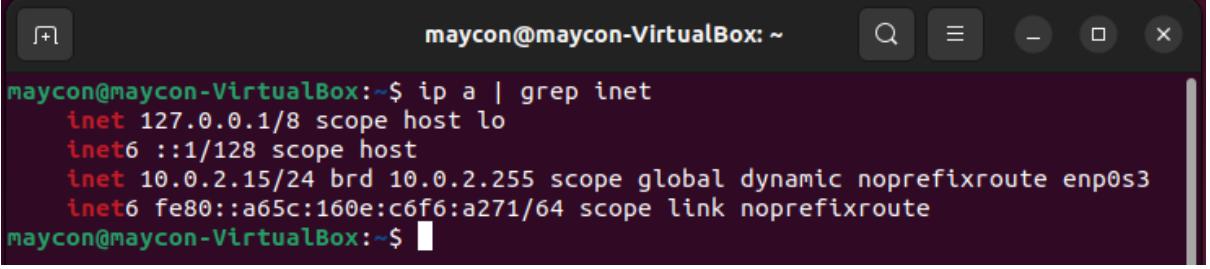
## 45 find

Informa o caminho até um determinado arquivo.

```
maycon@maycon-VirtualBox:~$ find . -name Semana01
./Code/SEII-MayconAlvesGomes/Semana01
maycon@maycon-VirtualBox:~$
```

## 46 grep

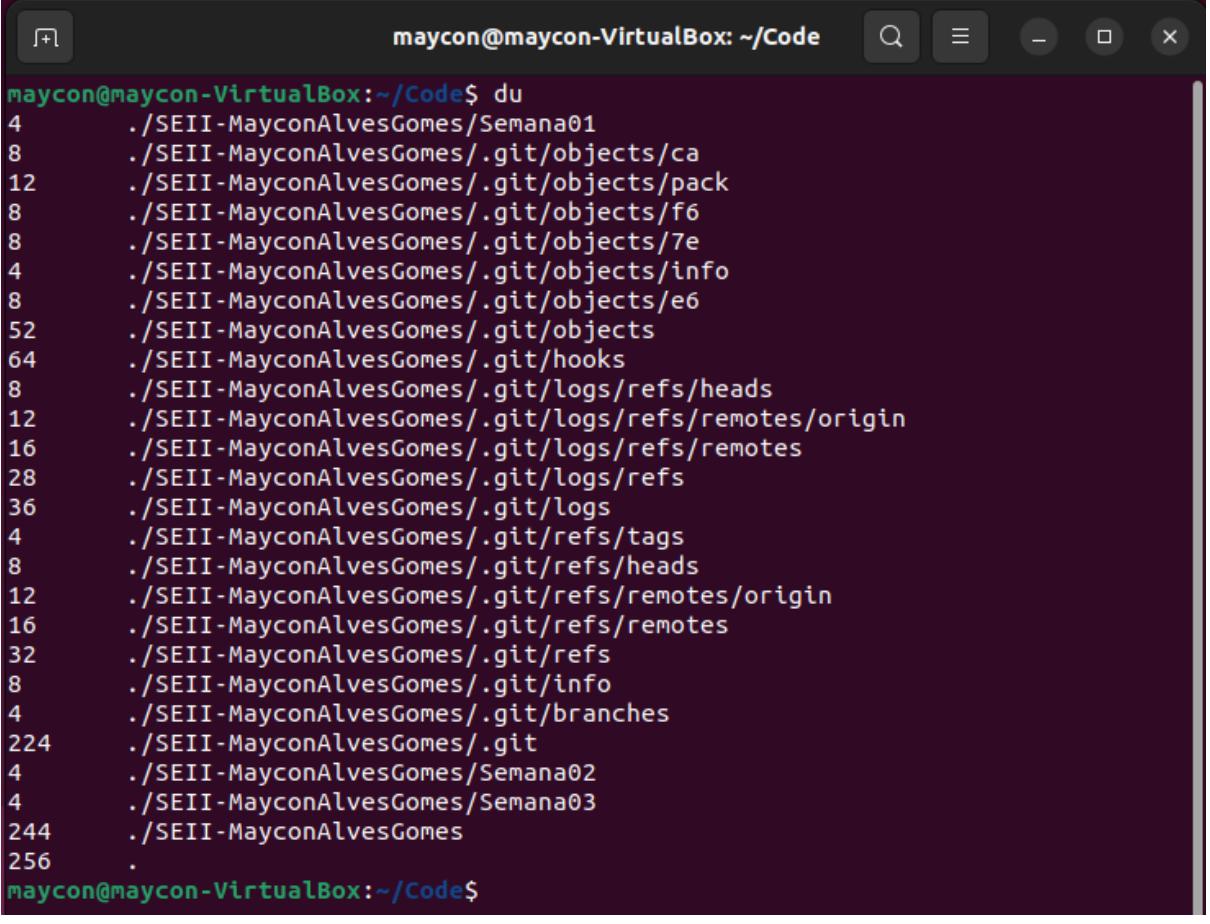
Filtrá informações da saída de um comando.



```
maycon@maycon-VirtualBox:~$ ip a | grep inet
    inet 127.0.0.1/8 scope host lo
        inet6 ::1/128 scope host
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        inet6 fe80::a65c:160e:c6f6:a271/64 scope link noprefixroute
maycon@maycon-VirtualBox:~$
```

47 du

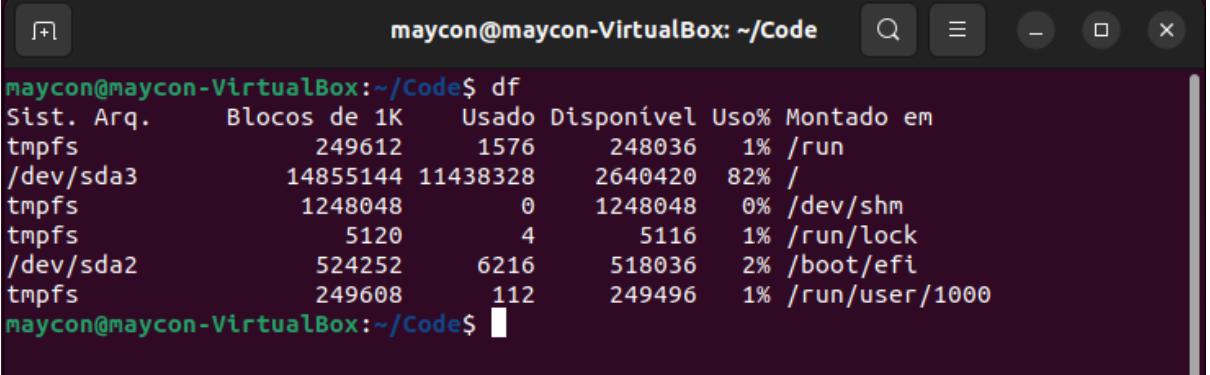
Estima o uso de espaço de arquivo de um diretório.



```
maycon@maycon-VirtualBox:~/Code$ du
4      ./SEII-MayconAlvesGomes/Semana01
8      ./SEII-MayconAlvesGomes/.git/objects/ca
12     ./SEII-MayconAlvesGomes/.git/objects/pack
8      ./SEII-MayconAlvesGomes/.git/objects/f6
8      ./SEII-MayconAlvesGomes/.git/objects/7e
4      ./SEII-MayconAlvesGomes/.git/objects/info
8      ./SEII-MayconAlvesGomes/.git/objects/e6
52     ./SEII-MayconAlvesGomes/.git/objects
64     ./SEII-MayconAlvesGomes/.git/hooks
8      ./SEII-MayconAlvesGomes/.git/logs/refs/heads
12     ./SEII-MayconAlvesGomes/.git/logs/refs/remotes/origin
16     ./SEII-MayconAlvesGomes/.git/logs/refs/remotes
28     ./SEII-MayconAlvesGomes/.git/logs/refs
36     ./SEII-MayconAlvesGomes/.git/logs
4      ./SEII-MayconAlvesGomes/.git/refs/tags
8      ./SEII-MayconAlvesGomes/.git/refs/heads
12     ./SEII-MayconAlvesGomes/.git/refs/remotes/origin
16     ./SEII-MayconAlvesGomes/.git/refs/remotes
32     ./SEII-MayconAlvesGomes/.git/refs
8      ./SEII-MayconAlvesGomes/.git/info
4      ./SEII-MayconAlvesGomes/.git/branches
224    ./SEII-MayconAlvesGomes/.git
4      ./SEII-MayconAlvesGomes/Semana02
4      ./SEII-MayconAlvesGomes/Semana03
244    ./SEII-MayconAlvesGomes
256    .
maycon@maycon-VirtualBox:~/Code$
```

48 df

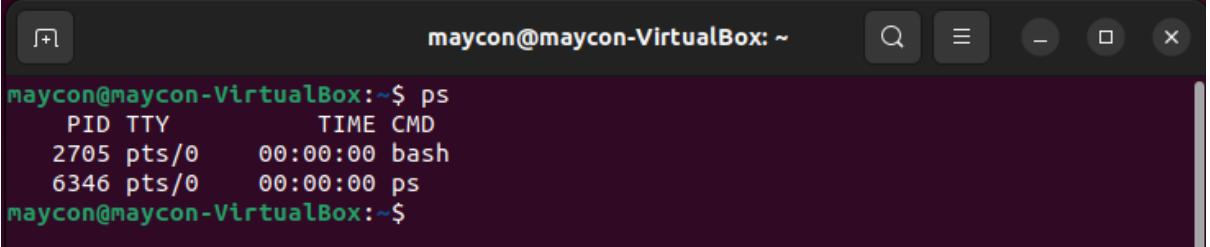
Exibe informações sobre a memória.



```
maycon@maycon-VirtualBox:~/Code$ df
Sist. Arq.      Blocos de 1K   Usado Disponível Uso% Montado em
tmpfs              249612      1576     248036    1% /run
/dev/sda3        14855144 11438328    2640420   82% /
tmpfs              1248048       0     1248048    0% /dev/shm
tmpfs                5120       4      5116    1% /run/lock
/dev/sda2        524252      6216     518036    2% /boot/efi
tmpfs              249608      112     249496    1% /run/user/1000
maycon@maycon-VirtualBox:~/Code$
```

## 49 ps

Lista os processos da atual instância do terminal.



```
maycon@maycon-VirtualBox:~$ ps
  PID TTY          TIME CMD
 2705 pts/0    00:00:00 bash
 6346 pts/0    00:00:00 ps
maycon@maycon-VirtualBox:~$
```

## 50 top

Exibe o monitoramento do sistema em tempo real.

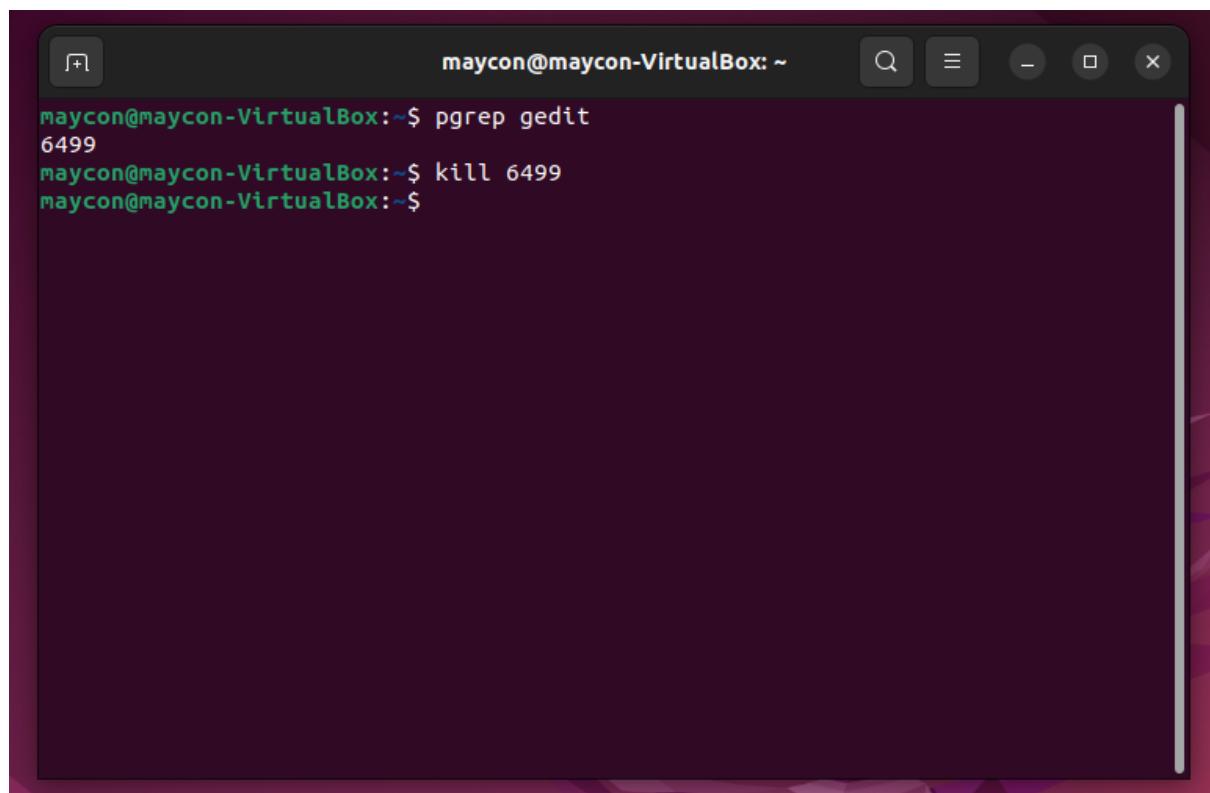
```
maycon@maycon-VirtualBox: ~
top - 20:04:07 up 2:25, 1 user, load average: 0,13, 0,03, 0,01
Tarefas: 176 total, 1 em exec., 175 dormindo, 0 parado, 0 zumbi
%Cpu(s): 2,5 us, 1,8 sy, 0,0 ni, 95,8 id, 0,0 wa, 0,0 hi, 0,0 si, 0,0 st
MB mem : 2437,6 total, 968,9 livre, 584,7 usados, 884,0 buff/cache
MB swap: 1550,0 total, 1377,0 livre, 173,0 usados, 1682,5 mem dispon.

PID USUARIO PR NI VIRT RES SHR S %CPU %MEM TEMPO+ COMANDO
941 maycon 20 0 3943812 123576 51784 S 3,6 5,0 2:57.84 gnome-s+
2687 maycon 20 0 572604 32412 21124 S 1,3 1,3 0:22.79 gnome-t+
6179 maycon 20 0 21948 4096 3328 R 0,7 0,2 0:00.46 top
499 systemd+ 20 0 14824 2688 1920 S 0,3 0,1 0:20.38 systemd+
2353 maycon 20 0 2806504 47408 31900 S 0,3 1,9 0:05.01 gjs
1 root 20 0 167872 9444 4580 S 0,0 0,4 0:02.44 systemd
2 root 20 0 0 0 0 S 0,0 0,0 0:00.00 kthreadd
3 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 rcu_gp
4 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 rcu_par+
5 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 slub_fl+
6 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 netns
8 root 0 -20 0 0 0 I 0,0 0,0 0:05.15 kworker+
10 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 mm_perc+
11 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
12 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
13 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
14 root 20 0 0 0 0 S 0,0 0,0 0:02.37 ksoftirq+
```

## 51 kill

Envia sinal à um processo, como por exemplo, para encerrá-lo.

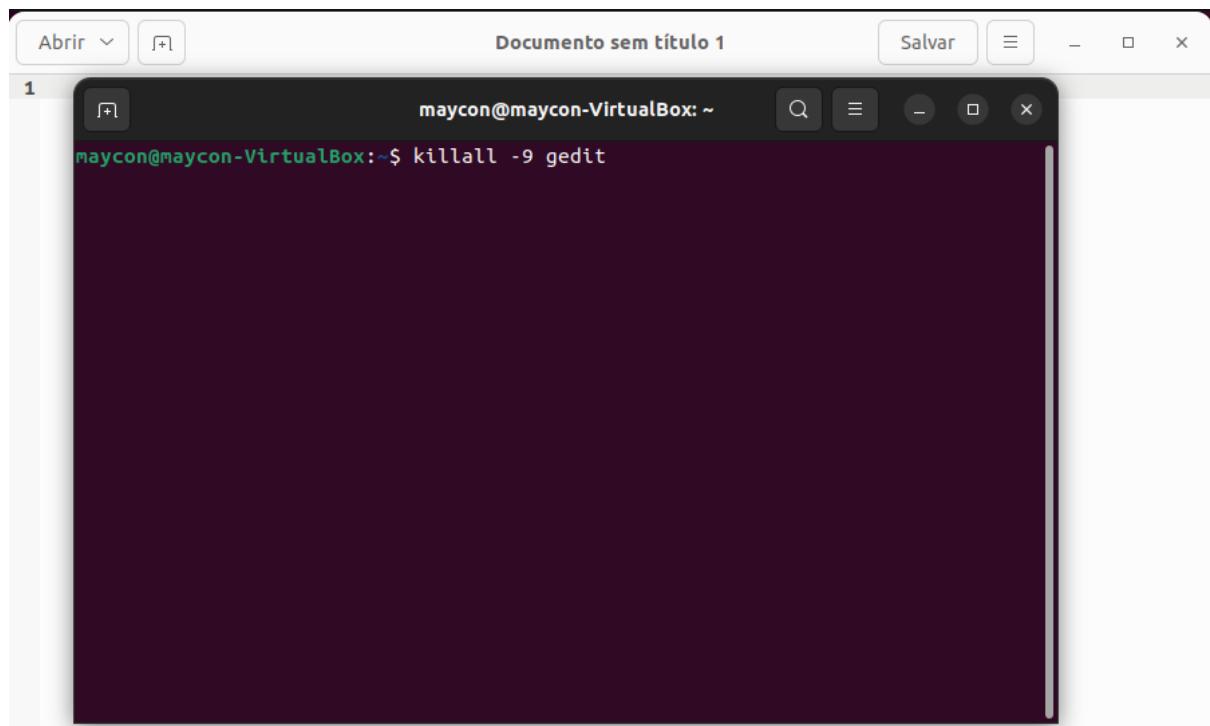
```
maycon@maycon-VirtualBox: ~
maycon@maycon-VirtualBox: ~$ pgrep gedit
6499
maycon@maycon-VirtualBox: ~$ 
```



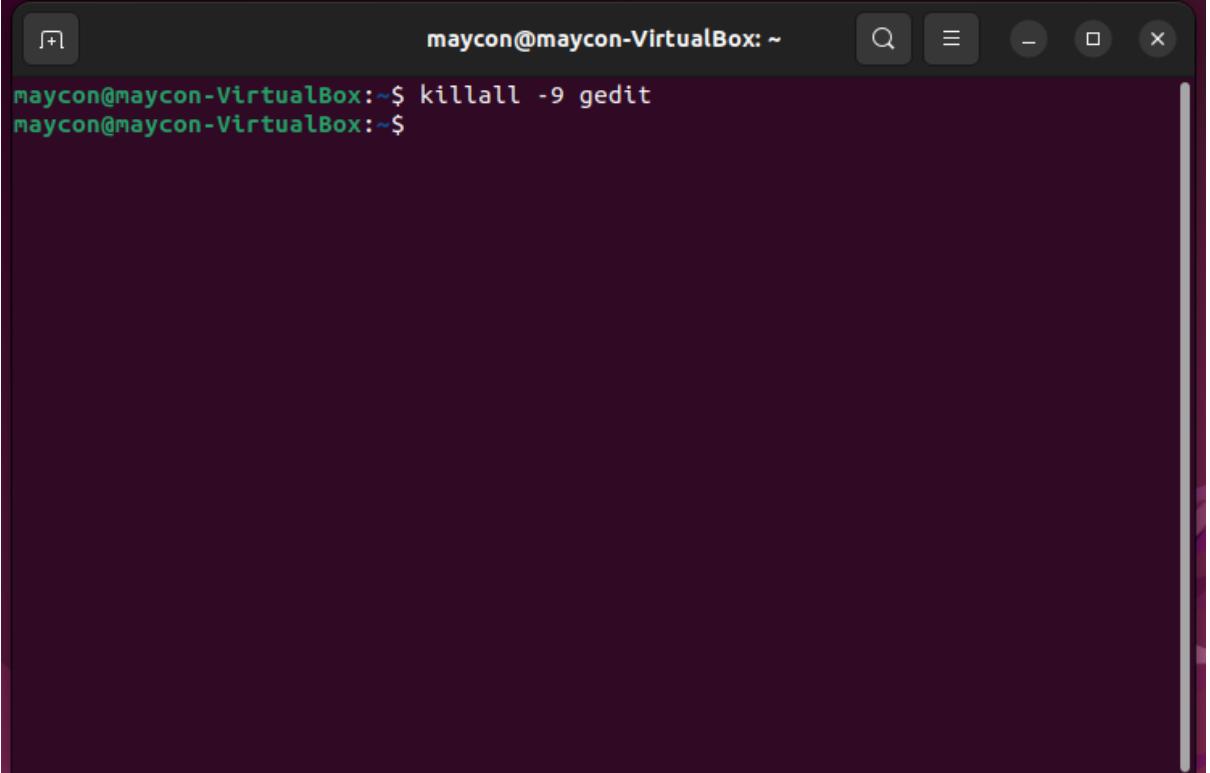
```
maycon@maycon-VirtualBox:~$ pgrep gedit
6499
maycon@maycon-VirtualBox:~$ kill 6499
maycon@maycon-VirtualBox:~$
```

## 52 killall

Permite enviar sinal à um processo pelo seu nome.



```
Abrir ▾ 1 Documento sem título 1 Salvar
maycon@maycon-VirtualBox:~$ killall -9 gedit
```



A screenshot of a terminal window titled "maycon@maycon-VirtualBox: ~". The window contains the following text:  
maycon@maycon-VirtualBox:~\$ killall -9 gedit  
maycon@maycon-VirtualBox:~\$

### 53 jobs, bg, and fg

Informa o número dos jobs e seus estados, faz o job funcionar em background, e faz o job vir à foreground, respectivamente.

```

maycon@maycon-VirtualBox: ~
MB swap: 1550,0 total, 1422,0 libre, 128,0 usados, 1602,8 mem dispon.

  PID USUARIO PR NI VIRT RES SHR S %CPU %MEM TEMPO+ COMANDO
  941 maycon 20 0 3955304 165500 58044 S 0,7 6,6 3:58.99 gnome-s+
  6475 maycon 20 0 571380 53024 40088 S 0,7 2,1 0:15.04 gnome-t+
7076 maycon 20 0 21948 4096 3328 R 0,7 0,2 0:00.03 top
  499 systemd+ 20 0 14824 2688 1920 S 0,3 0,1 0:32.82 systemd+
    1 root 20 0 167872 9444 4580 S 0,0 0,4 0:02.61 systemd
    2 root 20 0 0 0 0 S 0,0 0,0 0:00.00 kthreadd
    3 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 rcu_gp
    4 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 rcu_par+
    5 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 slab_fl+
    6 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 netns
    8 root 0 -20 0 0 0 I 0,0 0,0 0:05.66 kworker+
   10 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 mm_perc+
   11 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
   12 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
   13 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
   14 root 20 0 0 0 0 S 0,0 0,0 0:02.45 ksoftirq+
   15 root 20 0 0 0 0 I 0,0 0,0 0:06.03 rcu_pre+
[1]+  Parado          top
maycon@maycon-VirtualBox:~$ jobs 1
[1]+  Parado          top
maycon@maycon-VirtualBox:~$
```

```

maycon@maycon-VirtualBox: ~
%Cpu(s): 1,7 us, 1,4 sy, 0,0 ni, 96,9 id, 0,0 wa, 0,0 hi, 0,0 si, 0,0 st
MB mem : 2437,6 total, 705,3 libre, 651,6 usados, 1080,7 buff/cache
MB swap: 1550,0 total, 1422,0 libre, 128,0 usados, 1602,8 mem dispon.

  PID USUARIO PR NI VIRT RES SHR S %CPU %MEM TEMPO+ COMANDO
  6475 maycon 20 0 571380 53024 40088 S 1,3 2,1 0:15.35 gnome-t+
  941 maycon 20 0 3955308 165500 58044 S 1,0 6,6 3:59.60 gnome-s+
7076 maycon 20 0 21948 4096 3328 R 0,7 0,2 0:00.06 top
  499 systemd+ 20 0 14824 2688 1920 S 0,3 0,1 0:32.98 systemd+
    1 root 20 0 167872 9444 4580 S 0,0 0,4 0:02.61 systemd
    2 root 20 0 0 0 0 S 0,0 0,0 0:00.00 kthreadd
    3 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 rcu_gp
    4 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 rcu_par+
    5 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 slab_fl+
    6 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 netns
    8 root 0 -20 0 0 0 I 0,0 0,0 0:05.66 kworker+
   10 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 mm_perc+
   11 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
   12 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
   13 root 20 0 0 0 0 I 0,0 0,0 0:00.00 rcu_tas+
   14 root 20 0 0 0 0 S 0,0 0,0 0:02.45 ksoftirq+
   15 root 20 0 0 0 0 I 0,0 0,0 0:06.05 rcu_pre+
[1]+  Parado          top
maycon@maycon-VirtualBox:~$ fg 1
```

```

top - 21:25:58 up 3:47, 1 user, load average: 0,00, 0,07, 0,06
Tarefas: 176 total, 2 em exec., 174 dormindo, 0 parado, 0 zumbi
%Cpu(s): 1,1 us, 0,3 sy, 0,0 ni, 98,4 id, 0,2 wa, 0,0 hi, 0,0 si, 0,0 st
MB mem : 2437,6 total, 705,1 livre, 651,8 usados, 1080,7 buff/cache
MB swap: 1550,0 total, 1422,0 livre, 128,0 usados, 1602,6 mem dispon.
Alterar atraso de 3,0 para

```

PID	USUARIO	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TEMPO+	COMANDO
941	maycon	20	0	3955324	165500	58044	R	0,9	6,6	3:59.88	gnome-s+
6475	maycon	20	0	571380	53024	40088	S	0,4	2,1	0:15.48	gnome-t+
499	systemd+	20	0	14824	2688	1920	S	0,2	0,1	0:33.06	systemd+
5845	root	20	0	0	0	0	I	0,1	0,0	0:08.06	kworker+
1082	maycon	20	0	324532	5848	3712	S	0,1	0,2	0:20.55	ibus-da+
7076	maycon	20	0	21948	4096	3328	R	0,1	0,2	0:00.08	top
138	root	20	0	0	0	0	S	0,0	0,0	0:03.57	jbd2/sd+
974	root	20	0	251392	5632	4224	S	0,0	0,2	0:00.65	upowerd
1240	maycon	20	0	172716	4480	3712	S	0,0	0,2	0:06.25	ibus-en+
6942	root	20	0	0	0	0	I	0,0	0,0	0:00.10	kworker+
7026	maycon	20	0	2804992	59560	44932	S	0,0	2,4	0:00.69	gjs
1	root	20	0	167872	9444	4580	S	0,0	0,4	0:02.61	systemd
2	root	20	0	0	0	0	S	0,0	0,0	0:00.00	kthreadd
3	root	0	-20	0	0	0	I	0,0	0,0	0:00.00	rcu_gp
4	root	0	-20	0	0	0	I	0,0	0,0	0:00.00	rcu_par+
5	root	0	-20	0	0	0	I	0,0	0,0	0:00.00	slub_fl+
6	root	0	-20	0	0	0	I	0,0	0,0	0:00.00	netns

## 54 gzip

Compacta arquivos.

```

maycon@maycon-VirtualBox:~/Code$ gzip maycon.txt
maycon@maycon-VirtualBox:~/Code$ ls
maycon2.txt  maycon.txt.gz  SEII-MayconAlvesGomes
maycon@maycon-VirtualBox:~/Code$

```

## 55 gunzip

Descompacta arquivos.

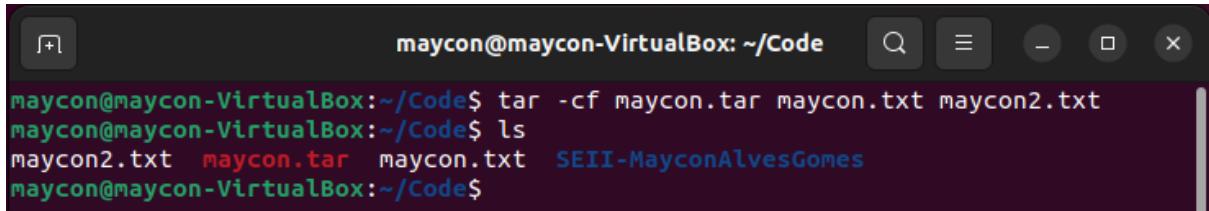
```

maycon@maycon-VirtualBox:~/Code$ gzip maycon.txt
maycon@maycon-VirtualBox:~/Code$ ls
maycon2.txt  maycon.txt.gz  SEII-MayconAlvesGomes
maycon@maycon-VirtualBox:~/Code$ gunzip maycon.txt
maycon@maycon-VirtualBox:~/Code$ ls
maycon2.txt  maycon.txt  SEII-MayconAlvesGomes
maycon@maycon-VirtualBox:~/Code$

```

## 56 tar

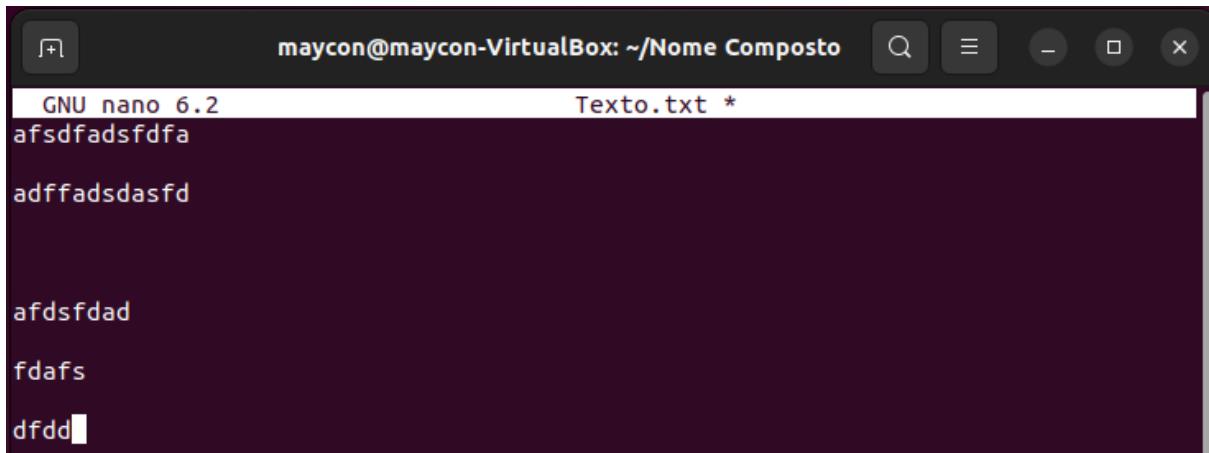
Pode ser usados para comprimir múltiplos arquivos em um só.



```
maycon@maycon-VirtualBox:~/Code$ tar -cf maycon.tar maycon.txt maycon2.txt
maycon@maycon-VirtualBox:~/Code$ ls
maycon2.txt  maycon.tar  maycon.txt  SEII-MayconAlvesGomes
maycon@maycon-VirtualBox:~/Code$
```

## 57 nano

Editar arquivos de texto pelo terminal.



```
maycon@maycon-VirtualBox:~/Nome Composto$ nano Texto.txt
GNU nano 6.2
afsfadfasdfa
adffadfasdasfd

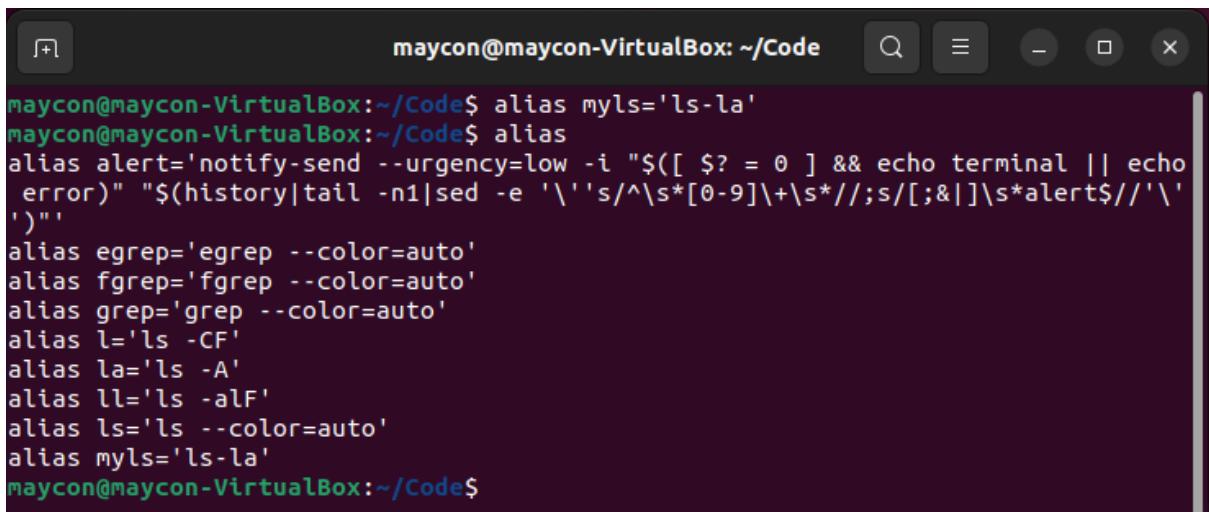
afdsfdad

fdafs

dfdd
```

## 58 alias

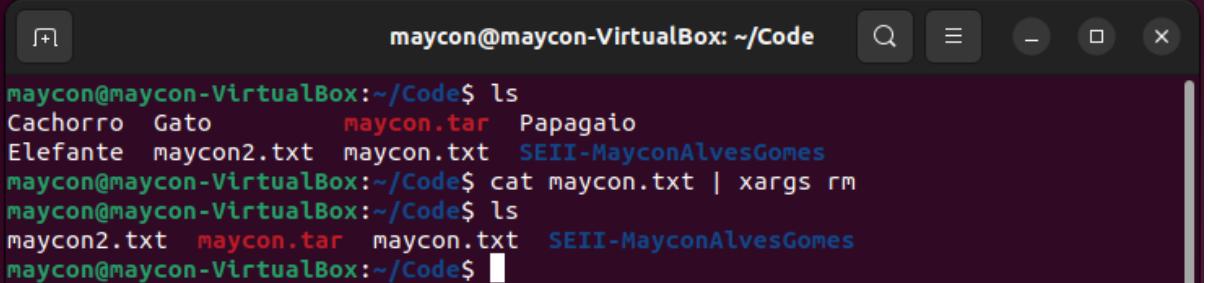
Substitui um comando grande por um apelido.



```
maycon@maycon-VirtualBox:~/Code$ alias myls='ls -la'
maycon@maycon-VirtualBox:~/Code$ alias
alias alert='notify-send --urgency=low -i "$( [ $? = 0 ] && echo terminal || echo error)" "$(history|tail -n1|sed -e '\''s/^[\s*][0-9]+\+[\s*//;s/[;&|]\s*alert$/'\''')"
alias egrep='egrep --color=auto'
alias fgrep='fgrep --color=auto'
alias grep='grep --color=auto'
alias l='ls -CF'
alias la='ls -A'
alias ll='ls -alF'
alias ls='ls --color=auto'
alias myls='ls -la'
maycon@maycon-VirtualBox:~/Code$
```

## 59 xargs

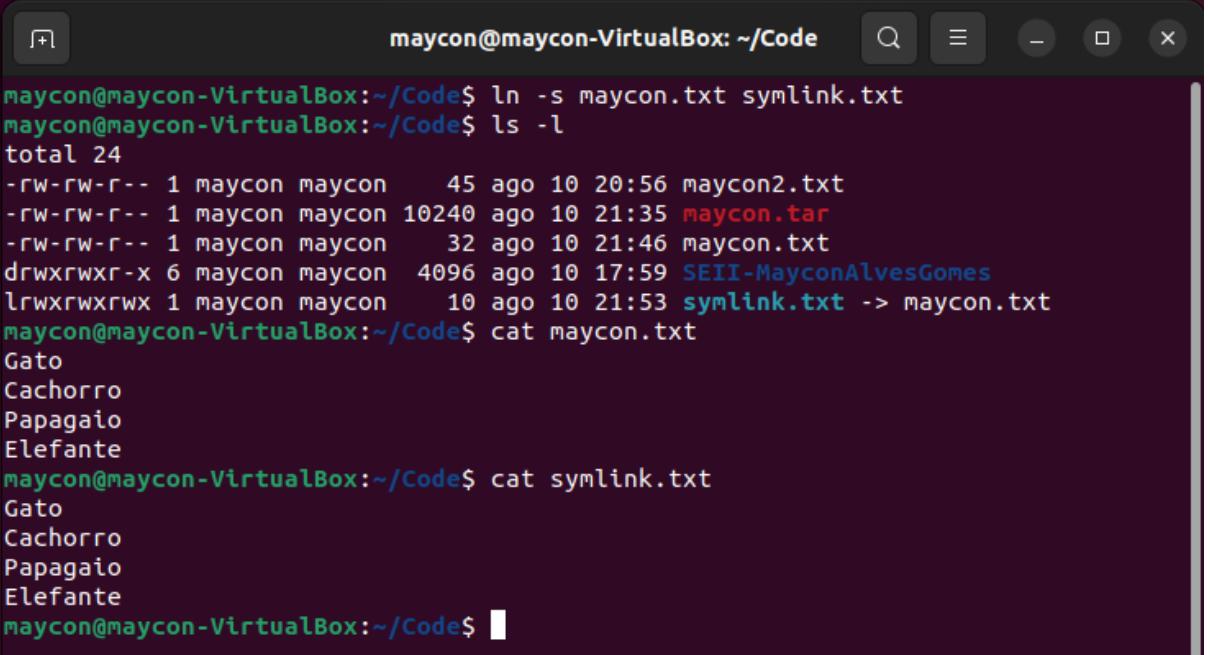
É o mesmo que o piping, passando a saída de um comando para a entrada do outro, porém abrange mais casos onde só o piping não funciona.



```
maycon@maycon-VirtualBox:~/Code$ ls
Cachorro Gato      maycon.tar  Papagaio
Elefante  maycon2.txt  maycon.txt  SEII-MayconAlvesGomes
maycon@maycon-VirtualBox:~/Code$ cat maycon.txt | xargs rm
maycon@maycon-VirtualBox:~/Code$ ls
maycon2.txt  maycon.tar  maycon.txt  SEII-MayconAlvesGomes
maycon@maycon-VirtualBox:~/Code$
```

## 60 ln

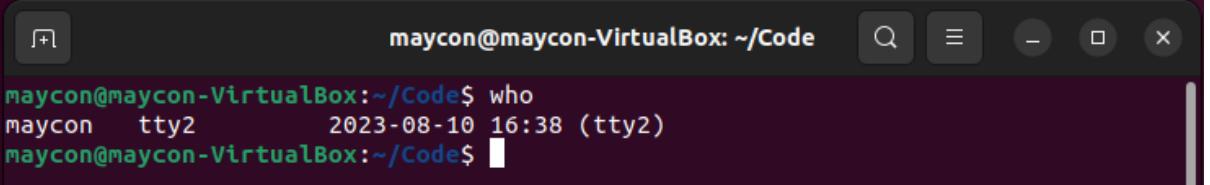
Cria links entre arquivos.



```
maycon@maycon-VirtualBox:~/Code$ ln -s maycon.txt symlink.txt
maycon@maycon-VirtualBox:~/Code$ ls -l
total 24
-rw-rw-r-- 1 maycon maycon    45 ago 10 20:56 maycon2.txt
-rw-rw-r-- 1 maycon maycon 10240 ago 10 21:35 maycon.tar
-rw-rw-r-- 1 maycon maycon     32 ago 10 21:46 maycon.txt
drwxrwxr-x 6 maycon maycon  4096 ago 10 17:59 SEII-MayconAlvesGomes
lrwxrwxrwx 1 maycon maycon     10 ago 10 21:53 symlink.txt -> maycon.txt
maycon@maycon-VirtualBox:~/Code$ cat maycon.txt
Gato
Cachorro
Papagaio
Elefante
maycon@maycon-VirtualBox:~/Code$ cat symlink.txt
Gato
Cachorro
Papagaio
Elefante
maycon@maycon-VirtualBox:~/Code$
```

## 61 who

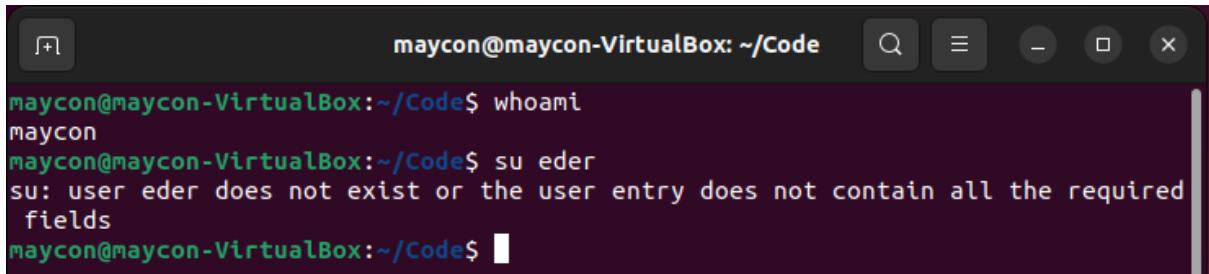
Mostra os usuários logados no sistema.



```
maycon@maycon-VirtualBox:~/Code$ who
maycon  tty2        2023-08-10 16:38 (tty2)
maycon@maycon-VirtualBox:~/Code$
```

## 62 su

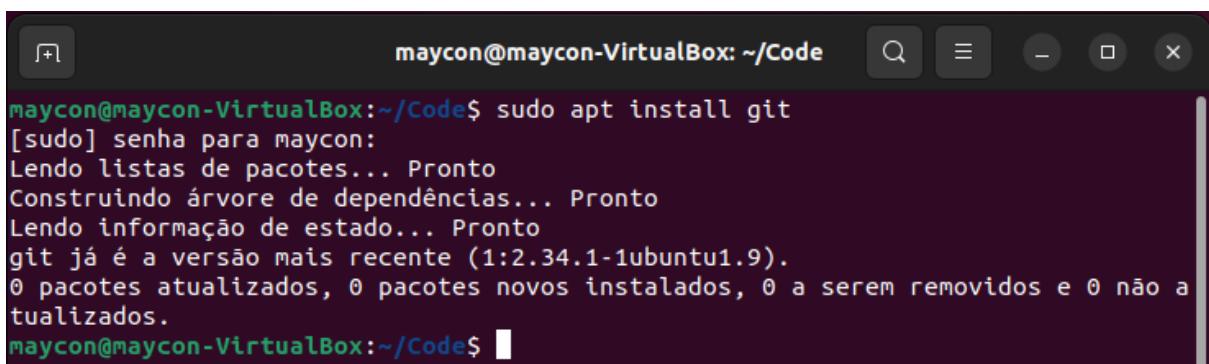
Switch user. Permite logar em outro usuário.



```
maycon@maycon-VirtualBox:~/Code$ whoami
maycon
maycon@maycon-VirtualBox:~/Code$ su eder
su: user eder does not exist or the user entry does not contain all the required
fields
maycon@maycon-VirtualBox:~/Code$
```

## 63 sudo

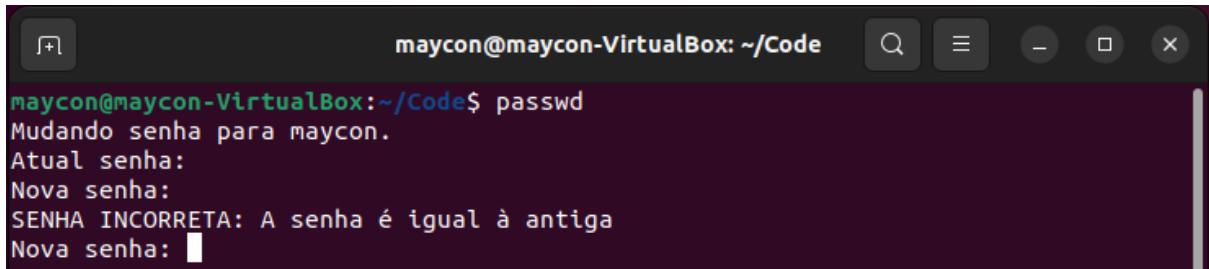
Usado quando há necessidade de usar permissões elevadas.



```
maycon@maycon-VirtualBox:~/Code$ sudo apt install git
[sudo] senha para maycon:
Lendo listas de pacotes... Pronto
Construindo árvore de dependências... Pronto
Lendo informação de estado... Pronto
git já é a versão mais recente (1:2.34.1-1ubuntu1.9).
0 pacotes atualizados, 0 pacotes novos instalados, 0 a serem removidos e 0 não a
tualizados.
maycon@maycon-VirtualBox:~/Code$
```

## 64 passwd

Mudança de senha de usuário.



```
maycon@maycon-VirtualBox:~/Code$ passwd
Mudando senha para maycon.
Atual senha:
Nova senha:
SENHA INCORRETA: A senha é igual à antiga
Nova senha:
```

## 65 chown

Muda o proprietário de um arquivo.

```
maycon@maycon-VirtualBox:~/Code$ cd Code  
maycon@maycon-VirtualBox:~/Code$ chown maycon maycon.txt  
maycon@maycon-VirtualBox:~/Code$
```

## 66 Understanding permissions

```
maycon@maycon-VirtualBox: ~/Code$ ls -l
total 24
-rw-rw-r-- 1 maycon maycon    45 ago 10 20:56 maycon2.txt
-rw-rw-r-- 1 maycon maycon 10240 ago 10 21:35 maycon.tar
-rw-rw-r-- 1 maycon maycon    32 ago 10 21:46 maycon.txt
drwxrwxr-x 6 maycon maycon  4096 ago 10 17:59 SEII-MayconAlvesGomes
lrwxrwxrwx 1 maycon maycon     10 ago 10 21:53 symlink.txt -> maycon.txt
maycon@maycon-VirtualBox: ~/Code$
```

The 50 Most Popular Linux & Terminal Commands - Full Course for Beginners

1.00

# File Type

The very first character indicates the type of the file. Some of the more common types and their corresponding attributes are:

- regular file
- d directory
- c character special file
- l symbolic link

- r w - r w - r --

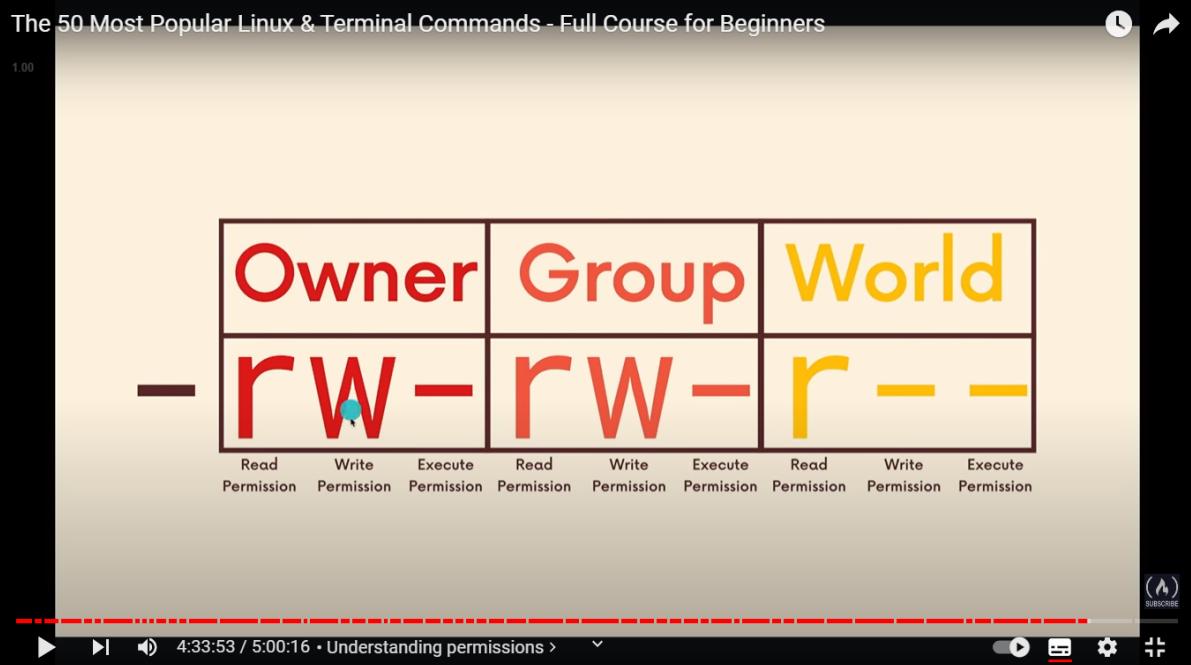
d r w x r - x r - x

()

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◀ ▶ ⏪ ⏩ ⏴ ⏵

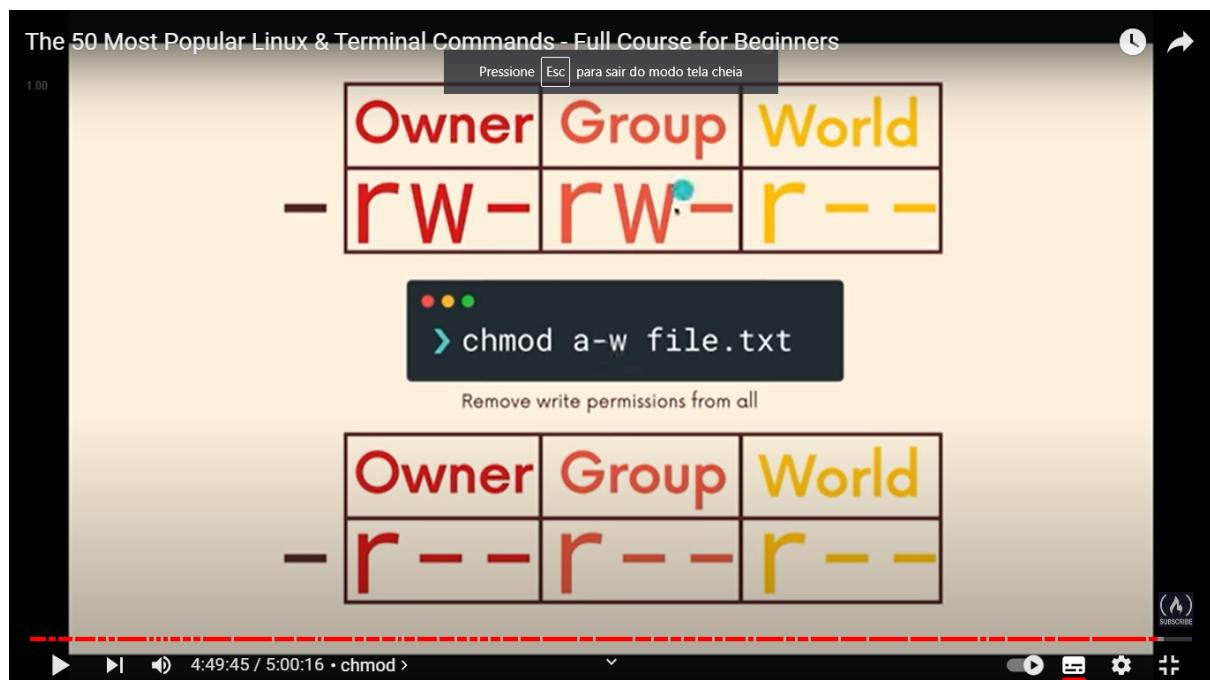


The screenshot shows a video player interface for the same course. The video is at 4:34:18 / 5:00:16 and is titled "Understanding permissions". The main content is a table mapping permission characters to their effects on files and directories. The table has four columns: Character, Effect On Files, Effect On Directories, and a final column for '-' which is not explicitly labeled but describes the behavior of the '-' character.

Character	Effect On Files	Effect On Directories	
r	file can be read	directory's contents can be listed	
w	file can be modified	directory's contents can be modified (create new files, rename files/folders) but only if the executable attribute is also set	
x	file can be treated as a program to be executed	allows a directory to be entered or "cd"ed into	
-	file cannot be read, modified, or executed depending on the location of the - character	directory contents cannot be shown, modified, or cd'ed into depending on the location of the - character	

## 67 chmod

Muda as permissões de um arquivo.



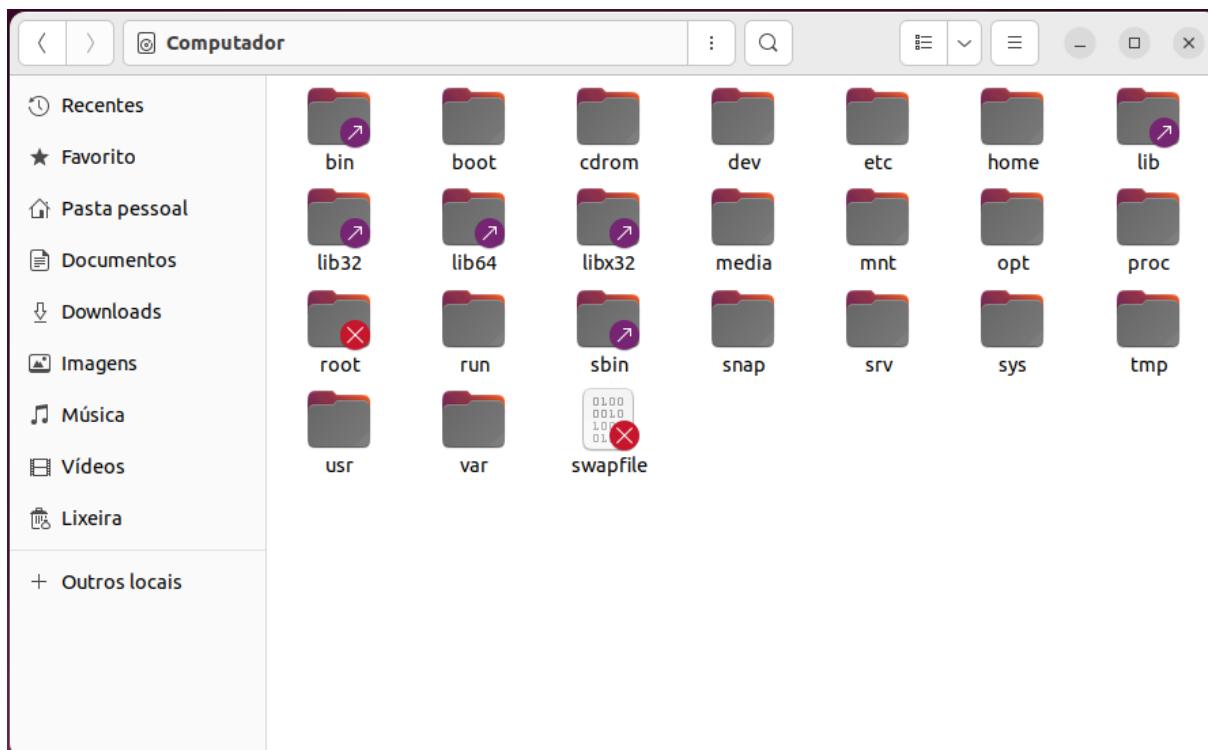
a = all (todos usuários)

- = operações de remover permissão

w = write (operação de escrita)

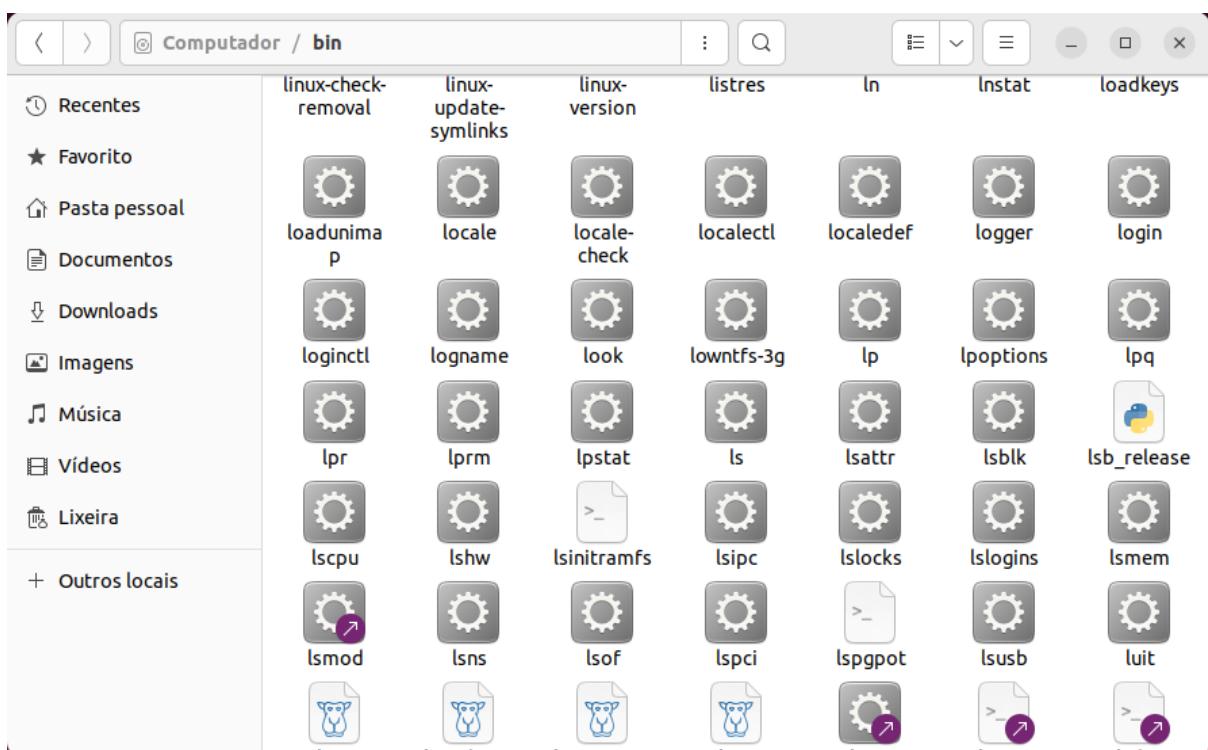
```
maycon@maycon-VirtualBox:~/Code$ ls -l
total 24
-rw-rw-r-- 1 maycon maycon    45 ago 10 20:56 maycon2.txt
-rw-rw-r-- 1 maycon maycon 10240 ago 10 21:35 maycon.tar
-rw-rw-rw- 1 maycon maycon     32 ago 10 21:46 maycon.txt
drwxrwxr-x 6 maycon maycon  4096 ago 10 17:59 SEII-MayconAlvesGomes
lrwxrwxrwx 1 maycon maycon      10 ago 10 21:53 symlink.txt -> maycon.txt
maycon@maycon-VirtualBox:~/Code$ chmod a-w maycon.txt
maycon@maycon-VirtualBox:~/Code$ ls -l
total 24
-rw-rw-r-- 1 maycon maycon    45 ago 10 20:56 maycon2.txt
-rw-rw-r-- 1 maycon maycon 10240 ago 10 21:35 maycon.tar
-rw-rw-rw- 1 maycon maycon     32 ago 10 21:46 maycon.txt
drwxrwxr-x 6 maycon maycon  4096 ago 10 17:59 SEII-MayconAlvesGomes
lrwxrwxrwx 1 maycon maycon      10 ago 10 21:53 symlink.txt -> maycon.txt
maycon@maycon-VirtualBox:~/Code$
```

## 68 Estruturação do “Linux File System”

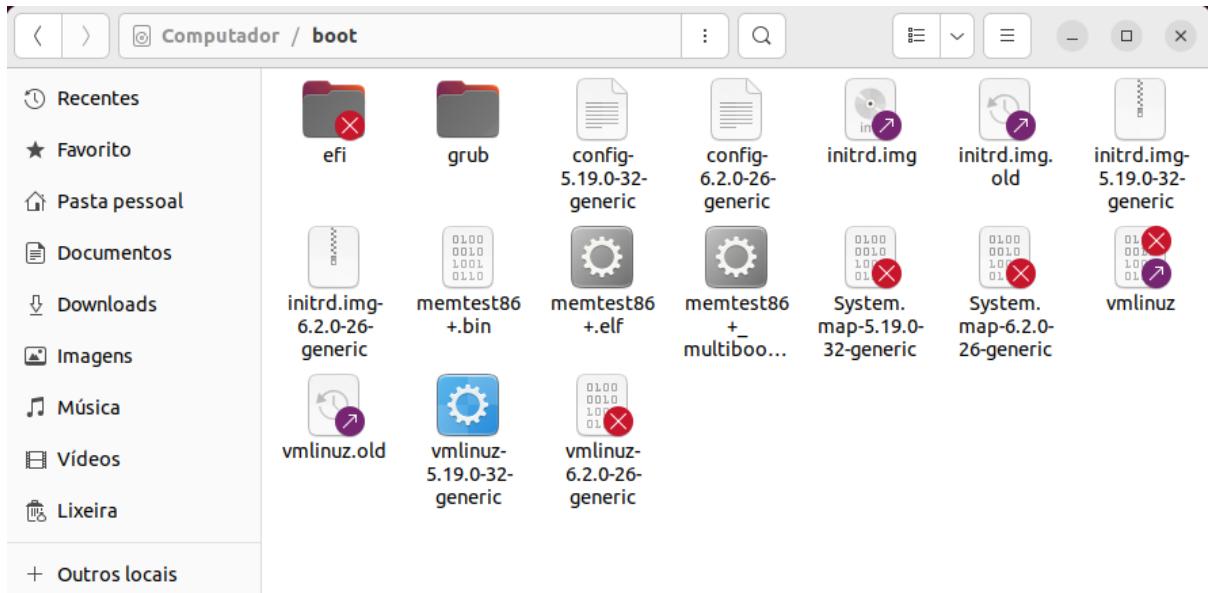


A pasta raiz, também chamada de “~” é equivalente ao “Disco Local C” do Windows. Os arquivos com setas são ponteiros usados para encurtar o acesso à determinadas pastas. As pastas em vermelho são de acesso exclusivo do usuário root, para fins de proteção.

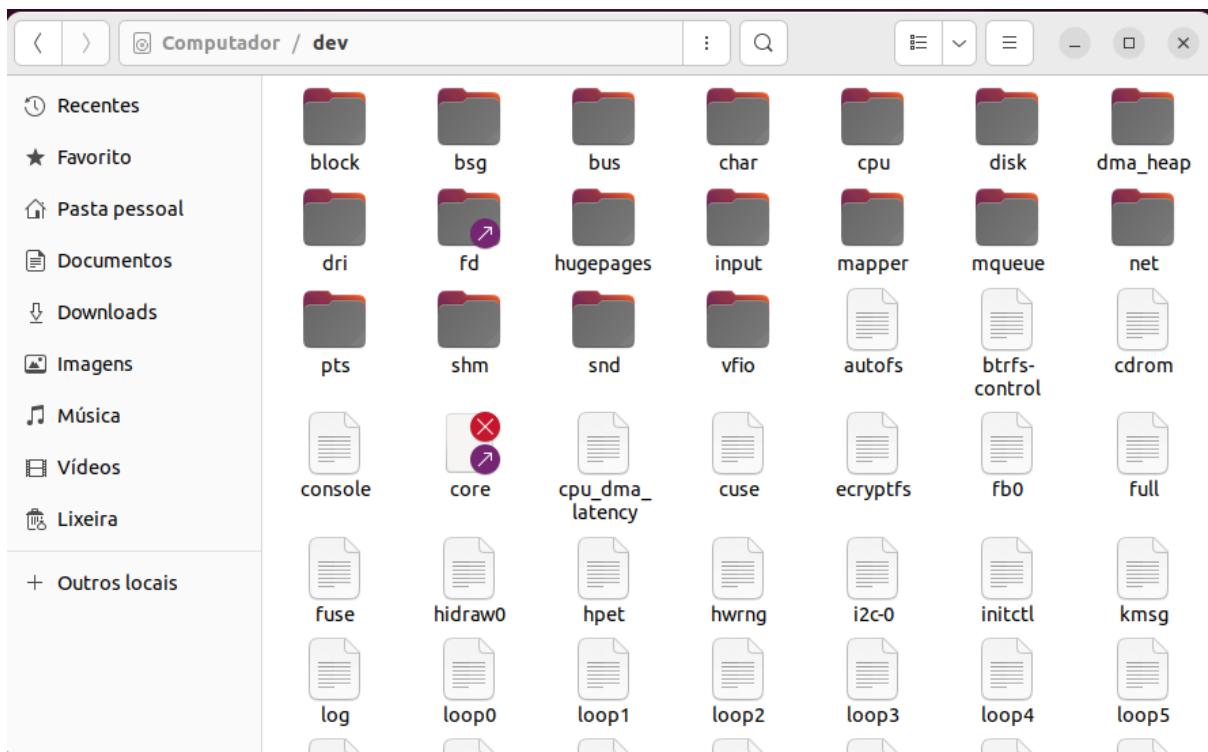
A pasta cdrom só é útil quando há um cd inserido no computador.



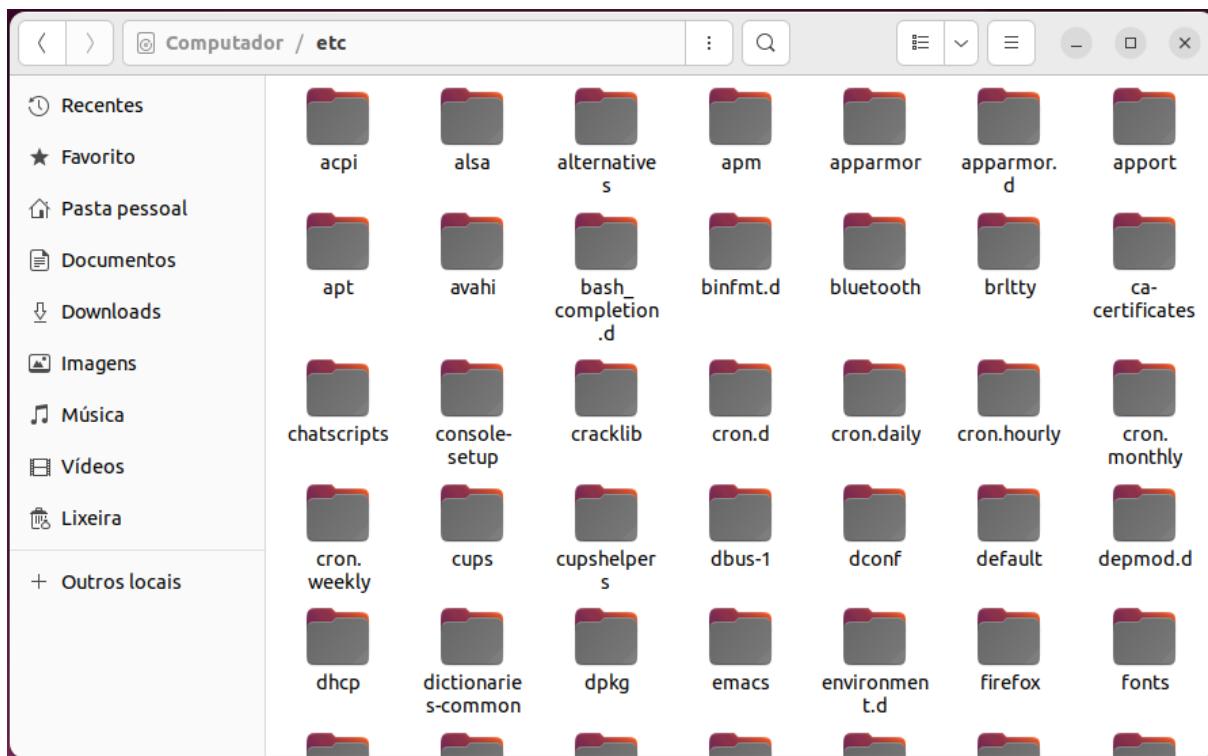
A pasta bin é onde se localiza diversos binários executados pelo sistemas, como o comando “ls”, por exemplo.



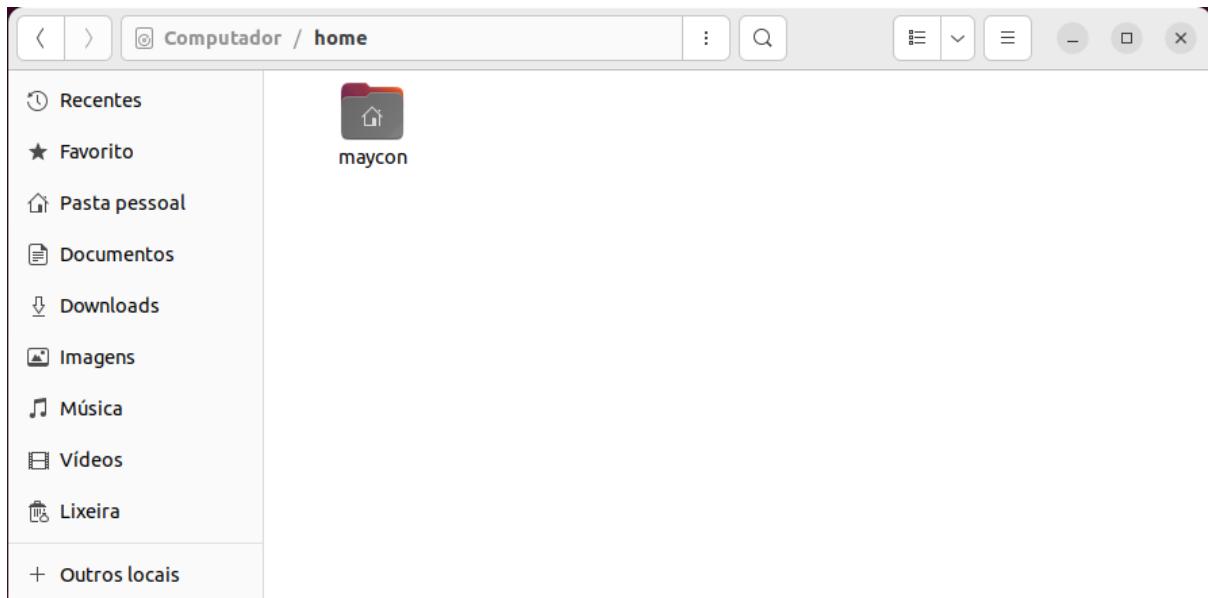
A pasta boot possui diversos programas utilizados pelo bootloader do sistema operacional.



Na pasta dev, podemos encontrar arquivos que representam espaços na memória do computador.



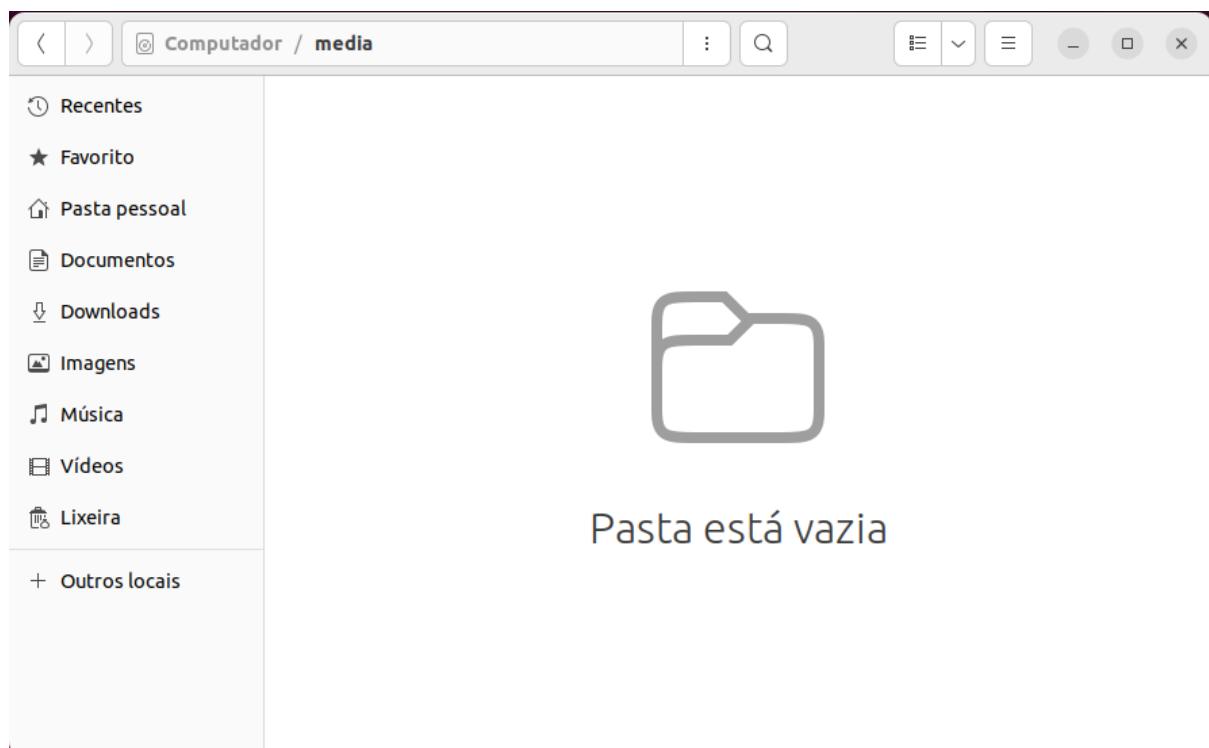
Na pasta “etc” encontramos arquivos do sistema disponíveis à todos os usuários.



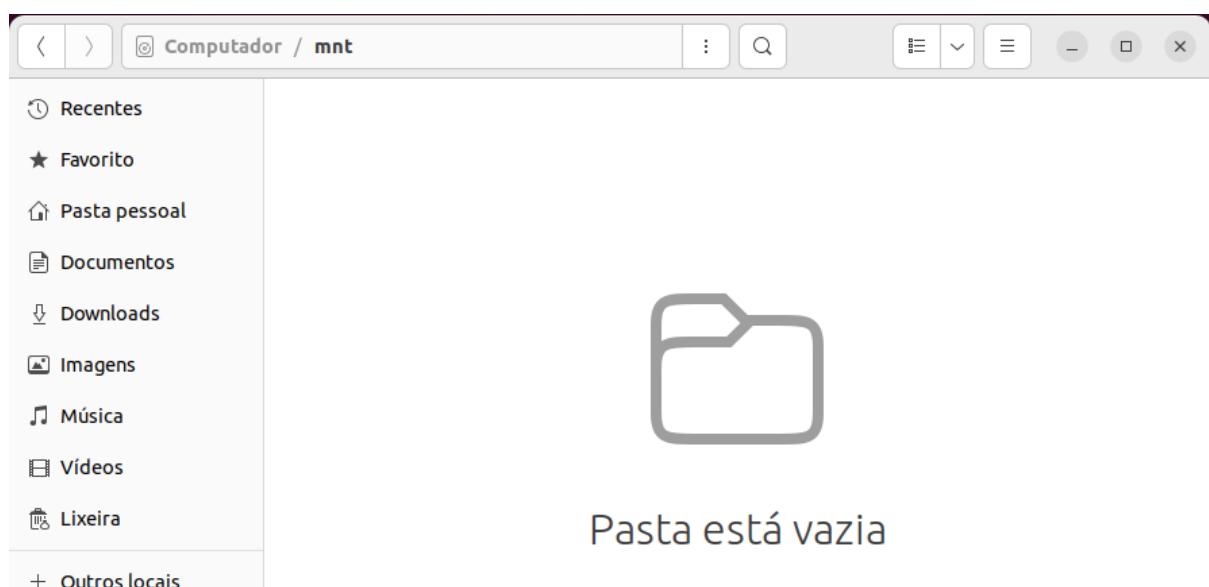
Na pasta home, encontramos arquivos do sistema disponíveis à usuários específicos.



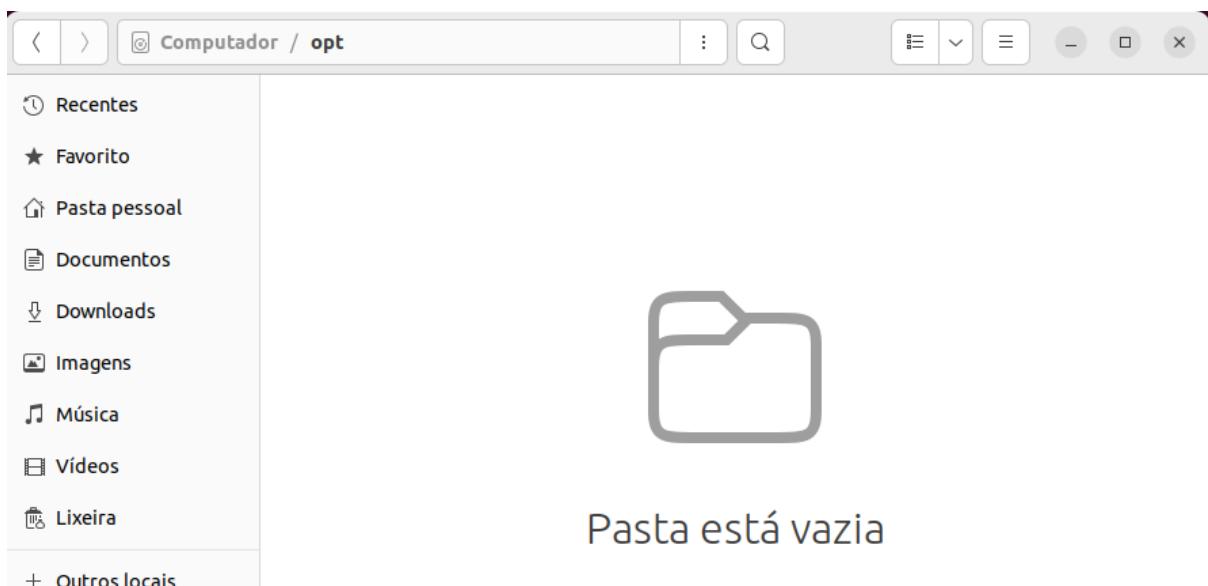
As pastas libs contém bibliotecas de softwares usados pelo sistema operacional.



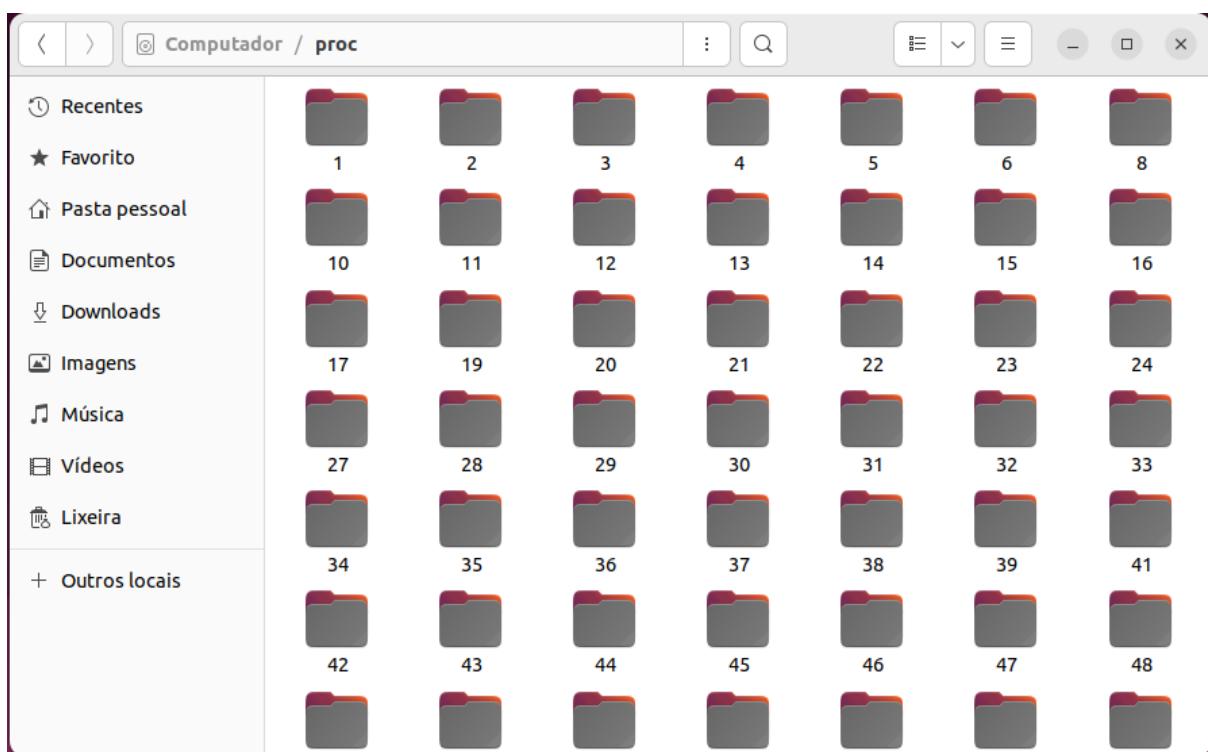
Em media, são montadas automaticamente as unidades removíveis do sistema.



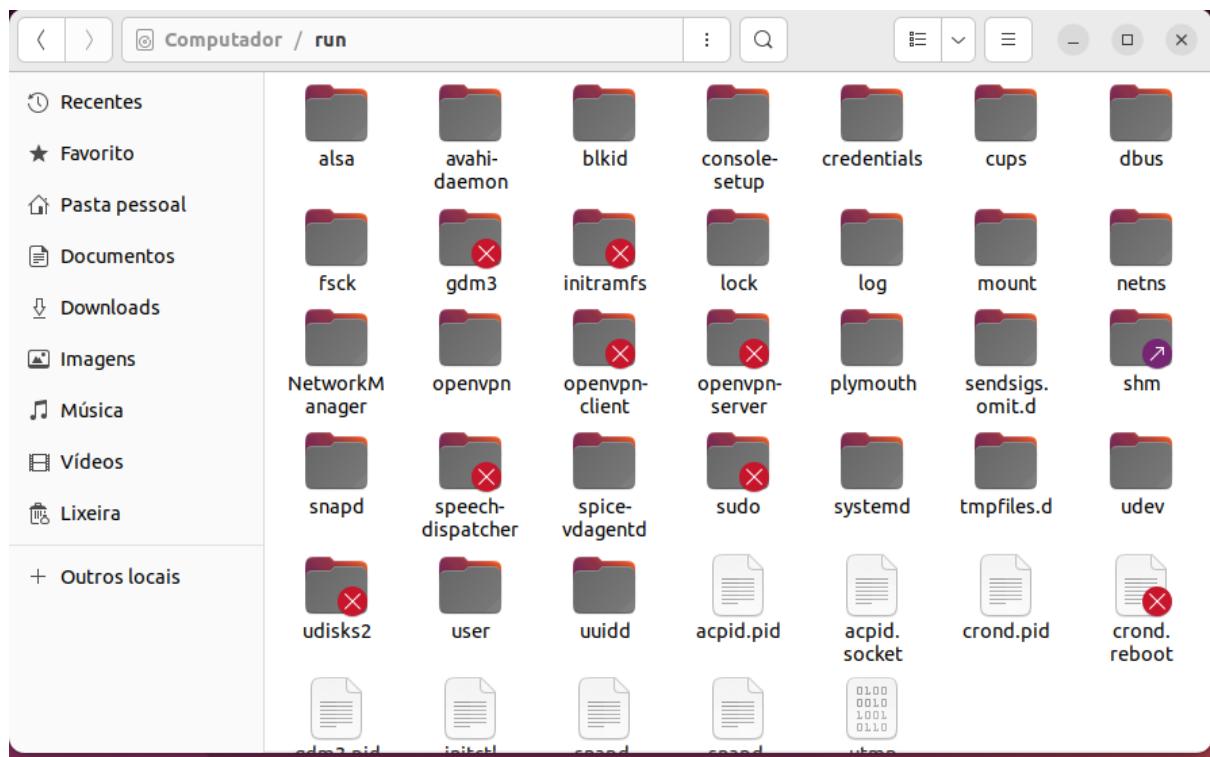
Mnt é uma versão manual de /media.



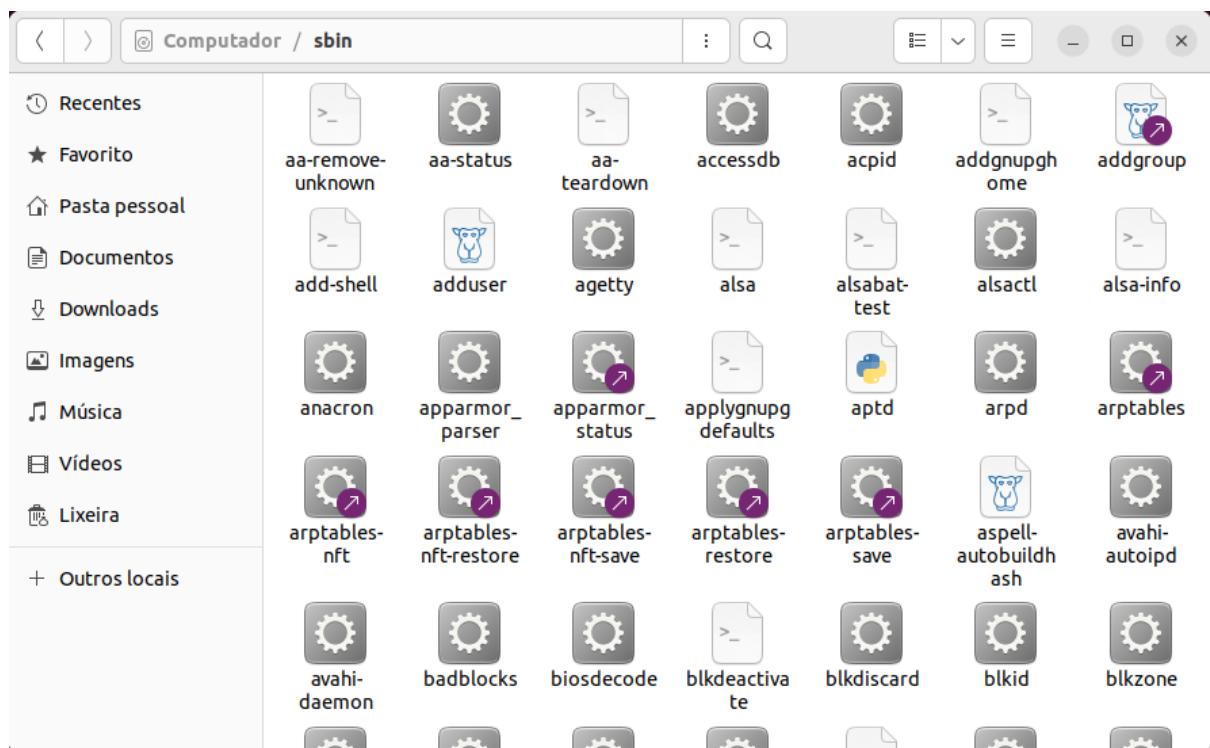
Opt é uma pasta opcional, onde alguns softwares podem estar contidos, como o google chrome, por exemplo.



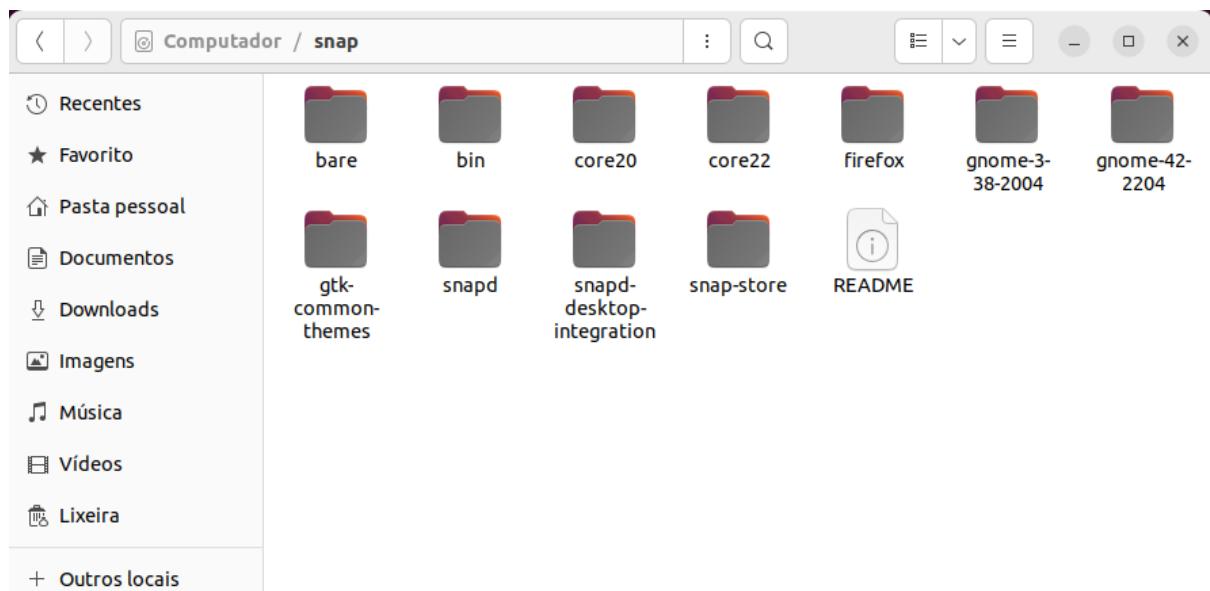
Em /proc encontramos arquivos que contém informações sobre o sistema e processos dele. Trata-se de um arquivo virtual, pois é apagado toda vez que se desliga a máquina



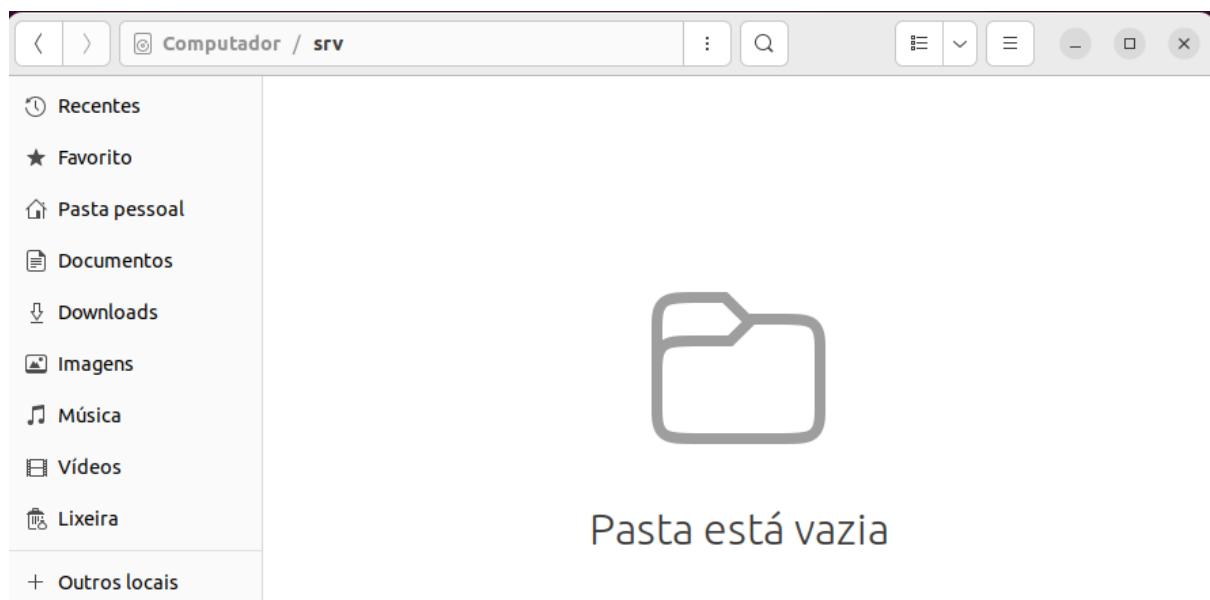
A /run também se trata de uma pasta virtual. Nela são salvas informações sobre o sistema desde o último boot, como usuários logados e daemons.



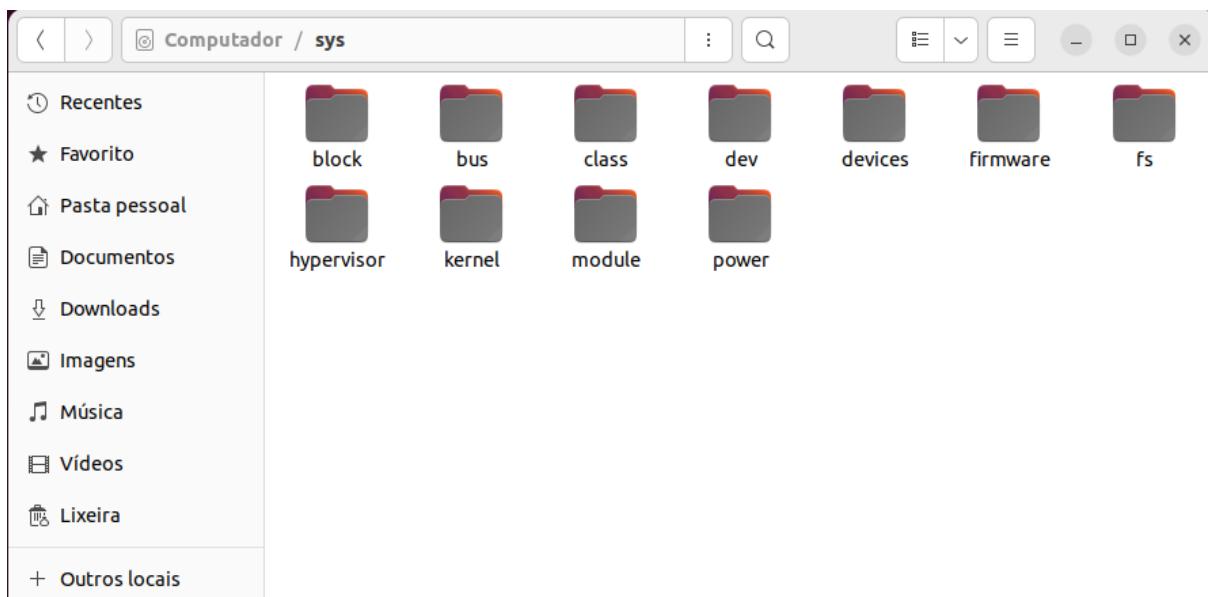
O /sbin possui system binaries. Só podem ser acessados usando o comando sudo.



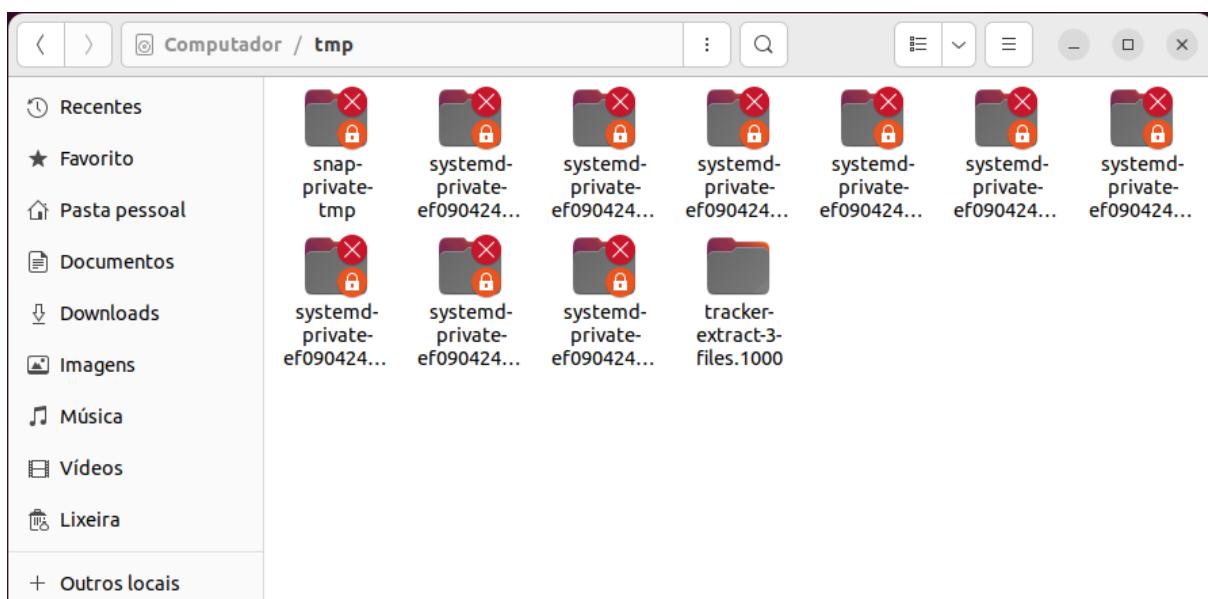
Como o próprio nome sugere, em /snap, encontramos os snaps do sistema. Trata-se de uma pasta recente na organização.



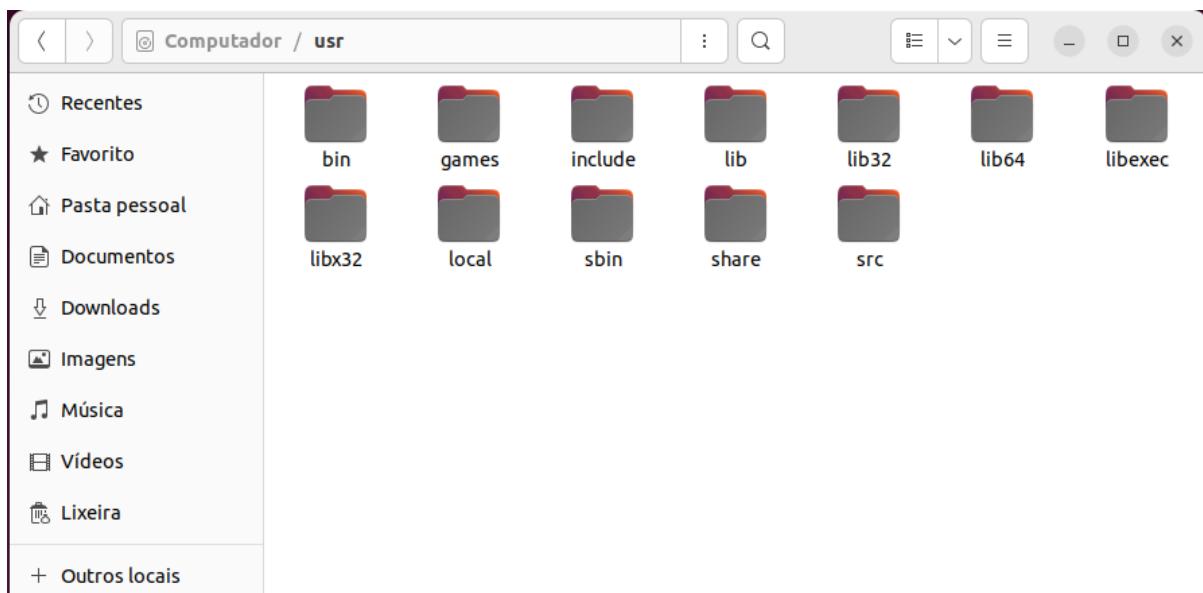
A pasta /srv, serve para hospedar arquivos como um servidor para outros usuários.



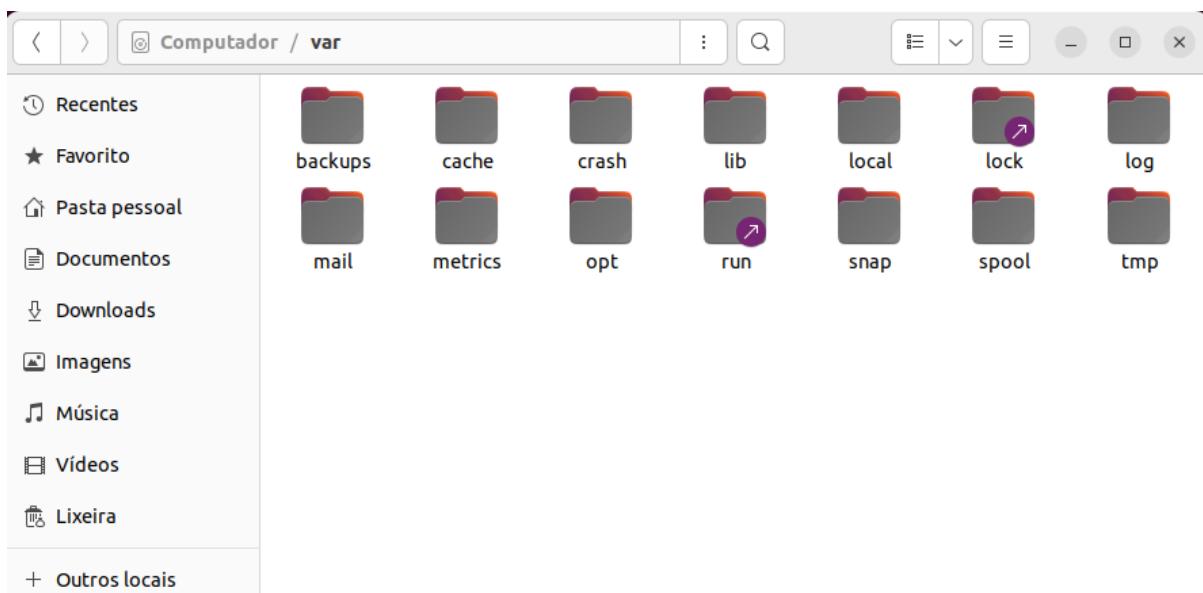
A pasta /sys é uma pasta virtual. Aqui pode-se interagir com o kernel e também é onde são salvos os módulos (drivers) do sistema.



Na pasta /tmp são salvos os arquivos temporários dos programas.



Encontramos em /usr, arquivos disponíveis à todos os usuários que não são considerados básicos ao funcionamento do sistema.



No diretório /var, encontramos arquivos que são esperados de aumentar de tamanho ao longo do tempo, como backups, logs, cache, etc.