

# 40 comandos basicos em linux



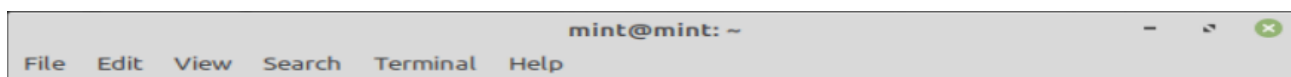
## INTRODUÇÃO

**O Terminal do Linux é uma ferramenta poderosa que permite interagir com o sistema operacional por meio de comandos de texto. Com ele, é possível realizar uma variedade de tarefas de gerenciamento de arquivos, administração do sistema e exploração de redes.**

**Neste trabalho, vamos explorar alguns dos comandos essenciais do Terminal do Linux e entender como eles podem ser utilizados para manipular diretórios, arquivos, processos, redes e muito mais. Esses comandos são a base para administrar um sistema Linux de forma eficiente e produtiva.**

### 1 ls

**Este comando lista o conteúdo de um diretório.**

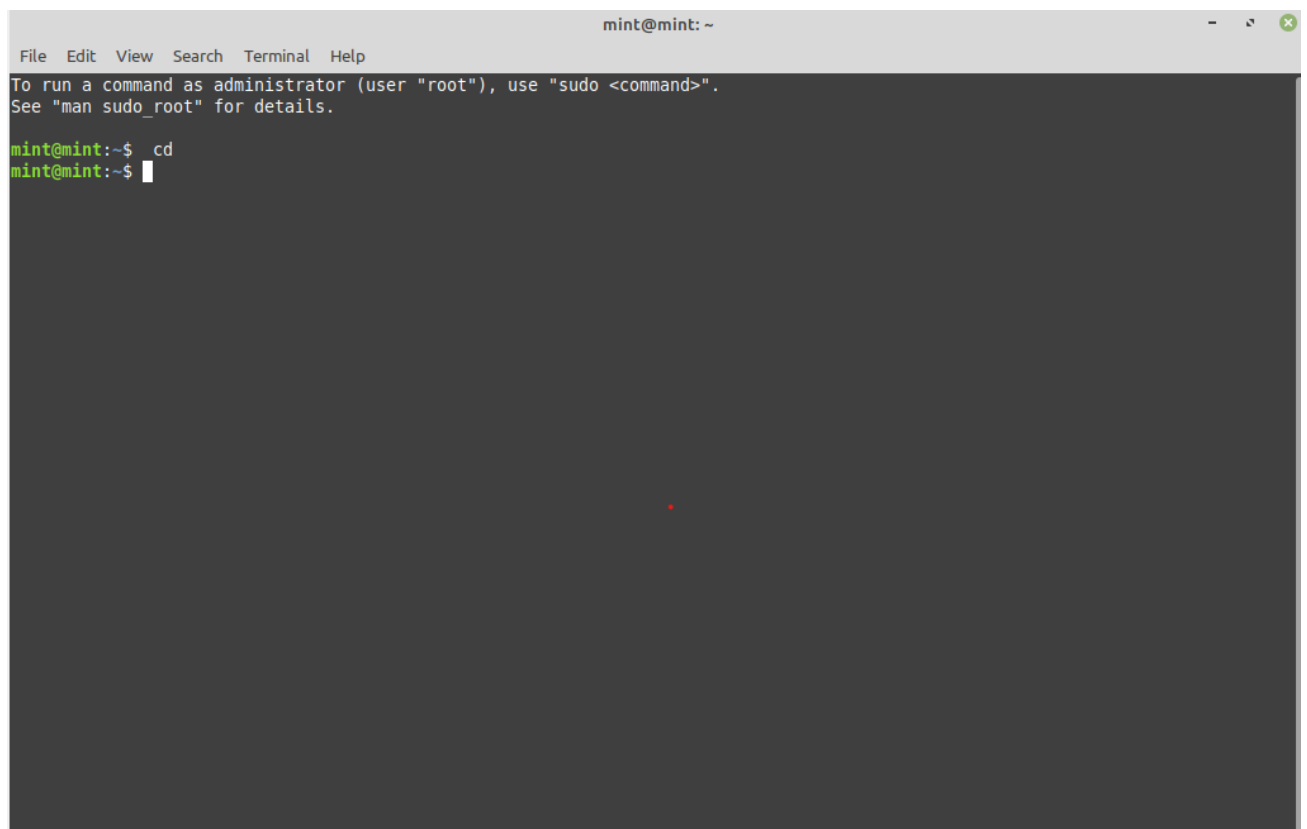


```
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

mint@mint:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos
mint@mint:~$
```

## 2 cd

**Este comando muda de diretório.**

A terminal window titled 'mint@mint: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the same initial text as the first image, followed by the command 'cd' being entered and executed. The prompt changes from 'mint@mint:~\$' to 'mint@mint:~\$' with a cursor, indicating the command has been processed.

```
mint@mint:~$ cd
mint@mint:~$
```

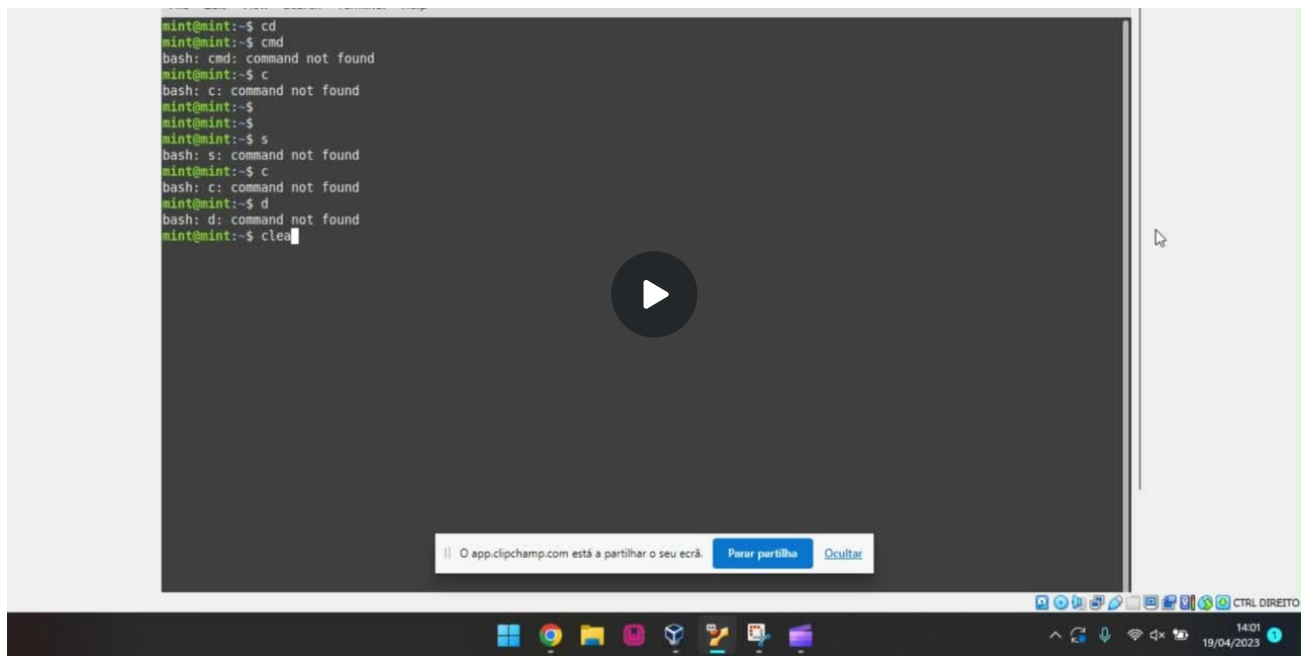
## 3 clear

**Este comando limpa a consola de comandos.**

A terminal window titled 'linux [Em execução] - Oracle VM VirtualBox' with a menu bar (Ficheiro, Máquina, Ver, Entrada, Dispositivos, Ajuda). The terminal shows the command 'clear' being entered and executed, which clears the terminal screen. The prompt changes from 'mint@mint:~\$' to 'mint@mint:~\$' with a cursor, indicating the command has been processed.

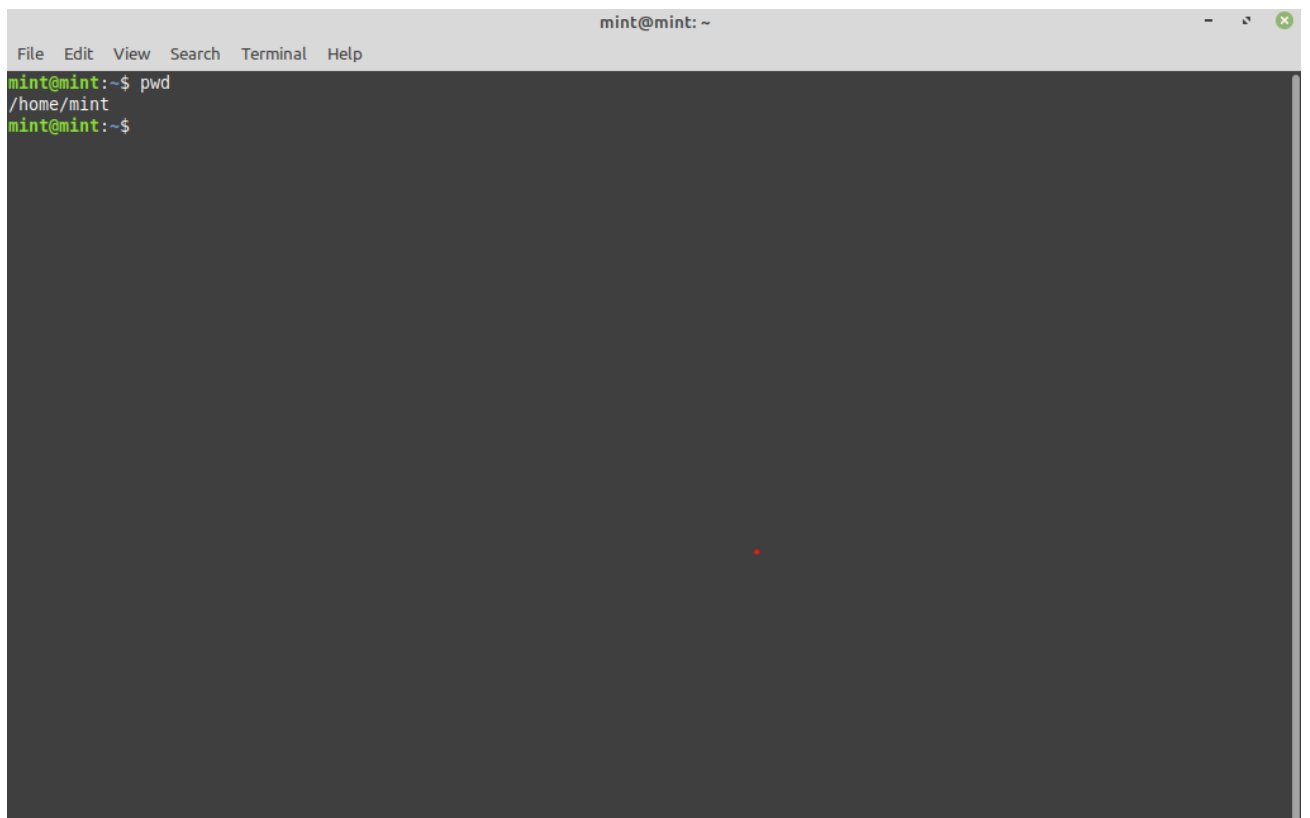
```
linux [Em execução] - Oracle VM VirtualBox
Ficheiro  Máquina  Ver  Entrada  Dispositivos  Ajuda

mint@mint:~$ clear
mint@mint:~$
```



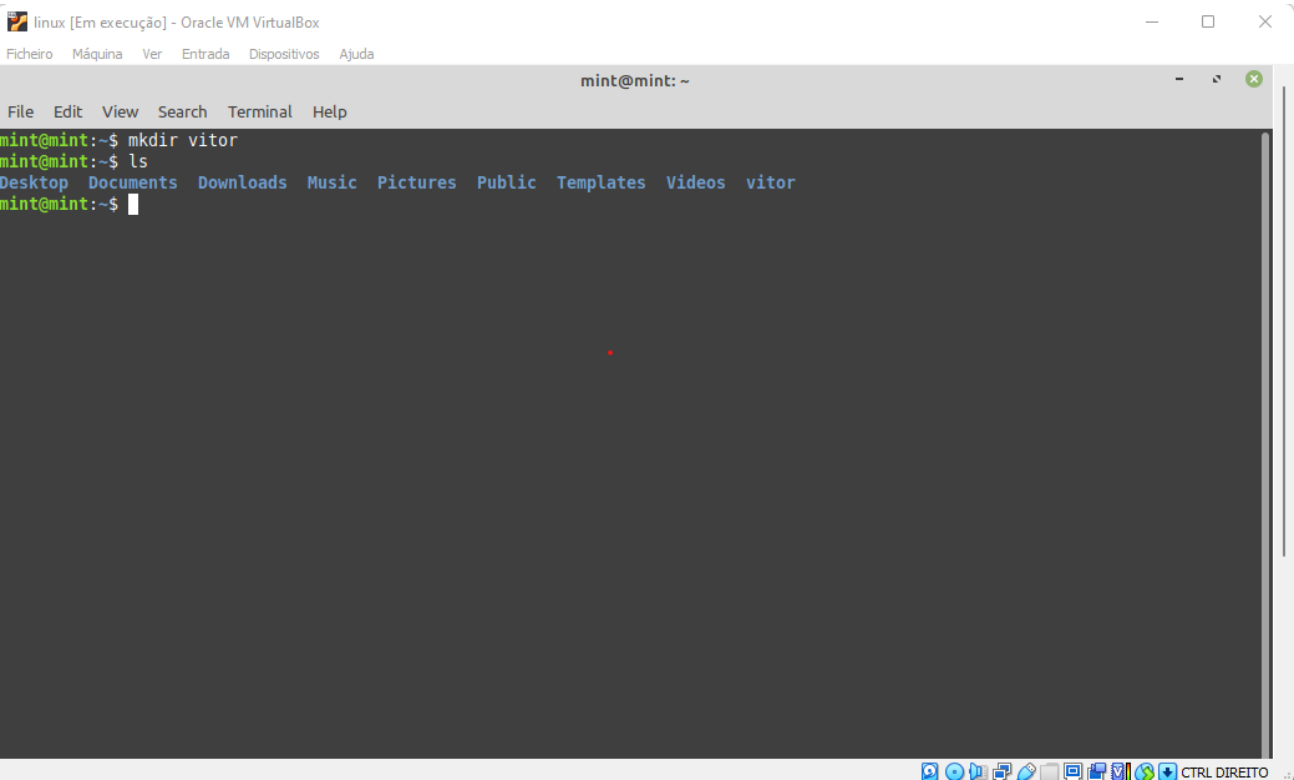
## 4 pwd

Este comando exibe o diretório atual.



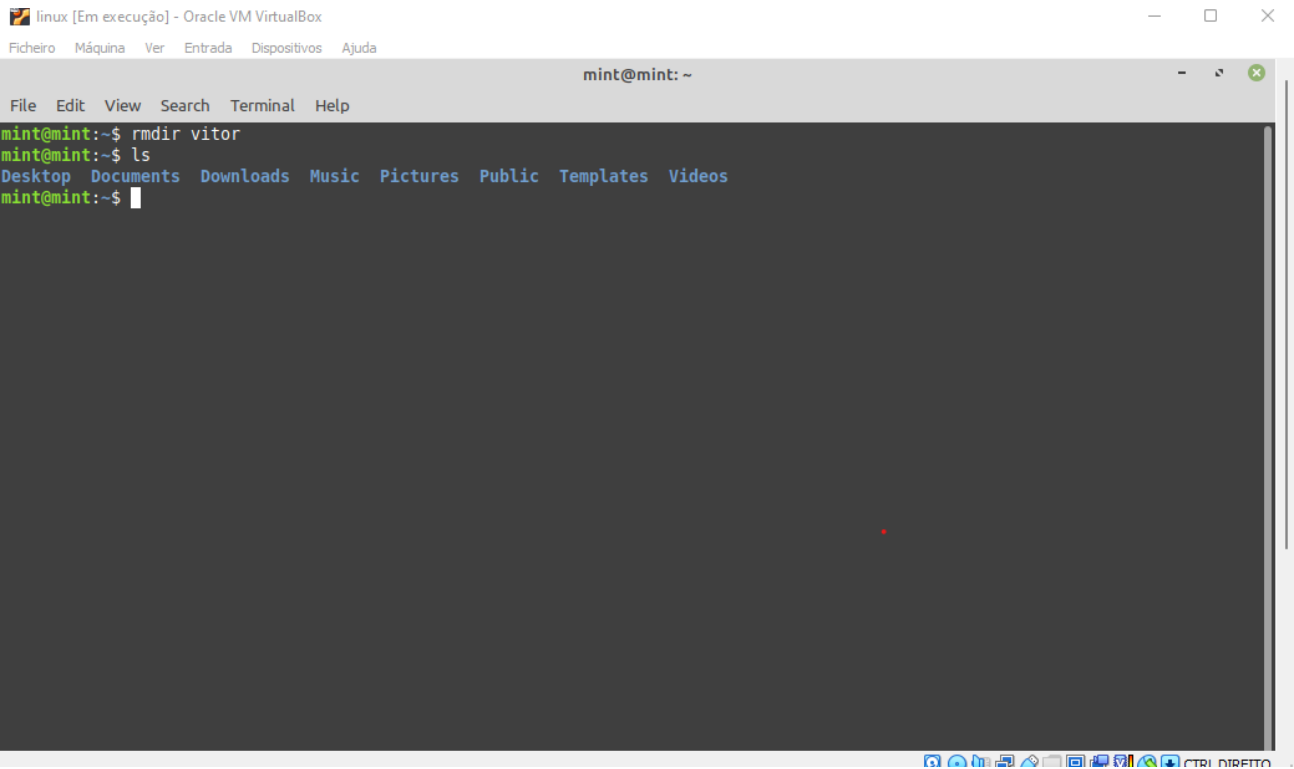
## 5 mkdir

## Este comando cria um diretório.



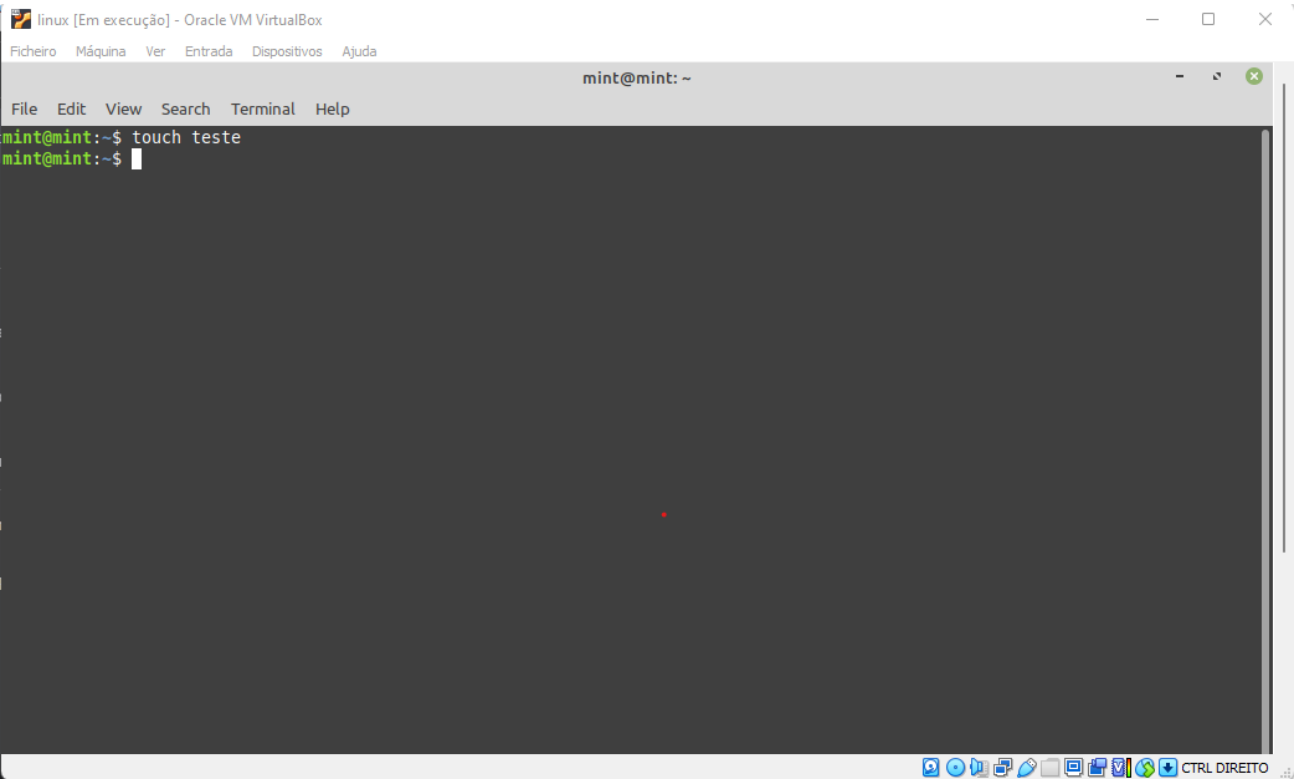
## 6 rmdir

### Este comando remove um diretório vazio.



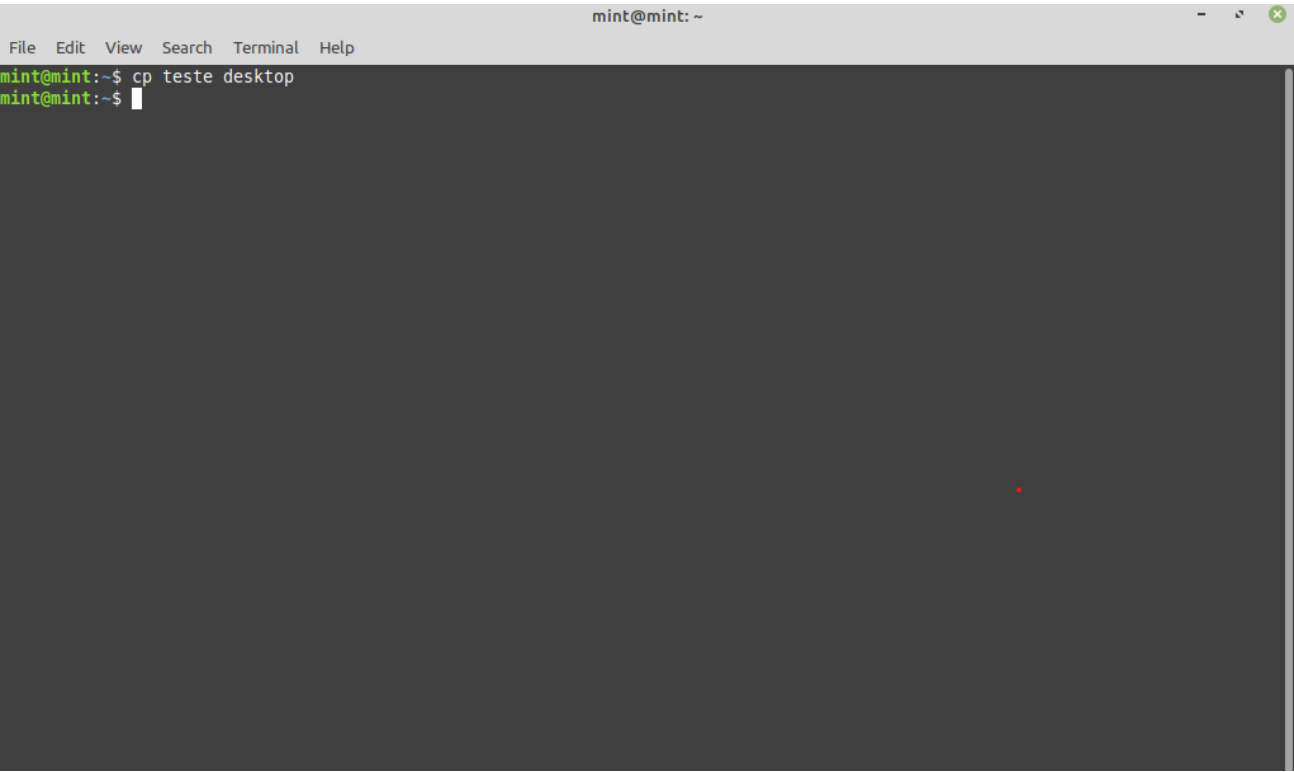
# 7 touch

Este comando cria um novo arquivo vazio.



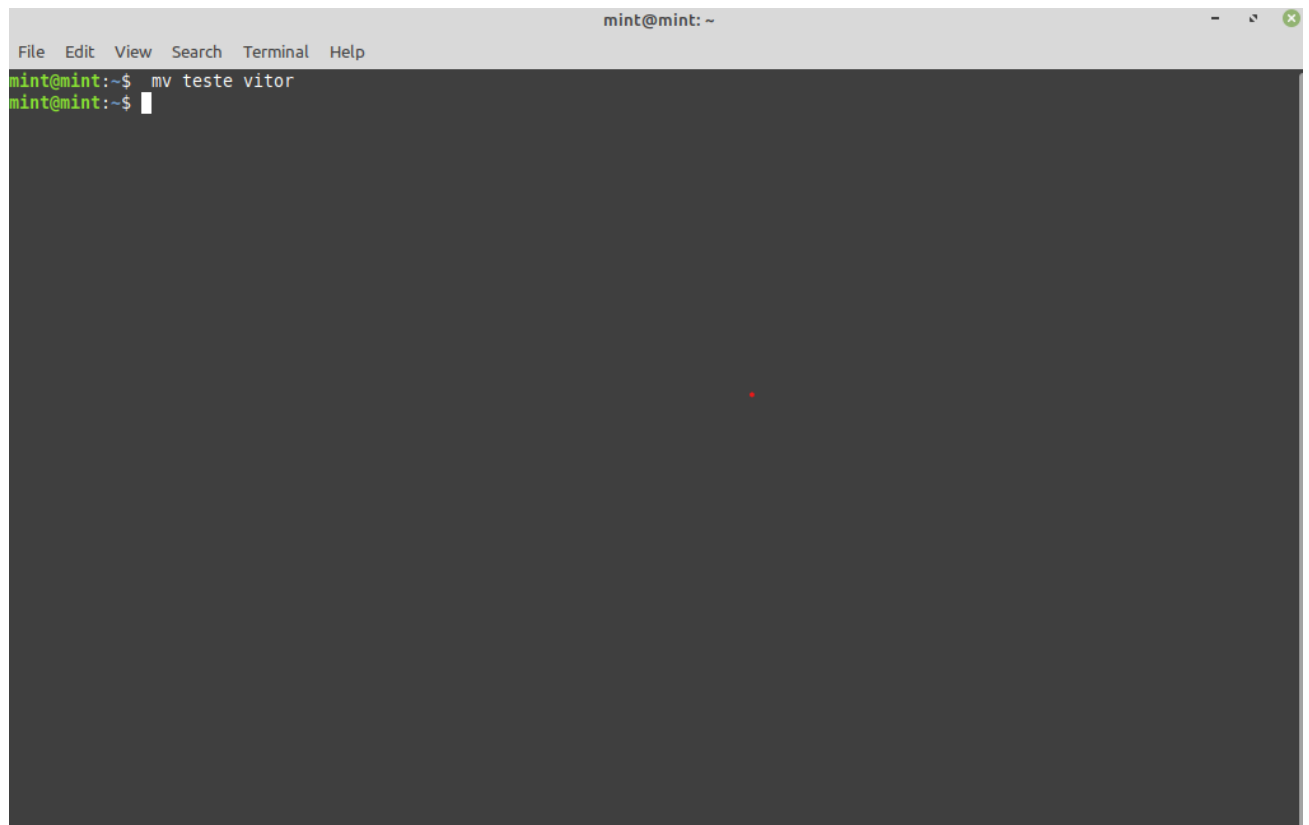
# 8 cp

Este comando copia arquivos e diretórios.



## 9 mv

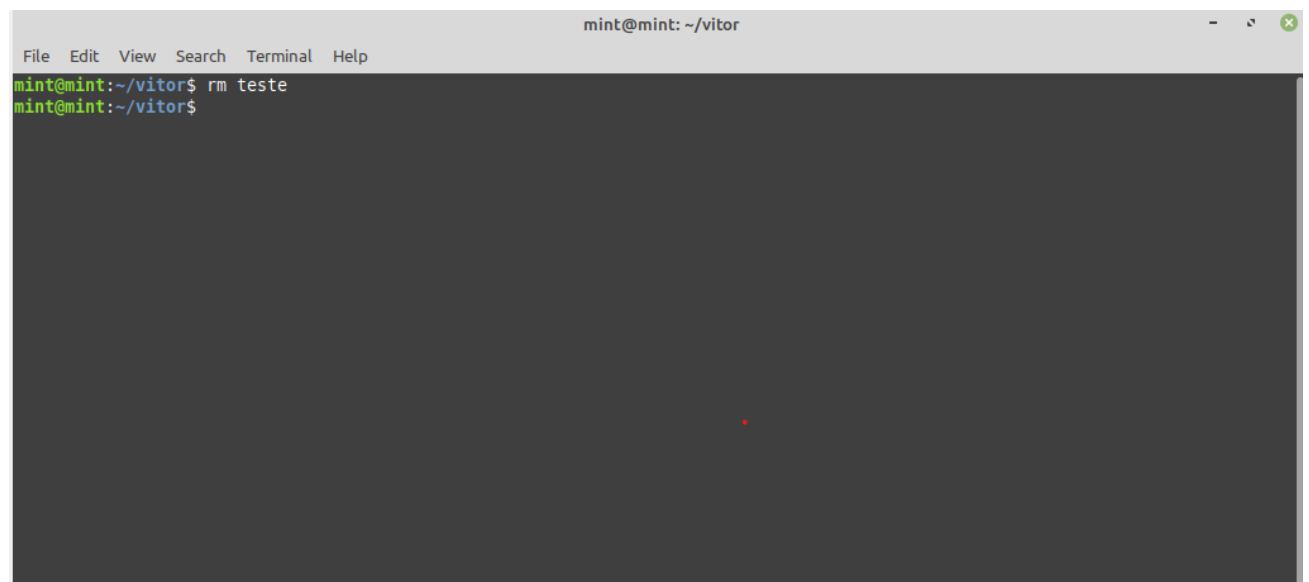
**Este comando move ou renomeia arquivos e diretórios.**



```
mint@mint: ~  
File Edit View Search Terminal Help  
mint@mint:~$ mv teste vitor  
mint@mint:~$
```

## 10 rm

**Este comando remove arquivos e diretórios.**

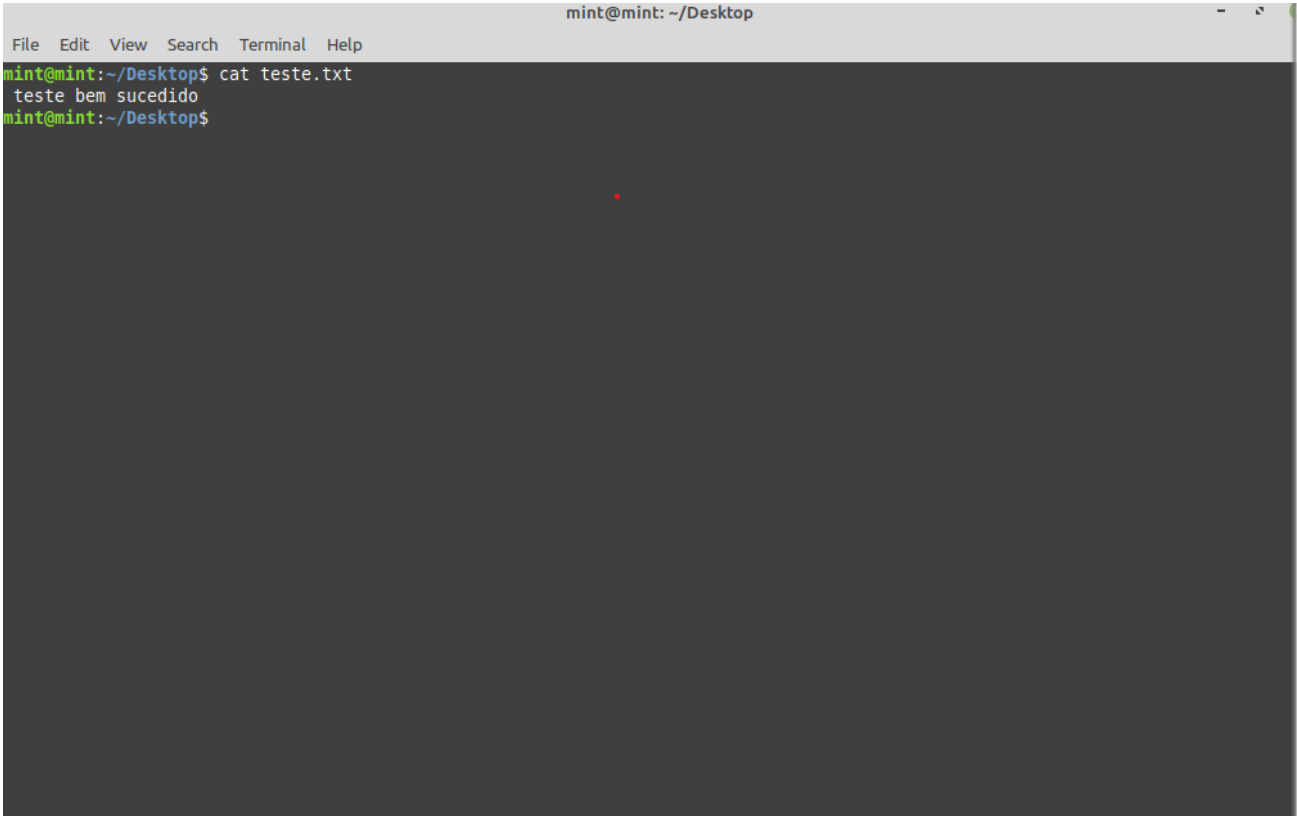


```
mint@mint: ~/.vitor  
File Edit View Search Terminal Help  
mint@mint:~/.vitor$ rm teste  
mint@mint:~/.vitor$
```



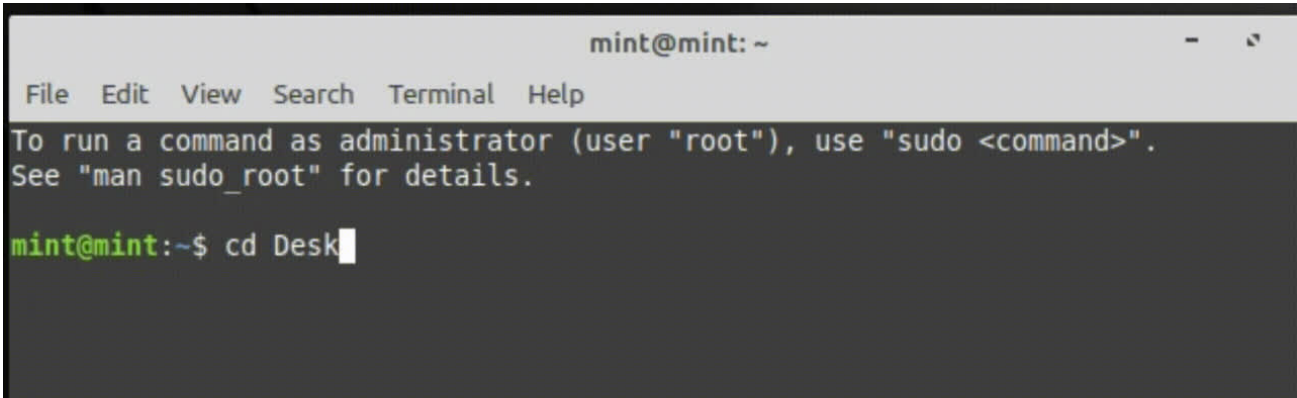
## 11 cat

Este comando mostra o conteúdo de um arquivo.



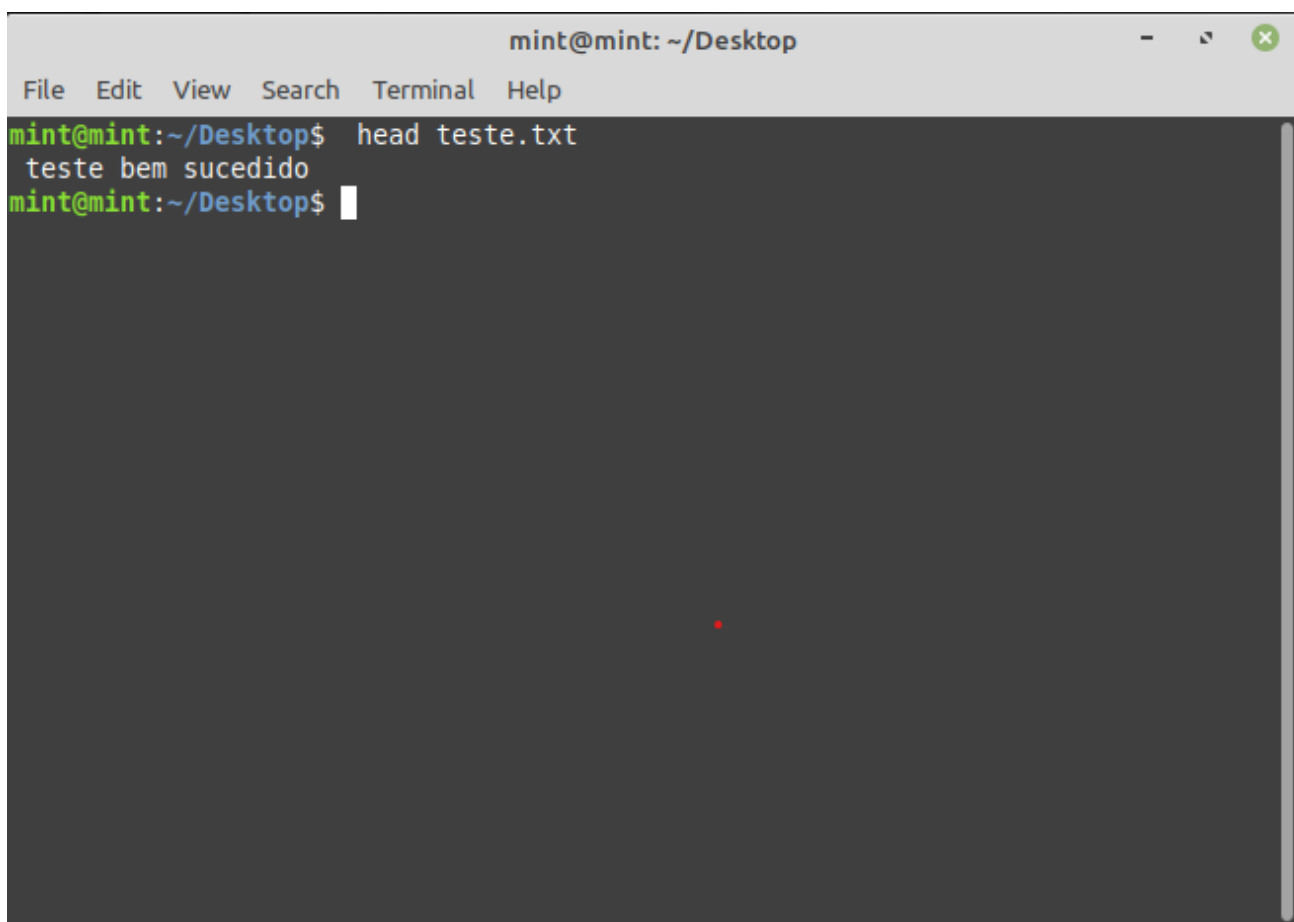
## 12 less

Este comando mostra o conteúdo de um arquivo página por página.



### 13 head

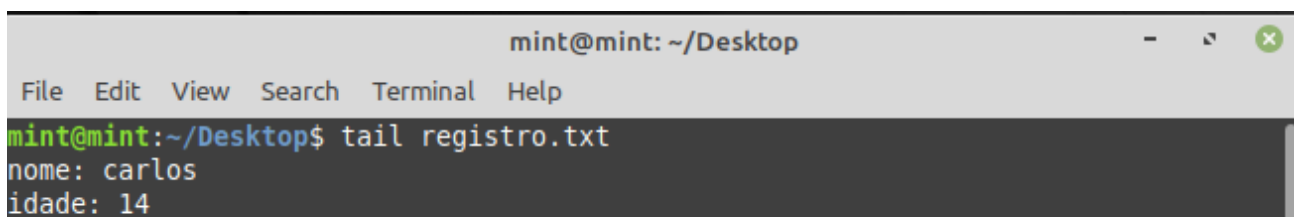
Este comando exibe as primeiras linhas de um arquivo.

A terminal window titled 'mint@mint: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The prompt is 'mint@mint:~/Desktop\$'. The command 'head teste.txt' has been entered, and the output 'teste bem sucedido' is displayed on the next line. The prompt 'mint@mint:~/Desktop\$' is shown again with a cursor.

```
mint@mint: ~/Desktop
File Edit View Search Terminal Help
mint@mint:~/Desktop$ head teste.txt
teste bem sucedido
mint@mint:~/Desktop$
```

### 14 tail

Este comando exibe as últimas linhas de um arquivo.

A terminal window titled 'mint@mint: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The prompt is 'mint@mint:~/Desktop\$'. The command 'tail registro.txt' has been entered, and the output 'nome: carlos' and 'idade: 14' is displayed on the next two lines. The prompt 'mint@mint:~/Desktop\$' is shown again with a cursor.

```
mint@mint: ~/Desktop
File Edit View Search Terminal Help
mint@mint:~/Desktop$ tail registro.txt
nome: carlos
idade: 14
mint@mint:~/Desktop$
```



```

fim
mint@mint:~/Desktop$
```

## 15 grep

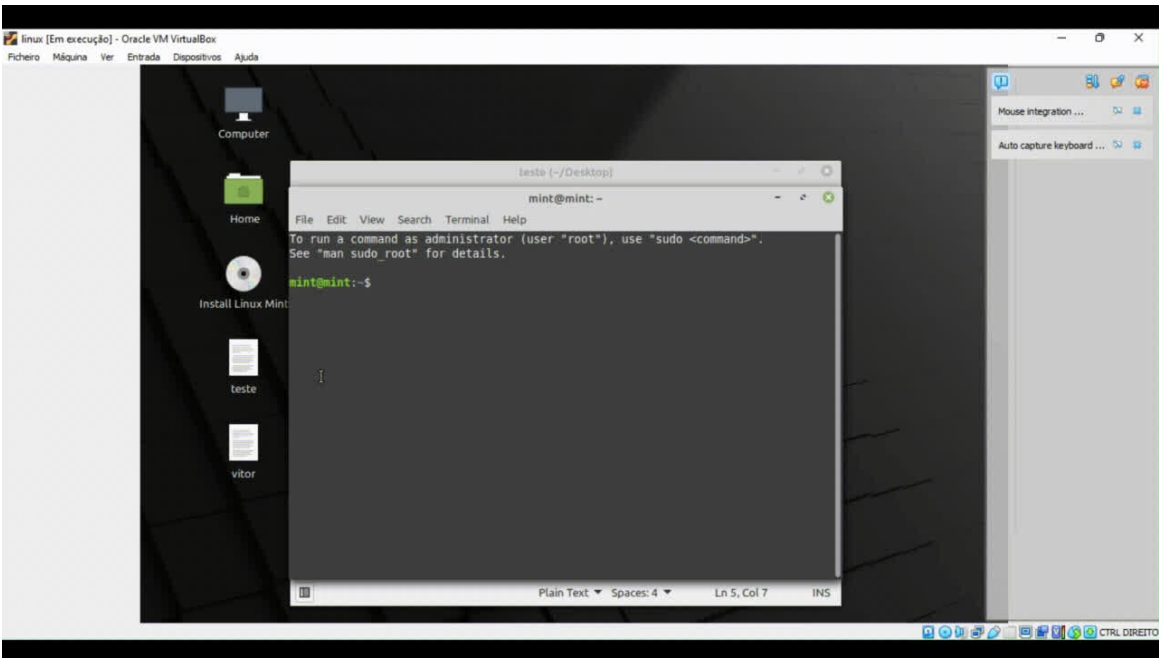
Este comando pesquisa por uma palavra ou padrão num arquivo.

```

mint@mint: ~/Desktop
File Edit View Search Terminal Help
mint@mint:~/Desktop$ grep teste vitor
mint@mint:~/Desktop$ grep teste julho
grep: julho: No such file or directory
mint@mint:~/Desktop$
```

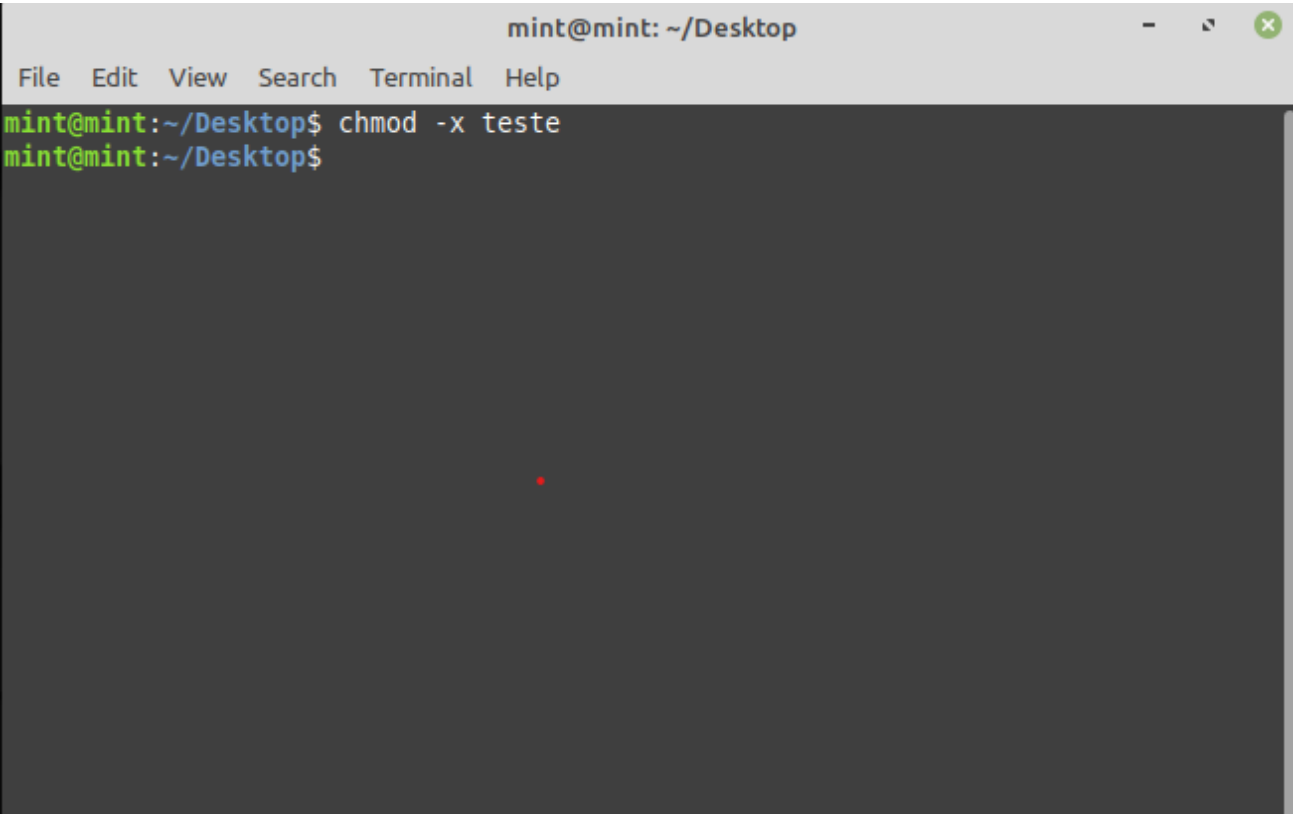
16 wc

Este comando conta o número de palavras, linhas e caracteres em um arquivo.



17 chmod

Este comando altera as permissões de um arquivo ou diretório.



18 df

Exibe informações sobre o uso de disco.

```
mint@mint: ~/Desktop
File Edit View Search Terminal Help
mint@mint:~/Desktop$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
udev            972244         0    972244   0% /dev
tmpfs           203552     1124    202428   1% /run
/dev/sr0        1938272 1938272         0 100% /cdrom
/dev/loop0      1820032 1820032         0 100% /rofs
/cow            1017752 104852    912900  11% /
tmpfs           1017752         0    1017752   0% /dev/shm
tmpfs           5120         4        5116   1% /run/lock
tmpfs           1017752         0    1017752   0% /sys/fs/cgroup
tmpfs           1017752         4    1017748   1% /tmp
tmpfs           203548         52    203496   1% /run/user/999
mint@mint:~/Desktop$
```

19 ps

Este comando mostra os processos em execução.

```
mint@mint: ~/Desktop
File Edit View Search Terminal Help
mint@mint:~/Desktop$ ps
  PID TTY          TIME CMD
  2184 pts/0    00:00:00 bash
  2659 pts/0    00:00:00 ps
mint@mint:~/Desktop$
```

20 top

Este comando exibe os processos em execução em tempo real.

```
mint@mint: ~/Desktop
File Edit View Search Terminal Help
top - 14:23:34 up 50 min, 1 user, load average: 0.04, 0.06, 0.07
Tasks: 148 total, 1 running, 147 sleeping, 0 stopped, 0 zombie
%Cpu(s): 2.4 us, 0.7 sy, 0.0 ni, 97.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 1987.8 total, 480.6 free, 541.7 used, 965.5 buff/cache
MiB Swap: 0.0 total, 0.0 free, 0.0 used. 1165.2 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR  S  %CPU  %MEM    TIME+  COMMAND
 1741 mint      20   0 2256032 187040 109280 S   1.7   9.2   2:11.71 cinnamon
 1285 root      20   0 287504   88236  47708 S   1.0   4.3   0:17.87 Xorg
 1767 mint      20   0 707388   67512  45400 S   0.7   3.3   0:04.64 nemo-de+
 2176 mint      20   0 539672   41472  30136 S   0.7   2.0   0:05.66 gnome-t+
 2661 mint      20   0  13588   3792   3284 R   0.3   0.2   0:00.03 top
    1 root      20   0  101724 11588   8668 S   0.0   0.6   0:03.13 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+
    6 root        0 -20         0         0         0 I   0.0   0.0   0:00.00 kworker+
    9 root        0 -20         0         0         0 I   0.0   0.0   0:00.00 mm_perc+
   10 root      20   0         0         0         0 S   0.0   0.0   0:00.77 ksoftir+
   11 root      20   0         0         0         0 I   0.0   0.0   0:01.90 rcu_sch+
   12 root      rt   0         0         0         0 S   0.0   0.0   0:00.03 migrati+
   13 root     -51   0         0         0         0 S   0.0   0.0   0:00.00 idle_in+
   14 root      20   0         0         0         0 S   0.0   0.0   0:00.00 cpuhp/0
   15 root      20   0         0         0         0 S   0.0   0.0   0:00.00 kdevtmp+
```

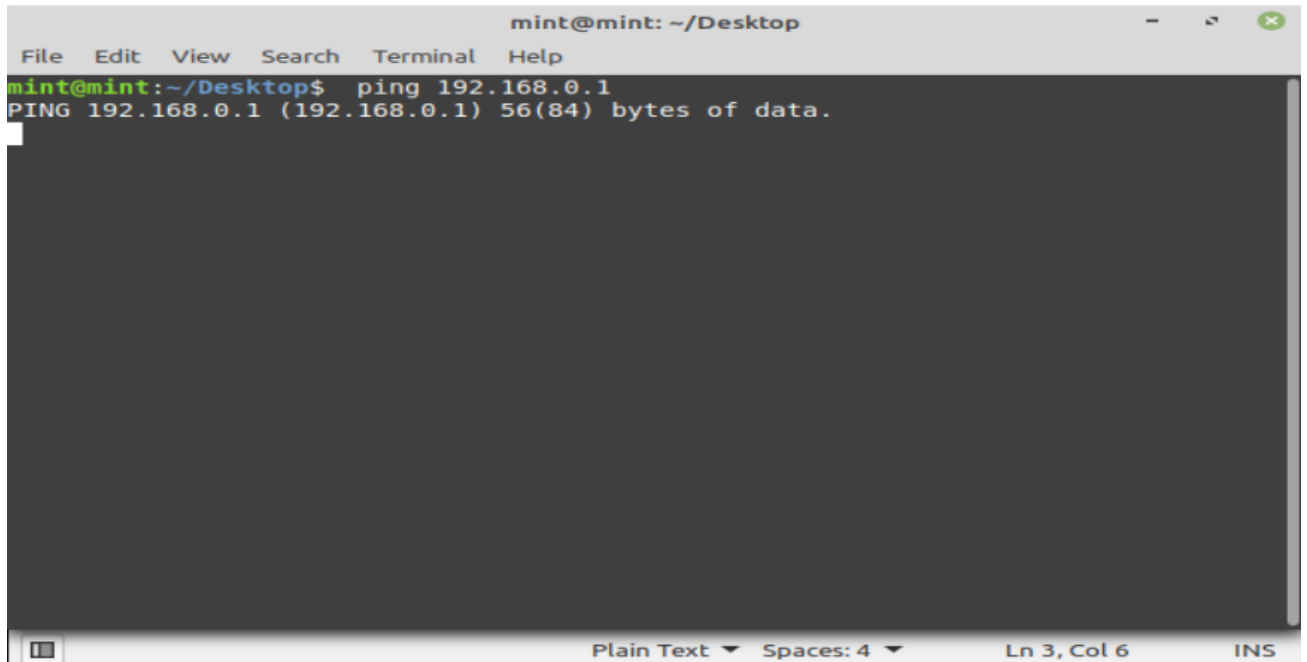
21 kill

Este comando envia um pedido de interrupção de um certo processo.

```
rutszo@rutszo: ~/Desktop
File Edit View Search Terminal Help
rutszo@rutszo:~/Desktop$ kill <id do processo>
```

## 22 ping

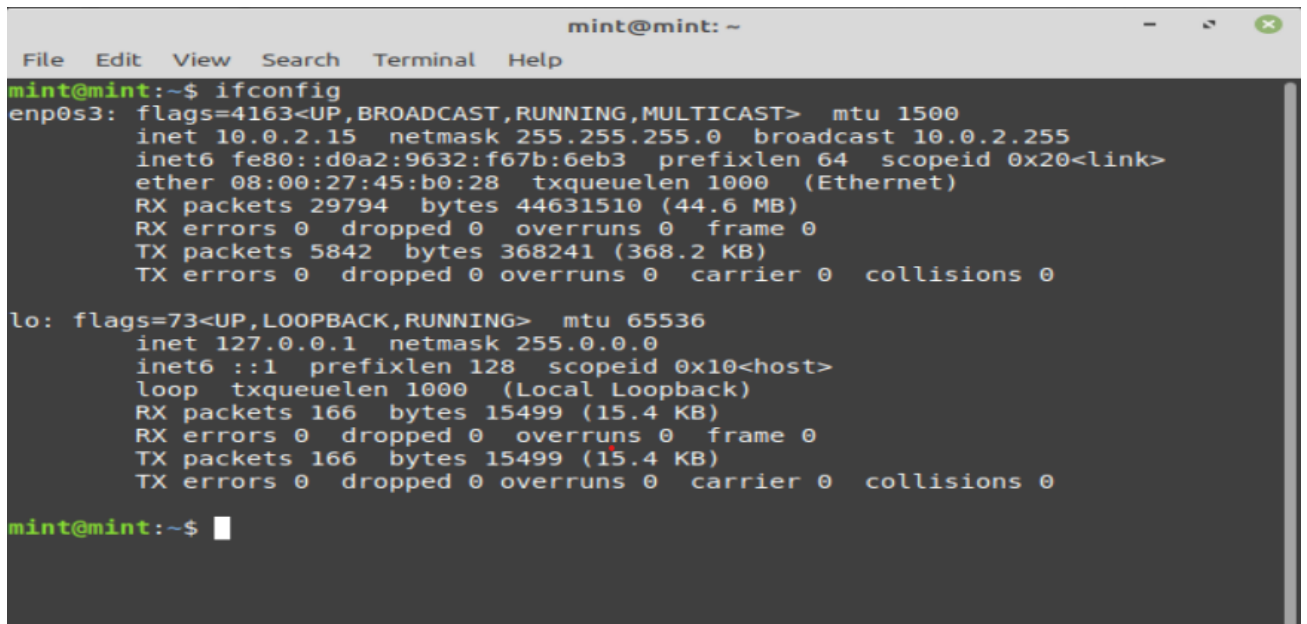
Este comando verifica a conectividade de rede / se é possível conectar ao exterior.

A terminal window titled 'mint@mint: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The command 'ping 192.168.0.1' has been entered and executed. The output shows 'PING 192.168.0.1 (192.168.0.1) 56(84) bytes of data.' followed by a large black redaction box. The status bar at the bottom indicates 'Plain Text', 'Spaces: 4', 'Ln 3, Col 6', and 'INS' mode.

```
mint@mint: ~/Desktop
File Edit View Search Terminal Help
mint@mint:~/Desktop$ ping 192.168.0.1
PING 192.168.0.1 (192.168.0.1) 56(84) bytes of data.
[Redacted]
```

## 23 ifconfig

Este comando exibe informações de rede.

A terminal window titled 'mint@mint: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The command 'ifconfig' has been entered and executed. The output shows details for the 'enp0s3' (Ethernet) and 'lo' (Loopback) interfaces, including IP addresses, netmasks, and various statistics. The status bar at the bottom is empty.

```
mint@mint: ~
File Edit View Search Terminal Help
mint@mint:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::d0a2:9632:f67b:6eb3 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:45:b0:28 txqueuelen 1000 (Ethernet)
    RX packets 29794 bytes 44631510 (44.6 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 5842 bytes 368241 (368.2 KB)
    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
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 166 bytes 15499 (15.4 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 166 bytes 15499 (15.4 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

mint@mint:~$
```

## 24 netstat

Este comando exibe informações de conexão de rede.

```
mint@mint:~$ netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
udp        0      0 mint:bootpc            _gateway:bootps        ESTABLISHED

Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags       Type       State
unix   3      [ ]          DGRAM      State
unix   2      [ ]          DGRAM      14246      /run/systemd/notify
unix   2      [ ]          DGRAM      24212      /run/user/999/systemd/notify
unix   2      [ ]          DGRAM      14270      /run/systemd/journal/syslog
unix  18      [ ]          DGRAM      14282      /run/systemd/journal/dev-log
unix   8      [ ]          DGRAM      14286      /run/systemd/journal/socket
unix   3      [ ]          STREAM     CONNECTED  34415      /run/dbus/system_bus_socket
unix   3      [ ]          STREAM     CONNECTED  29967      @/tmp/dbus-XnZdK1doCZ
unix   3      [ ]          STREAM     CONNECTED  26611      /run/user/999/bus
unix   3      [ ]          STREAM     CONNECTED  25258      /run/dbus/system_bus_socket
unix   3      [ ]          STREAM     CONNECTED  23988
unix   3      [ ]          STREAM     CONNECTED  30067      /run/systemd/journal/stdout
unix   3      [ ]          STREAM     CONNECTED  24853      /run/systemd/journal/stdout
unix   3      [ ]          STREAM     CONNECTED  26842      @/tmp/dbus-XnZdK1doCZ
unix   3      [ ]          STREAM     CONNECTED  34418      /run/user/999/bus
unix   3      [ ]          STREAM     CONNECTED  29894
unix   3      [ ]          STREAM     CONNECTED  26610
unix   3      [ ]          DGRAM      15678
unix   3      [ ]          STREAM     CONNECTED  25255
unix   3      [ ]          STREAM     CONNECTED  23991      /run/systemd/journal/stdout
unix   3      [ ]          STREAM     CONNECTED  27645      /run/user/999/bus
unix   3      [ ]          STREAM     CONNECTED  81503      /run/dbus/system_bus_socket
unix   3      [ ]          STREAM     CONNECTED  26778
unix   3      [ ]          STREAM     CONNECTED  29893
unix   3      [ ]          STREAM     CONNECTED  26609      @/tmp/dbus-XnZdK1doCZ
unix   3      [ ]          STREAM     CONNECTED  16784      /run/systemd/journal/stdout
unix   3      [ ]          STREAM     CONNECTED  25257
unix   2      [ ]          DGRAM      23774
unix   3      [ ]          STREAM     CONNECTED  20462
unix   2      [ ]          DGRAM      16632
unix   3      [ ]          STREAM     CONNECTED  27763
unix   3      [ ]          STREAM     CONNECTED  81505
unix   3      [ ]          STREAM     CONNECTED  26843
unix   3      [ ]          STREAM     CONNECTED  34417
unix   3      [ ]          STRFAM     CONNECTED  29881      /run/user/999/bus
```

## 25 route

Este comando exibe e modifica a tabela de roteamento.

```
mint@mint: ~
File Edit View Search Terminal Help

mint@mint:~$ route
Kernel IP routing table
Destination Gateway Genmask Flags Metric Ref Use Iface
default _gateway 0.0.0.0 UG 100 0 0 enp0s3
10.0.2.0 0.0.0.0 255.255.255.0 U 100 0 0 enp0s3
link-local 0.0.0.0 255.255.0.0 U 1000 0 0 enp0s3
mint@mint:~$
```

## 26 traceroute

Este comando rastreia o caminho de um packet através da rede.

**(para usar este comando necessita de colocar o seguinte comando para ter acesso:**

**sudo apt-get install traceroute)**

```
rutszo@rutszo: ~/Desktop
File Edit View Search Terminal Help
rutszo@rutszo:~/Desktop$ traceroute google.com
traceroute to google.com (142.250.201.78), 30 hops max, 60 byte packets
 1  _gateway (10.0.2.2)  0.423 ms  0.358 ms  0.341 ms
 2  * * *
 3  * * *
```

## 27 ssh

**Este comando serve para conectar-se a um servidor remota de forma segura.**

```
rutszo@rutszo: ~/Desktop
File Edit View Search Terminal Help
rutszo@rutszo:~/Desktop$ ssh user@host
```

## 28 scp

**Este comando copia arquivos de um / para um servidor remoto de forma segura.**

```
rutszo@rutszo: ~/Desktop
File Edit View Search Terminal Help
rutszo@rutszo:~/Desktop$ scp user@host ficheiro destino
```



## 29 tar

**Este comando cria / extrai arquivos compactados.**

**criar:**

```
rufszo@rufszo: ~/Desktop
File Edit View Search Terminal Help
rufszo@rufszo:~/Desktop$ tar -cf arquivo.tar ficheiro
```

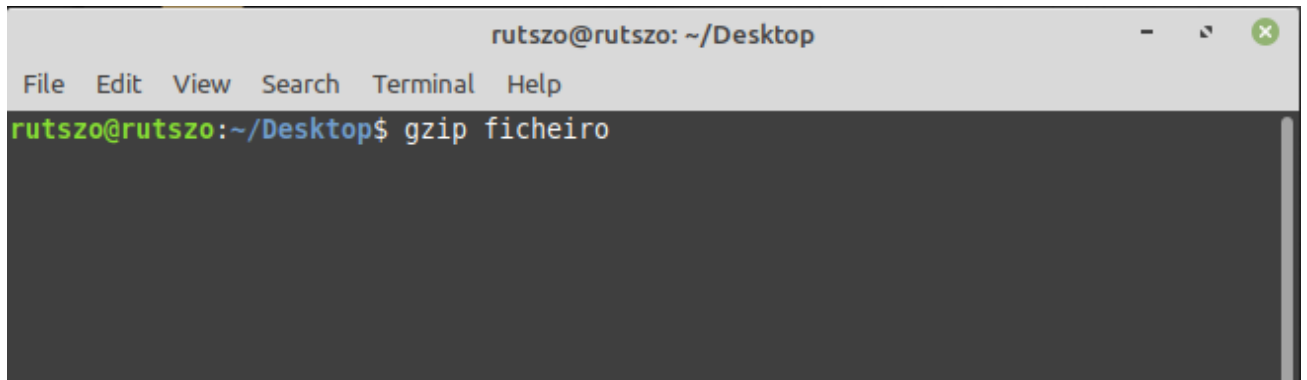
**extrair:**

```
rufszo@rufszo: ~/Desktop
File Edit View Search Terminal Help
rufszo@rufszo:~/Desktop$ tar -xf arquivo.tar
```



### 30 gzip

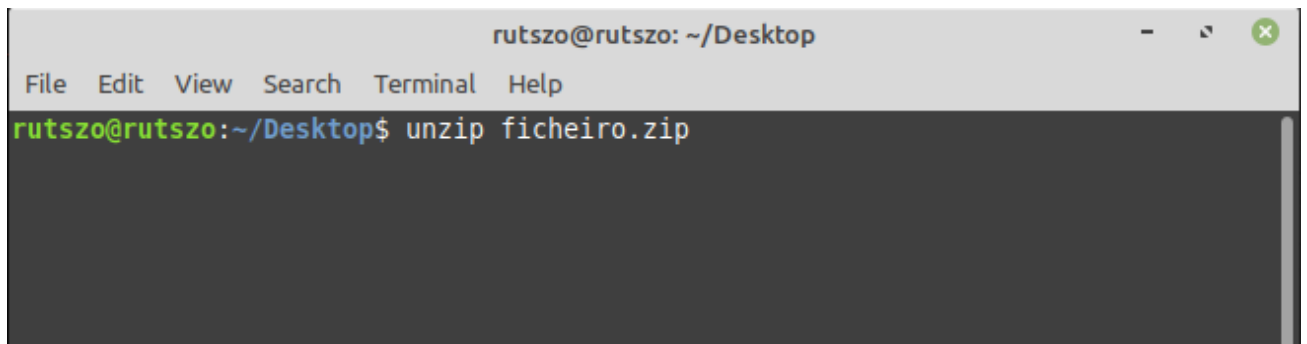
**Este comando compacta / extrai arquivos.**

A terminal window titled 'rutszo@rutszo: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The command 'gzip ficheiro' is entered at the prompt.

```
rutszo@rutszo: ~/Desktop
File Edit View Search Terminal Help
rutszo@rutszo:~/Desktop$ gzip ficheiro
```

### 31 unzip

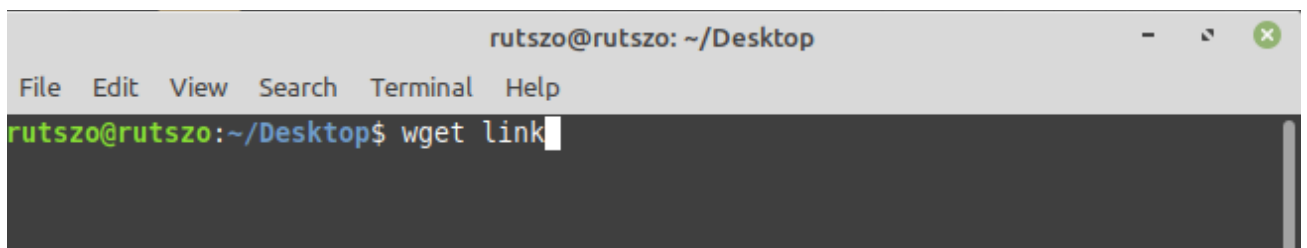
**Este comando extrai arquivos ZIP.**

A terminal window titled 'rutszo@rutszo: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The command 'unzip ficheiro.zip' is entered at the prompt.

```
rutszo@rutszo: ~/Desktop
File Edit View Search Terminal Help
rutszo@rutszo:~/Desktop$ unzip ficheiro.zip
```

### 32 wget

**Este comando baixa um arquivo de um endereço na internet. (necessita de usar o comando: sudo apt install wget)**

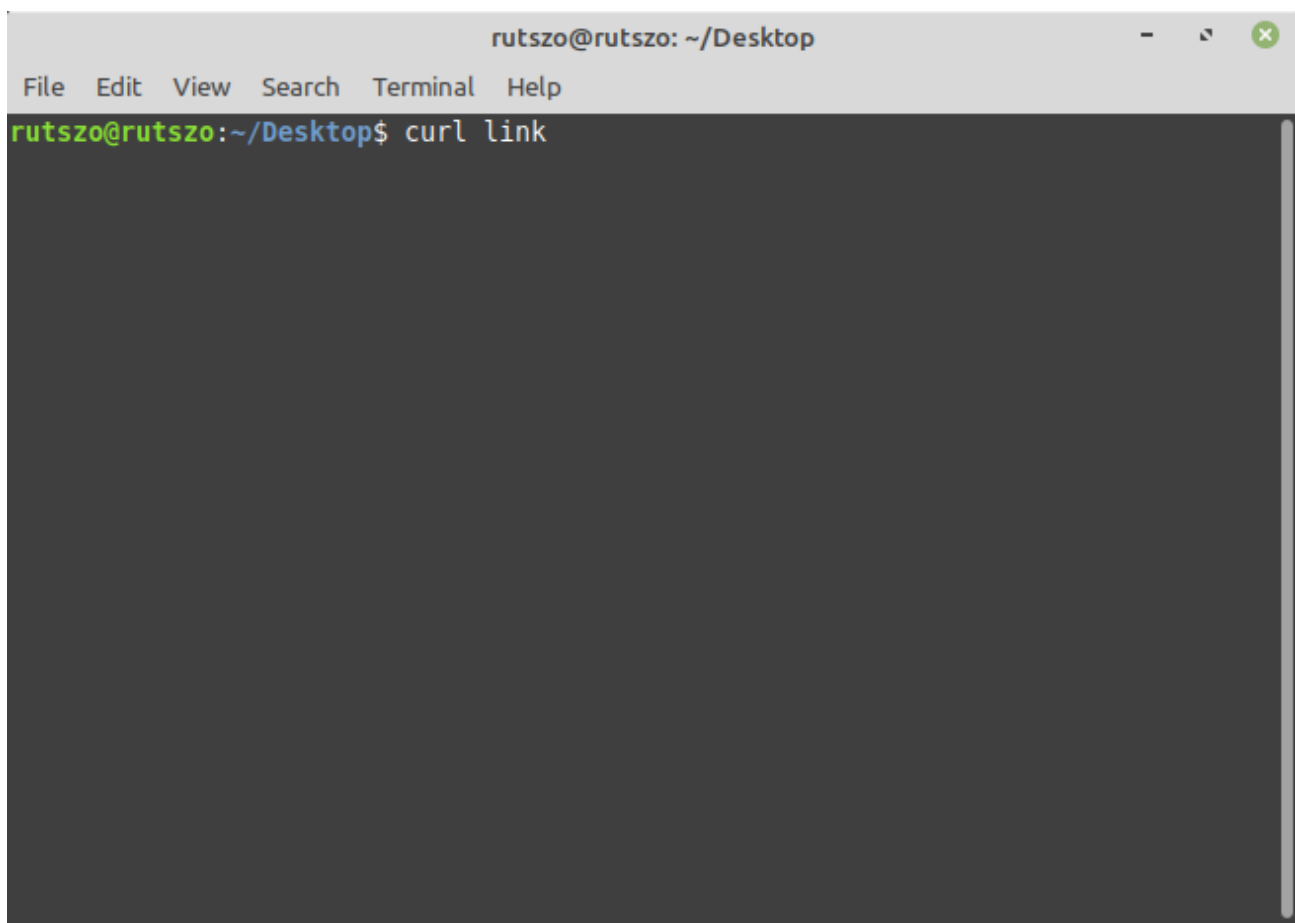
A terminal window titled 'rutszo@rutszo: ~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The command 'wget link' is entered at the prompt.

```
rutszo@rutszo: ~/Desktop
File Edit View Search Terminal Help
rutszo@rutszo:~/Desktop$ wget link
```



### 33 curl

Este comando envia uma solicitação HTTP e exibe a sua resposta.



### 34 uname

Exibe informações sobre o sistema.

```
mint@mint: ~/Desktop
File Edit View Search Terminal Help
mint@mint:~/Desktop$ uname
Linux
mint@mint:~/Desktop$
```

### 35 apropos

Este comando serve para pesquisar por outros comandos num manual.

```
mint@mint: ~/Desktop
File Edit View Search Terminal Help
mint@mint:~/Desktop$ apropos cd
apt-cdrom (8) - APT CD-ROM management utility
cd-create-profile (1) - Color Manager Profile Creation Tool
cd-fix-profile (1) - Color Manager Testing Tool
cd-it8 (1) - Color Manager Testing Tool
gcov-dump (1) - offline gcda and gcno profile dump tool
gcov-dump-9 (1) - offline gcda and gcno profile dump tool
gcov-tool (1) - offline gcda profile processing tool
gcov-tool-9 (1) - offline gcda profile processing tool
hex2hcd (1) - Broadcom Bluetooth firmware converter
hipercdecode (1) - Decode a HIPERC stream into human readable form.
libOpenCL (7) - OCL-ICD implementation of OpenCL ICD loader
libOpenCL.so (7) - OCL-ICD implementation of OpenCL ICD loader
mcd (1) - change MSDOS directory
Net::DNS::RR::CDNSKEY (3pm) - DNS CDNSKEY resource record
Net::DNS::RR::CDS (3pm) - DNS CDS resource record
rsyncd.conf (5) - configuration file for rsync in daemon mode
systemd-timesyncd (8) - Network Time Synchronization
systemd-timesyncd.service (8) - Network Time Synchronization
tcdrain (3) - get and set terminal attributes, line control, get and...
timesyncd.conf (5) - Network Time Synchronization configuration files
timesyncd.conf.d (5) - Network Time Synchronization configuration files
ubiquity (8) - install Linux Mint from a live CD
x86_64-linux-gnu-gcov-dump (1) - offline gcda and gcno profile dump tool
```



38 su

Este comando muda para o usuário root ou outro.

```
mint@mint: ~/Desktop
File Edit View Search Terminal Help
mint@mint:~/Desktop$ su
Password: 
```

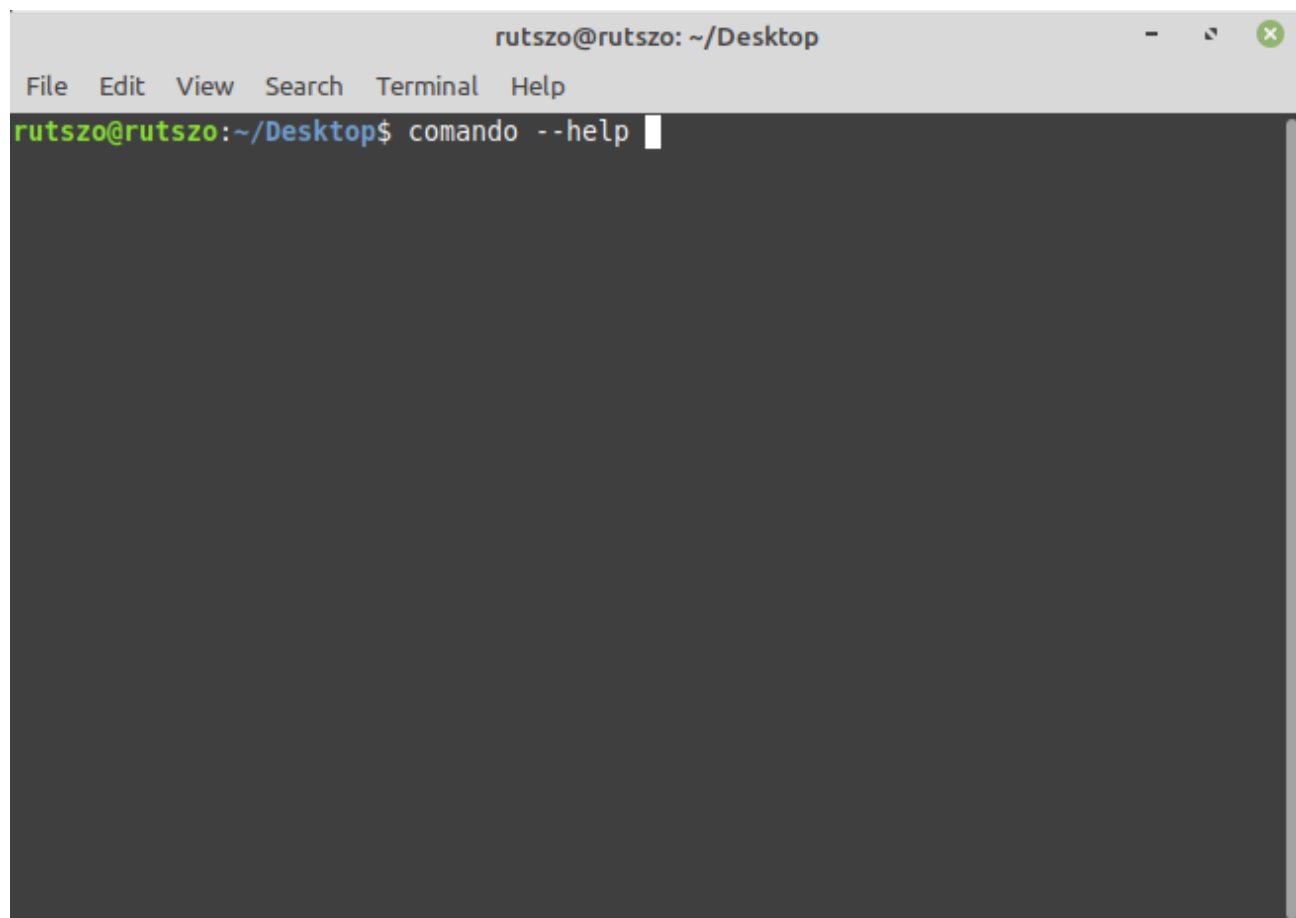
39 sudo

Este comando serve para executar comandos com privilégios de administrador.

```
mint@mint: ~/Desktop
File Edit View Search Terminal Help
mint@mint:~/Desktop$ sudo
usage: sudo -h | -K | -k | -V
usage: sudo -v [-AknS] [-g group] [-h host] [-p prompt] [-u user]
usage: sudo -l [-AknS] [-g group] [-h host] [-p prompt] [-U user] [-u user]
[command]
usage: sudo [-AbEHknPS] [-r role] [-t type] [-C num] [-g group] [-h host] [-p
prompt] [-T timeout] [-u user] [VAR=value] [-i|-s] [<command>]
usage: sudo -e [-AknS] [-r role] [-t type] [-C num] [-g group] [-h host] [-p
prompt] [-T timeout] [-u user] file ...
mint@mint:~/Desktop$
```

## 40 help

Este comando é um complemento para qualquer comando linux, pois mostra como utilizar os mesmos

A screenshot of a Linux terminal window. The title bar at the top reads 'rutszo@rutszo: ~/Desktop' and includes standard window control buttons (minimize, maximize, close). Below the title bar is a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal area has a dark background. The prompt 'rutszo@rutszo:~/Desktop\$' is shown in green and blue, followed by the command 'comando --help' in white. A white cursor is positioned at the end of the command line.

```
rutszo@rutszo: ~/Desktop
File Edit View Search Terminal Help
rutszo@rutszo:~/Desktop$ comando --help
```

## WEBGRAFIA

### linux terminal

<https://ubuntu.com/tutorials/command-line-for-beginners#1-overview>



