



Universidade Federal de Uberlândia

FEELT – Faculdade de Engenharia Elétrica



Experimental de sistemas embarcados 2

Relatório 1

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Capítulo 1 ao 3

Comando: su

Descrição: Neste comando foi possível logar como root ou administrador, desta forma podemos ter alguns privilégios no sistema.

Comando: exit

Descrição: Sai do usuário administrador nesse caso, este comando serve para encerrar o processo.

Comando: ls

Descrição: O comando ls é usado para visualizar conteúdo em um diretório

Comando: cp

Descrição: Comando de cópia de arquivos

Comando: ls -a

Descrição: exibe o conteúdo em outro formato

Comando: ls -l

Descrição: exibe o conteúdo em lista

Comando: ls --al

Descrição: exibe o conteúdo em outro formato

Comando: pwd --version

Descrição: versão

Comando: cd --help

Descrição: exibe ajuda do comando cd

Comando: clear

Descrição: Limpa a tela

Comando: echo ‘teste’

Descrição: exibe o texto entre aspas no terminal

Comando: echo -e

Descrição: exibe o texto em aspas mas com caracteres especiais

Comando: history

Descrição: exibe o histórico de comandos

Comando: echo \$HISTSIZE

Descrição: aumentar o tamanho do histórico de comandos

Comando: export HISTSIZE =100

Descrição: aumentar o tamanho do histórico de comandos em 100 linhas

Comando: su

Descrição: loga como administrador

Comando: apt install vim

Descrição: instala os pacotes vim

Comando: logout

Descrição: sai da conta atual

Comando: exit

Descrição: sai do modo root ou da conta

Comando: shutdown

Descrição: desliga o sistema

Comando: sudo shutdown -h 10:10 " Desligando"

Descrição: desliga o sistema as 10:10 e mostra o aviso entre aspas

Comando: sudo reboot

Descrição: reinicia a máquina

Comando: sudo shutdown -r now

Descrição: reinicializa a máquina

Comando: ls

Descrição: exibe o conteúdo do diretório atual

Comando: ls -l

Descrição: exibe em formato de lista

Comando: ls -ld

Descrição: informações de um diretório sem listar o conteúdo

Comando: ls --all

Descrição: exibe arquivos ocultos

Comando: ls -S

Descrição: exibe o tamanho em blocos

Comando: ls -R

Descrição: lista recursivamente

Comando: cd ~

Descrição: acessa o diretório símbolo ~ é expandido pelo interpretador como /home/seu_usuario ao executar o comando.

Comando: cd

Descrição: acessa um determinado diretório

Comando: echo ~

Descrição: alternativo ao comando do cd sozinho

Comando: ls -la

Descrição: acessa diretórios específicos

Comando: rename teste . txt teste2 . txt

Descrição: renomeia o arquivo

Comando: mkdir teste/

Descrição: cria o diretório

Comando: rmdir teste/

Descrição: remove o mesmo

Comando: mkdir tempdir1/ tempdir2/ tempdir3/

Descrição: cria vários diretórios

Comando: rmdir tempdir1/ tempdir2/ tempdir3/

Descrição: remove os mesmos

Comando: touch arq1

Descrição: cria o arquivo

Comando: echo 'Laranja' >> arq1

Descrição: cria um link e lista

Comando: ln -s arq1 arq1 – soft

Descrição: visualiza os links

Comando: ls -l arq1 *

Descrição: visualiza o link do arquivo

Capítulo 4

Comando: echo ' ol á Alessandro ! '

Descrição: imprime o texto entre aspas

Comando: echo - en ' ol á \ tAlessandro ! '

Descrição: imprime o texto entre aspas e habilita a interpretação dos códigos após a barra invertida

Comando: cat a.txt

Descrição: concatena arquivos

Comando: cat a.txt b.txt

Descrição: concatena os dois arquivos

Comando: cat a.txt expand -t 1

Descrição: concatena e exibe

Comando: cat a. txt | tr '\t' ''

Descrição: concatena e muda a saída do arquivo

Comando: tr 'A -Z ' 'a -z ' < a. txt

Descrição: muda de A a Z

Comando: echo 'a {1} , b {2} ' | tr '{} '()

Descrição: exibe o texto em aspas devido aos caracteres

Comando: tr - dc ' aeiouAEIOU ' < a. txt

Descrição: muda a saída do arquivo

Comando: fmt - w10 a. txt

Descrição: formata o arquivo

Comando: fold -s -w 20 a . txt

Descrição: limita a largura do texto

Comando: cat a. txt | grep alexandro

Descrição: concatena o arquivo de texto

Comando: grep '[0 -9] ' a. txt

Descrição: exibe apenas a sequência de dois ou mais números

Comando: grep '[0 -9]\{2 ,\} ' a. txt

Descrição: pode-se busca número de telefones por esse comando

Comando: dmesg | egrep " firmware | amd "

Descrição: cria expressões regulares e busca o conteúdo entre aspas

Comando: dmesg | fgrep " @"

Descrição: procura string com alfanuméricos

Comando: head a. txt

Descrição: imprime as n linhas iniciais de um arquivo

Comando: look a. txt

Descrição: procura linhas que começa com determinado caracter

Comando: nl a. txt

Descrição: enumera as linhas

Comando: cat a.txt

Descrição: concatena a

Comando: cat b.txt

Descrição: concatena b

Comando: paste a.txt b.txt

Descrição: cola a com b

Comando: paste -d , <(seq 1 3) <(seq 4 6) <(seq 7 9)

Descrição: cola a sequência

Comando: cat arquivo | rev

Descrição: concatena e inverte a sequência de textos

Comando: wc a.txt

Descrição: mostra as linhas palavras e números de a

Comando: wc -l a.txt

Descrição: mostra as linhas palavras e números de a em lista

Comando: wc -w a.txt

Descrição: conta o número de palavras

Comando: wc -c a.txt

Descrição: conta o número de bytes

Comando: echo " á é ó ú " | wc -c

Descrição: imprime o texto e conta os bytes

Comando: echo " á é í ó ú " | wc -m

Descrição: imprime o texto e conta os caracteres

Capítulo 5

Comando: compgen -c

Descrição: saber os comandos incluídos na distribuição

Comando: whoami

Descrição: para saber a identificação

Comando: id

Descrição: faz relação entre usuários e identificadores

Comando: passwd

Descrição: alterar a senha do usuário

Comando: users

Descrição: descobre os usuários logados

Comando: sudo apt - get install finger

Descrição: instala os pacotes finger

Comando: finger

Descrição: fornece informações dos usuários

Comando: finger -l

Descrição: fornece informações dos usuários em lista

Comando: free

Descrição: mostra as estatísticas de uso da memória

Comando: su

Descrição: loga como administrador

Comando: uname

Descrição: apresenta informações do sistema operacional

Comando: uname -m

Descrição: verifica a plataforma

Comando: uname -n

Descrição: descobre o nome da máquina

Comando: uname -a

Descrição: apresenta todas as informações do sistema operacional

Comando: uptime

Descrição: apresenta a hora corrente, a quanto tempo o seu computador está ligado, a quantidade de usuários logados e a carga média do sistema a 1, 5 ou 15 minutos passados.

Comando: ls --version

Descrição: versão de um comando

Comando: echo \$PATH

Descrição: exibe o caminho

Comando: w

Descrição: verifica quais usuários estão logados e o que eles estão fazendo

Comando: whereis gcc

Descrição: determina a localização do programa gcc

Comando: which ls

Descrição: descobre um programa que está em uso no path

Comando: whatis clear

Descrição: busca informações no sistema e limpa

Comando: whatis ps

Descrição: busca e mostra os processos correntes

Comando: whatis netstat

Descrição: busca e mostra conexões de rede

Comando: whatis route

Descrição: mostra e manipula tabela de roteamento

Comando: whatis ls

Descrição: mostra diretórios correntes

Comando: whatis cat

Descrição: concatena arquivos e imprime

Comando: whatis date

Descrição: procura dados no sistema

Comando: who

Descrição: verifica quem está logado no computador

Comando: hostname ; date ; ls ;

Descrição: exemplo de execução de múltiplos comandos com ‘;’

Comandos capítulo 6

Comando: ps -aef

Descrição: apresenta os processos em execução

Comando: ps -u

Descrição: visualizar todos os processos de um determinado usuário

Comando: ps - aef -r | head -5

Descrição: lista processos que mais consomem cpu

Comando: ps - aef | grep firefox

Descrição: lista processos que mais consomem cpu de forma ordenada

Comando: pstree

Descrição: visualiza informações de um processo específico

Comando: top -d 1

Descrição: comando de controle de processos

Comando: top -q

Descrição: controle de processos

Comando: top -s

Descrição: controle de processos

Comando: ps

Descrição: visualiza uma lista de processos em execução

Comando: ps -u

Descrição: lista processos que estão rodando

Comando: ps u

Descrição: informações de cpu

Comando: ps aux

Descrição: lista dados do sistema

Comando: ps x --forest

Descrição: mostra a hierarquia de processos

Comando: nice -19 ./ teste

Descrição: rodando processo em background

Comando: nice -10 ./ teste

Descrição: rodando processo em background

Comandos capítulo 7

Comando: ls -l

Descrição: lista conteúdos de diretório em forma de lista

Comando: touch a.txt

Descrição: cria o arquivo

Comando: chmod 777

Descrição: é um recurso utilizado para permitir que usuários leiam, editem e executem arquivos e diretórios

Comandos capítulo 8

Comando: cut -d

Descrição: lista todos os usuários do linux

Comando: sudo adduser aluno

Descrição: adiciona o usuário aluno

Comando: sudo userdel aluno

Descrição: deleta o usuário aluno

Comando: userdel -r aluno

Descrição: apaga usuário e arquivos do mesmo

Comando: sudo usermod -e

Descrição: modifica a conta do usuário

Comando: sudo group add professores

Descrição: adiciona o grupo de professores

Comando: sudo groupdel professores

Descrição: deleta o grupo de professores

Comandos capítulo 9

Comandos: apt install net - tools

Descrição: instala as ferramentas net-tools

Comandos: hostname

Descrição: descobre o nome da máquina

Comandos: varp -a

Descrição:

Comandos: ifconfig

Descrição: configura e mantem interfaces de rede

Comandos: ping www . ufu . br

Descrição: envio e recebimento de rede do site acima

Comandos: ping -c 10 www . ufu . br

Descrição: permite pingar um endereço de broadcast

Comandos: ping -i 5 -c 3 www . google . com

Descrição: ping com operação de tempo

Comandos: host www . google . com

Descrição: descobri endereço ip de um host

Comandos: dig www . google . com

Descrição: obter informações sobre domínios

Comandos: nslookup www . google . com

Descrição: descobre informações sobre domínio

Comandos: sudo apt install traceroute

Descrição: instala os pacotes traceroute

Comandos: traceroute www.google.com

Descrição: imprime caminhos do host até o destino

Comandos: traceroute www . ufmg . br

Descrição: imprime caminhos do host até o destino

Comandos: netstat -s

Descrição: faz rastreamento das portas utilizadas no computador

Comandos: netstat -i

Descrição: estatísticas sobre as interfaces de rede

Comandos: netstat - rn

Descrição: mostra tabelas de roteamento

Comandos: sudo apt - get install nmap

Descrição: instala os pacotes nmap

Comandos: nmap www . ufmg . br

Descrição: faz varredura na rede

Comandos: nmap -v localhost

Descrição: exibe mais informações

Comandos: nmap 192.168.0.1 192.168.0.104

Descrição: rastreia múltiplos hosts

Comandos: nmap www . google . com www . facebook . com

Descrição: rastreia múltiplos domínios

Comandos: nmap 192.168.0.*

Descrição: rastreia uma subrede

Comandos: route

Descrição: manipula as rotas de roteamento

Comandos: telnet www . vivas . eng . br

Descrição: protocolo de acesso remoto

Comandos: ssh vivas@192 .168.0.1

Descrição: acesso remoto a um servidor

Comandos: firefox &tcpdump -D

Descrição: abre o Firefox remotamente e copia dados

Comandos: apt install tcpdump

Descrição: instala os pacotes específicos

Comandos: tcpdump -i eno1

Descrição: captura pacotes de rede

Comandos: tcpdump -i eno1 icmp

Descrição: captura pacotes de rede

Comandos: sudo apt install lynx

Descrição: Instala pacotes do lynx

Comando: apt update

Descrição: o apt-get update com privilégios de administrador é o primeiro comando que você precisa executar em qualquer sistema Linux após uma nova instalação. Esse comando atualiza o banco de dados e informa ao seu sistema se há pacotes mais novos disponíveis ou não.

Comando: apt upgrade

Descrição: o comando apt-upgrade sempre buscará atualizar os pacotes de software instalados se novas versões forem encontradas nos repositórios. Não desencadeia a remoção de nenhum pacote. Enquanto isso, apt-get dist-upgrade irá deletar alguns pacotes quando for necessário fazê-lo durante a atualização dos pacotes de software.

Comando: apt list -- upgradable

Descrição: apresenta o comando para consultar quais pacotes podem ser atualizados

Comando: apt install vim

Descrição: instalar os pacotes do vim

Comando: apt remove vim

Descrição: remover pacotes do vim

Comando: dnf install lshw

Descrição: novo pacote no Fedora, e instalação do pacote lshw

Comandos capítulo 14

Comando: uname -a

Descrição: versão do kernel linux

Comando: uname -s

Descrição: nome da máquina

Comando: uname -n

Descrição: nome

Comando: uname -r

Descrição: versao

Comando: uname -v

Descrição: versão completa

Comando: lscpu

Descrição: fornece informações sobre a cpu

Comando: sudo fdisk -l

Descrição: lista as partições do disco

Comando: lsusb

Descrição: este comando exibe informações sobre dispositivos USB (Universal Serial Bus)

Comando: lspci

Descrição: o lspci é útil para mostrar todas as informações sobre os barramentos PCI do sistema e os dispositivos conectados a eles.

Comando: apt-get install pcmciautils

Descrição: instalação do pcmciautils

Comando: lspcmcia

Descrição: o comando lspcmcia lista todos os dispositivos PCMCIA em seu computador

Comando: free -m

Descrição: verifica o arquivo meminfo no diretório /proc como na Listagem.

Comando: vmstat -s

Descrição: listando informações sobre a memória

Comando: lsmem

Descrição: informações da memória naquele diretório

Comando: dmidecode -t 17

Descrição: informações de memória ram

Comando: sudo apt-get install hwinfo

Descrição: instalando pacote hwinfo

Comando: eject

Descrição: o comando eject pode ser utilizado para ejectar CDROMs ou DVDs de seu computador.

Prints capítulo 1 ao 3

```
Terminal - user@user-VirtualBox...                                14 mai, 18:42
File Edit View Terminal Tabs Help
Terminal - user@user-VirtualBox: ~
user@user-VirtualBox:~$ su
Password:
root@user-VirtualBox:/home/user# exit
exit
user@user-VirtualBox:~$ ls
Desktop Documents Downloads Music Pictures projeto Public SEII-SamuelHenriqueLimaDaSilva snap Templates Videos
user@user-VirtualBox:~$ ls -lF
Desktop Documents Downloads Music Pictures projeto Public SEII-SamuelHenriqueLimaDaSilva snap Templates Videos
user@user-VirtualBox:~$ cp -R
cp: missing file operand
Try 'cp -help' for more information.
user@user-VirtualBox:~$ cp -R
cp: missing file operand
Try 'cp -help' for more information.
user@user-VirtualBox:~$ cp -R
cp: missing file operand
Try 'cp -help' for more information.
user@user-VirtualBox:~$ ls -a
.. .bashrc .dmrc .local projeto .ssh .sudo_as_admin_successful .vboxclient-display-svga-x11.pid .Xauthority .xsession-errors.old
. .cache Documents Music Public .Templates .vboxclient-draganddrop.pid .Xdefaults .xscreensaver
.bash_history .config Downloads Pictures SEII-SamuelHenriqueLimaDaSilva .vboxclient-seamless.pid .vboxclient-clipboard.pid Videos .xsession-errors
.bash_logout Desktop .ICEauthority .profile snap
user@user-VirtualBox:~$ ls -l
total 44
drwxr-xr-x  2 user user 4096 mai 10 21:51 Desktop
drwxr-xr-x  2 user user 4096 mai 10 21:51 Documents
drwxr-xr-x  3 user user 4096 mai 11 13:47 Downloads
drwxr-xr-x  2 user user 4096 mai 10 21:51 Music
drwxr-xr-x  2 user user 4096 mai 10 21:51 Pictures
drwxrwxr-x 12 user user 4096 mai 12 08:18 projeto
drwxr-xr-x  2 user user 4096 mai 10 21:51 Public
drwxrwxr-x  3 user user 4096 mai 11 19:07 SEII-SamuelHenriqueLimaDaSilva
drwxr-xr-x  2 user user 4096 mai 11 13:47 snap
drwxr-xr-x  2 user user 4096 mai 10 21:51 Templates
drwxr-xr-x  2 user user 4096 mai 10 21:51 Videos
user@user-VirtualBox:~$
```

```
Terminal - user@user-VirtualBox... 14 mai, 18:48
File Edit View Terminal Tabs Help Terminal - user@user-VirtualBox:~  

user@user-VirtualBox:  

user@user-VirtualBox: $ ls -all  

.bashrc .dmrc .local .profile snap .thunderbird .vboxclient-seamless.pid .xscreensaver  

.cache Documents mozilla projeto .ssh .vboxclient-clipboard.pid Videos .xsession-errors  

.bash_history Downloads Music Public .sudo_as_admin_successful .vboxclient-display-vga-x11.pid .XAuthority .xsession-errors.old  

.bash_logout Pictures SEII-SamuelHenriqueLimaDaSilva Templates .vboxclient-draganddrop.pid .Xdefaults  

user@user-VirtualBox:  

user@user-VirtualBox: $ pwd --version  

pwd: pwd: --: invalid option  

Usage: pwd [-LP]  

user@user-VirtualBox:  

user@user-VirtualBox: $ cd --help  

cd: cd [-L][-P [-e]] [-@] [dir]  

    Change the shell working directory.  

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

HOME shell variable.  

The variable CDPATH defines the search path for the directory containing  

DIR. Alternative directory names in CDPATH are separated by a colon (:).  

A null directory name is the same as the current directory. If DIR begins  

with a slash (/), then CDPATH is not used.  

If the directory is not found, and the shell option 'cdable_vars' is set,  

the word is assumed to be a variable name. If that variable has a value,  

its value is used for DIR.  

Options:  

-L force symbolic links to be followed: resolve symbolic  

links in DIR after processing instances of '.'  

-P use the physical directory structure without following  

symbolic links: resolve symbolic links in DIR before  

processing instances of '.'  

-e if the -P option is supplied, and the current working  

directory cannot be determined successfully, exit with  

a non-zero status  

-@ on systems that support it, present a file with extended  

attributes as a directory containing the file attributes  

The default is to follow symbolic links, as if '-L' were specified.  

'..' is processed by removing the immediately previous pathname component  

back to a slash or the beginning of DIR.
```

```
Terminal - user@user-Virtua... Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help Terminal - user@user-VirtualBox:~
user@user-VirtualBox:~$ pwd --version
bash: pwd: -- invalid option
pwd: usage: pwd [-P]
user@user-VirtualBox:~$ cd --help
cd: cd [-L] [-P [-e]] [-e!] [dir]
      Change the shell working directory.

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

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

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

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

The default is to follow symbolic links, as if '-L' were specified.
`..' is processed by removing the immediately previous pathname component
back to a slash or the beginning of DIR.

Exit Status:
  Returns 0 if the directory is changed, and if $PWD is set successfully when
  -P is used; non-zero otherwise.
user@user-VirtualBox:~$ 
```

```
Terminal - user@user-Virtua... Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help Terminal - user@user-VirtualBox:~
user@user-VirtualBox:~$ echo $SHELL
/bin/bash
user@user-VirtualBox:~$ echo 'teste'
teste
user@user-VirtualBox:~$ echo
user@user-VirtualBox:~$ history
1 cd /media/user/VBox_GAs_6.1.32/
2 cd /media/user/VBox_GAs_6.1.32
3 cd /media/user/VBox_GAs_6.1.32/
4 ls
5 sudo
6 sudo ./VBox
7 sudo .
8 sudo .
9 sudo .
10 sudo ./VBox
11 sudo
12 sudo .
13 sudo ./VBox
14 cd /media/user/VBox_GAs_6.1.32/
15 ls
16 sudo
17 sudo /
18 sudo ./VBox
19 sudo ./VBox_GAs_6.1.32
20 sudo ./VBoxLinuxAdditions.run
21 sudo reboot
22 ls
23 ls -l
24 ls -A
25 sudo reboot
26 mkdir projeto
27 cd projeto/
28
29 git clone https://github.com/Samuel442/SEII-SamuelHenriqueLimaDaSilva.git
30 ls
31 cd
32 sudo apt-get update
```

```
Terminal - user@user-Virtua... Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help Terminal - user@user-VirtualBox:~
32 sudo apt-get update
33 cd projeto/
34 git clone https://github.com/Samuel442/SEII-SamuelHenriqueLimaDaSilva.git
35
36 sudo apt-get install git-all
37 git version
38 git clone https://github.com/Samuel442/SEII-SamuelHenriqueLimaDaSilva.git
39 ssh-keygen
40 cat /home/user/.ssh/id_rsa.pub
41 cd projeto/
42 git clone https://github.com/Samuel442/SEII-SamuelHenriqueLimaDaSilva.git
43
44 cd SEII-SamuelHenriqueLimaDaSilva
45 ll
46 cd
47 cd projeto/
48 mkdir Semana01
49 ll
50 mkdir Semana02
51 ll
52 ls
53 mkdir Semana 03
54 ls
55 ll
56 rmdir Semana
57 ls
58 mkdir Semana03
59 ls
60 ll
61 cd home/
62 cd Home/
63 mkdir 03/
64 ls
65 mkdir Semana04
66 ls
67 mkdir Semana05
68 ls
69 mkdir Semana06
70 ls
71 mkdir Semana07
```

```
Terminal - user@user-VirtualBox:~  
File Edit View Terminal Tabs Help  
106 pwd  
107 cd ~  
108 ifconfig  
109 clear  
110 clear  
111 login  
112 clear  
113 su  
114 clear  
115 sudo passwd samuel  
116 clear  
117 sudo passwd samuel  
118 sudo passwd  
119 sudo passwd root  
120 ls  
121 su  
122 clear  
123 su  
124 ls  
125 ls -lF  
126 cp -R  
127 cp -R  
128 cp  
129 ls -a  
130 ls -l  
131 ls --all  
132 clear  
133 ls --all  
134 pwd --version  
135 cd -help  
136 less -a  
137 echo $$HELL  
138 less  
139 clear  
140 echo $$HELL  
141 echo 'teste'  
142 echo -e  
143 history  
user@user-VirtualBox:~
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox:~  
File Edit View Terminal Tabs Help  
143 history  
user@user-VirtualBox:~$ history -c  
user@user-VirtualBox:~$ echo $HISTSIZE  
1000  
user@user-VirtualBox:~$ export HISTSIZE=100  
bash: export: '-100': not a valid identifier  
user@user-VirtualBox:~$ su  
Password:  
root@user-VirtualBox:/home/user# apt install vim  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland2  
Use 'apt autoremove' to remove them.  
The following additional packages will be installed:  
  vim-runtime  
Suggested packages:  
  ctags vim-doc vim-scripts  
The following NEW packages will be installed:  
  vim vim-runtime  
0 upgraded, 2 newly installed, 0 to remove and 15 not upgraded.  
Need to get 8.548 kB of archives.  
After this operation, 37.6 MB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://br.archive.ubuntu.com/ubuntu jammy/main amd64 vim-runtime all 2:8.2.3995-1ubuntu2 [6.825 kB]  
Get:2 http://br.archive.ubuntu.com/ubuntu jammy/main amd64 vim amd64 2:8.2.3995-1ubuntu2 [1.724 kB]  
Fetched 8.548 kB in 1s (7.216 kB/s)  
Selecting previously unselected package vim-runtime.  
(Reading database ... 201997 files and directories currently installed.)  
Preparing to unpack .../vim-runtime_2:8.2.3995-1ubuntu2_all.deb  
Adding 'diversion of /usr/share/vim/vim82/doc/help.txt to /usr/share/vim/vim82/doc/help.txt.vim-tiny by vim-runtime'  
Adding 'diversion of /usr/share/vim/vim82/doc/tags to /usr/share/vim/vim82/doc/tags.vim-tiny by vim-runtime'  
Unpacking vim-runtime (2:8.2.3995-1ubuntu2) ...  
Selecting previously unselected package vim.  
Preparing to unpack .../vim_2:8.2.3995-1ubuntu2_amd64.deb ...  
Unpacking vim (2:8.2.3995-1ubuntu2) ...  
Setting up vim-runtime (2:8.2.3995-1ubuntu2) ...  
Setting up vim (2:8.2.3995-1ubuntu2) ...  
user@user-VirtualBox:~
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox:~  
File Edit View Terminal Tabs Help  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland2  
Use 'apt autoremove' to remove them.  
The following additional packages will be installed:  
  vim-runtime  
Suggested packages:  
  ctags vim-doc vim-scripts  
The following NEW packages will be installed:  
  vim vim-runtime  
0 upgraded, 2 newly installed, 0 to remove and 15 not upgraded.  
Need to get 8.548 kB of archives.  
After this operation, 37.6 MB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://br.archive.ubuntu.com/ubuntu jammy/main amd64 vim-runtime all 2:8.2.3995-1ubuntu2 [6.825 kB]  
Get:2 http://br.archive.ubuntu.com/ubuntu jammy/main amd64 vim amd64 2:8.2.3995-1ubuntu2 [1.724 kB]  
Fetched 8.548 kB in 1s (7.216 kB/s)  
Selecting previously unselected package vim-runtime.  
(Reading database ... 201997 files and directories currently installed.)  
Preparing to unpack .../vim-runtime_2:8.2.3995-1ubuntu2_all.deb ...  
Adding 'diversion of /usr/share/vim/vim82/doc/help.txt to /usr/share/vim/vim82/doc/help.txt.vim-tiny by vim-runtime'  
Adding 'diversion of /usr/share/vim/vim82/doc/tags to /usr/share/vim/vim82/doc/tags.vim-tiny by vim-runtime'  
Unpacking vim-runtime (2:8.2.3995-1ubuntu2) ...  
Selecting previously unselected package vim.  
Preparing to unpack .../vim_2:8.2.3995-1ubuntu2_amd64.deb ...  
Unpacking vim (2:8.2.3995-1ubuntu2) ...  
Setting up vim-runtime (2:8.2.3995-1ubuntu2) ...  
Setting up vim (2:8.2.3995-1ubuntu2) ...  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vim (vim) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vimdiff (vimdiff) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rvim (rvim) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rview (rview) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vi (vi) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/view (view) in auto mode  
Processing triggers for man-db (7.10.3-1) ...  
root@user-VirtualBox:/home/user# exit  
exit  
user@user-VirtualBox:~$ logout[
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox:~  
File Edit View Terminal Tabs Help  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland  
Use 'apt-get remove' to remove them.  
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  vim-runtime  
Suggested packages:  
  ctags vim-doc vim-scripts  
The following NEW packages will be installed:  
  vim vim-runtime  
0 upgraded, 2 newly installed, 0 to remove and 15 not upgraded.  
Need to get 8.548 kB of archives.  
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Get:1 http://br.archive.ubuntu.com/ubuntu jammy/main amd64 vim-runtime all 2:8.2.3995-1ubuntu2 [6.825 kB]  
Get:2 http://br.archive.ubuntu.com/ubuntu jammy/main amd64 vim amd64 2:8.2.3995-1ubuntu2 [1.724 kB]  
Fetched 8.548 kB in 1s (7.216 kB/s)  
Selecting previously unselected package vim-runtime.  
(Reading database ... 201997 files and directories currently installed.)  
Preparing to unpack .../vim-runtime_2:8.2.3995-1ubuntu2_all.deb ...  
Adding 'division' of '/usr/share/vim/vim80/doc/help.txt' to '/usr/share/vim/vim82/doc/help.txt.vim-tiny' by vim-runtime'  
Adding 'division' of '/usr/share/vim/vim80/doc/tags' to '/usr/share/vim/vim82/doc/tags.vim-tiny' by vim-runtime'  
Unpacking vim-runtime (2:8.2.3995-1ubuntu2) ...  
Selecting previously unselected package vim.  
Preparing to unpack .../vim_2:8.2.3995-1ubuntu2_amd64.deb ...  
Unpacking vim (2:8.2.3995-1ubuntu2) ...  
Setting up vim-runtime (2:8.2.3995-1ubuntu2) ...  
Setting up vim (2:8.2.3995-1ubuntu2) ...  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vim (vim) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vimdiff (vimdiff) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rvim (rvim) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rview (rview) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vi (vi) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/view (view) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/ex (ex) in auto mode  
Processing triggers for man-db (2.10.2-1) ...  
root@user-VirtualBox:~/home/user# exit  
exit  
user@user-VirtualBox:~$ shutdown[]
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox:~  
File Edit View Terminal Tabs Help  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland  
Use 'apt-get remove' to remove them.  
The following additional packages will be installed:  
  vim-runtime  
Suggested packages:  
  ctags vim-doc vim-scripts  
The following NEW packages will be installed:  
  vim vim-runtime  
0 upgraded, 2 newly installed, 0 to remove and 15 not upgraded.  
Need to get 8.548 kB of archives.  
After this operation, 37.6 MB of additional disk space will be used.  
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Get:2 http://br.archive.ubuntu.com/ubuntu jammy/main amd64 vim amd64 2:8.2.3995-1ubuntu2 [1.724 kB]  
Fetched 8.548 kB in 1s (7.216 kB/s)  
Selecting previously unselected package vim-runtime.  
(Reading database ... 201997 files and directories currently installed.)  
Preparing to unpack .../vim-runtime_2:8.2.3995-1ubuntu2_all.deb ...  
Adding 'division' of '/usr/share/vim/vim80/doc/help.txt' to '/usr/share/vim/vim82/doc/help.txt.vim-tiny' by vim-runtime'  
Adding 'division' of '/usr/share/vim/vim80/doc/tags' to '/usr/share/vim/vim82/doc/tags.vim-tiny' by vim-runtime'  
Unpacking vim-runtime (2:8.2.3995-1ubuntu2) ...  
Selecting previously unselected package vim.  
Preparing to unpack .../vim_2:8.2.3995-1ubuntu2_amd64.deb ...  
Unpacking vim (2:8.2.3995-1ubuntu2) ...  
Setting up vim-runtime (2:8.2.3995-1ubuntu2) ...  
Setting up vim (2:8.2.3995-1ubuntu2) ...  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vim (vim) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vimdiff (vimdiff) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rvim (rvim) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rview (rview) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vi (vi) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/view (view) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/ex (ex) in auto mode  
Processing triggers for man-db (2.10.2-1) ...  
root@user-VirtualBox:~/home/user# exit  
exit  
user@user-VirtualBox:~$ sudo reboot[]
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox:~  
File Edit View Terminal Tabs Help  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland  
Use 'apt-get remove' to remove them.  
The following additional packages will be installed:  
  vim-runtime  
Suggested packages:  
  ctags vim-doc vim-scripts  
The following NEW packages will be installed:  
  vim vim-runtime  
0 upgraded, 2 newly installed, 0 to remove and 15 not upgraded.  
Need to get 8.548 kB of archives.  
After this operation, 37.6 MB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://br.archive.ubuntu.com/ubuntu jammy/main amd64 vim-runtime all 2:8.2.3995-1ubuntu2 [6.825 kB]  
Get:2 http://br.archive.ubuntu.com/ubuntu jammy/main amd64 vim amd64 2:8.2.3995-1ubuntu2 [1.724 kB]  
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Selecting previously unselected package vim-runtime.  
(Reading database ... 201997 files and directories currently installed.)  
Preparing to unpack .../vim-runtime_2:8.2.3995-1ubuntu2_all.deb ...  
Adding 'division' of '/usr/share/vim/vim80/doc/help.txt' to '/usr/share/vim/vim82/doc/help.txt.vim-tiny' by vim-runtime'  
Adding 'division' of '/usr/share/vim/vim80/doc/tags' to '/usr/share/vim/vim82/doc/tags.vim-tiny' by vim-runtime'  
Unpacking vim-runtime (2:8.2.3995-1ubuntu2) ...  
Selecting previously unselected package vim.  
Preparing to unpack .../vim_2:8.2.3995-1ubuntu2_amd64.deb ...  
Unpacking vim (2:8.2.3995-1ubuntu2) ...  
Setting up vim-runtime (2:8.2.3995-1ubuntu2) ...  
Setting up vim (2:8.2.3995-1ubuntu2) ...  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vim (vim) in auto mode  
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update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rvim (rvim) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/rview (rview) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/vi (vi) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/view (view) in auto mode  
update-alternatives: using /usr/bin/vim.basic to provide /usr/bin/ex (ex) in auto mode  
Processing triggers for man-db (2.10.2-1) ...  
root@user-VirtualBox:~/home/user# exit  
exit  
user@user-VirtualBox:~$ sudo shutdown -r now[]
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox...
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ ls
Desktop Documents Downloads Music Pictures projeto Public SEII-SamuelHenriqueLimaDaSilva snap Templates Videos
user@user-VirtualBox:~$ ls -1
Desktop
Documents
Downloads
Music
Pictures
projeto
Public
SEII-SamuelHenriqueLimaDaSilva
snap
Templates
Videos
user@user-VirtualBox:~$ ls -ld
drwxr-x-- 19 user user 4096 mai 14 18:43 .
drwxr-xr-x  3 root root 4096 mai 10 21:14 ..
-rw-r----- 1 user user 1369 mai 14 17:49 .bash_history
-rw-r--r--  1 user user 220 mai 10 21:14 .bash_logout
-rw-r--r--  1 user user 3771 mai 10 21:14 .bashrc
-rw-r--r-- 11 user user 4096 mai 14 18:43 .cache/
drwxr-xr-x 13 user user 4096 mai 14 18:43 .config/
drwxr-xr-x  2 user user 4096 mai 10 21:51 Desktop/
-rw-r--r--  1 user user 26 mai 10 21:51 .dmrc
drwxr-xr-x  2 user user 4096 mai 10 21:51 Documents/
drwxr-xr-x  3 user user 4096 mai 11 13:47 Downloads/
-rw-r----- 1 user user   0 mai 10 21:51 .ICEauthority
user@user-VirtualBox:~$ ls -alF
Desktop/ Documents/ Downloads/ Music/ Pictures/ projeto/ Public/ SEII-SamuelHenriqueLimaDaSilva/ snap/ Templates/ Videos/
user@user-VirtualBox:~$ ls -alF
total 152
drwxr-x-- 19 user user 4096 mai 14 18:43 .
drwxr-xr-x  3 root root 4096 mai 10 21:14 ..
-rw-r----- 1 user user 1369 mai 14 17:49 .bash_history
-rw-r--r--  1 user user 220 mai 10 21:14 .bash_logout
-rw-r--r--  1 user user 3771 mai 10 21:14 .bashrc
-rw-r--r-- 11 user user 4096 mai 14 18:43 .cache/
drwxr-xr-x 13 user user 4096 mai 14 18:43 .config/
drwxr-xr-x  2 user user 4096 mai 10 21:51 Desktop/
-rw-r--r--  1 user user 26 mai 10 21:51 .dmrc
drwxr-xr-x  2 user user 4096 mai 10 21:51 Documents/
drwxr-xr-x  3 user user 4096 mai 11 13:47 Downloads/
-rw-r----- 1 user user   0 mai 10 21:51 .ICEauthority
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox...
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ ls -R
.
./Desktop:
./Documents:
./Downloads:
./firefox.tmp:
./Downloads/firefox.tmp:
./Music:
./Pictures:
./projeto:
./projeto/SEII-SamuelHenriqueLimaDaSilva:
./projeto/SEII-SamuelHenriqueLimaDaSilva/README.md
./projeto/Semanal01:
./projeto/Semanal01/`Linux - Comandos Básicos e Avançados.pdf'
./projeto/Semanal02:
./projeto/Semanal03:
./projeto/Semanal04:
./projeto/Semanal05:
./projeto/Semanal06:
./projeto/Semanal07:
./projeto/Semanal08:
./projeto/Semanal09:
./Public:
./SEII-SamuelHenriqueLimaDaSilva:
./SEII-SamuelHenriqueLimaDaSilva/README.md
./snap:
./snap/firefox:
./snap/firefox/l300 common current
./snap/firefox/l300:
./snap/firefox/common:
./Templates:
./Videos:
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox...
File Edit View Terminal Tabs Help
./projeto/Semanal01:
./Linux - Comandos Básicos e Avançados.pdf'
./projeto/Semanal02:
./projeto/Semanal03:
./projeto/Semanal04:
./projeto/Semanal05:
./projeto/Semanal06:
./projeto/Semanal07:
./projeto/Semanal08:
./projeto/Semanal09:
./Public:
./SEII-SamuelHenriqueLimaDaSilva:
./SEII-SamuelHenriqueLimaDaSilva/README.md
./snap:
./snap/firefox:
./snap/firefox/l300 common current
./snap/firefox/l300:
./snap/firefox/common:
./Templates:
./Videos:
user@user-VirtualBox:~$ 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
/home/user
user@user-VirtualBox:~$ ls -la
total 152
drwxr-x-- 19 user user 4096 mai 14 18:43 .
drwxr-xr-x  3 root root 4096 mai 10 21:14 ..
-rw-r--r--  1 user user 1369 mai 14 17:49 .bash_history
-rw-r--r--  1 user user 220 mai 10 21:14 .bash_logout
-rw-r--r--  1 user user 3771 mai 10 21:14 .bashrc
drwxr-xr-x 13 user user 4096 mai 14 18:43 .cache
drwxr-xr-x 13 user user 4096 mai 14 18:44 .config
drwxr-xr-x  2 user user 4096 mai 10 21:51 Desktop
-rw-r--r--  2 user user 20 mai 10 21:51 .dmrc
drwxr-xr-x  3 user user 4096 mai 10 21:51 Documents
drwxr-xr-x  3 user user 4096 mai 11 13:47 Downloads
-rw-r--r--  1 user user 0 mai 10 21:51 .ICEauthority
drwxrwxr-x  3 user user 4096 mai 10 21:51 .local
drwxr-xr-x  3 user user 4096 mai 14 18:43 .mozilla
drwxr-xr-x  2 user user 4096 mai 10 21:51 Music
drwxr-xr-x  2 user user 4096 mai 14 19:49 Pictures
-rw-r--r--  1 user user 807 mai 10 21:14 .profile
drwxrwxr-x 12 user user 4096 mai 12 08:18 projeto
drwxr-xr-x  2 user user 4096 mai 10 21:51 Public
drwxrwxr-x  3 user user 4096 mai 11 19:07 SEII-SamuelHenriqueLimaDaSilva
drwxr-xr-x  3 user user 4096 mai 11 13:47 snap
drwxr-xr-x  2 user user 4096 mai 11 19:09 .ssh
-rw-r--r--  1 user user 0 mai 11 11:57 .sudo_as_admin_successful
drwxr-xr-x  2 user user 4096 mai 10 21:51 Templates
drwxr-xr-x  6 user user 4096 mai 14 18:43 .thunderbird
-rw-r--r--  1 user user 5 mai 14 16:56 .vboxclient-clipboard.pid
-rw-r--r--  1 user user 5 mai 14 16:56 .vboxclient-display-svga-x11.pid
-rw-r--r--  1 user user 5 mai 14 16:56 .vboxclient-draganddrop.pid
-rw-r--r--  1 user user 5 mai 14 16:56 .vboxclient-seamless.pid
drwxr-xr-x  2 user user 4096 mai 10 21:51 Videos
-rw-r--r--  1 user user 60 mai 14 16:56 .Xauthority
-rw-r--r--  1 user user 1600 mai 10 21:14 .Xdefaults
-rw-r--r--  1 user user 14 mai 10 21:14 .xscreensaver
-rw-r----- 1 user user 13520 mai 14 19:49 .xsession-errors
-rw-r----- 1 user user 8322 mai 13 21:46 .xsession-errors.old
user@user-VirtualBox:~$ 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
total 152
drwxr-x-- 19 user user 4096 mai 14 18:43 .
drwxr-xr-x  3 root root 4096 mai 10 21:14 ..
-rw-r--r--  1 user user 1369 mai 14 17:49 .bash_history
-rw-r--r--  1 user user 220 mai 10 21:14 .bash_logout
-rw-r--r--  1 user user 3771 mai 10 21:14 .bashrc
drwxr-xr-x 13 user user 4096 mai 14 18:43 .cache
drwxr-xr-x 13 user user 4096 mai 14 18:44 .config
drwxr-xr-x  2 user user 4096 mai 10 21:51 Desktop
-rw-r--r--  2 user user 20 mai 10 21:51 .dmrc
drwxr-xr-x  3 user user 4096 mai 10 21:51 Documents
drwxr-xr-x  3 user user 4096 mai 11 13:47 Downloads
-rw-r--r--  1 user user 0 mai 10 21:51 .ICEauthority
drwxrwxr-x  3 user user 4096 mai 14 18:43 .local
drwxr-xr-x  3 user user 4096 mai 14 18:43 .mozilla
drwxr-xr-x  2 user user 4096 mai 10 21:51 Music
drwxr-xr-x  2 user user 4096 mai 14 19:49 Pictures
-rw-r--r--  1 user user 807 mai 10 21:14 .profile
drwxrwxr-x 12 user user 4096 mai 12 08:18 projeto
drwxr-xr-x  2 user user 4096 mai 10 21:51 Public
drwxrwxr-x  3 user user 4096 mai 11 13:47 snap
drwxr-xr-x  2 user user 4096 mai 11 19:09 .ssh
-rw-r--r--  1 user user 0 mai 11 11:57 .sudo_as_admin_successful
drwxr-xr-x  2 user user 4096 mai 10 21:51 Templates
drwxr-xr-x  6 user user 4096 mai 14 18:43 .thunderbird
-rw-r--r--  1 user user 5 mai 14 16:56 .vboxclient-clipboard.pid
-rw-r--r--  1 user user 5 mai 14 16:56 .vboxclient-display-svga-x11.pid
-rw-r--r--  1 user user 5 mai 14 16:56 .vboxclient-draganddrop.pid
-rw-r--r--  1 user user 5 mai 14 16:56 .vboxclient-seamless.pid
drwxr-xr-x  2 user user 4096 mai 10 21:51 Videos
-rw-r--r--  1 user user 60 mai 14 16:56 .Xauthority
-rw-r--r--  1 user user 1600 mai 10 21:14 .Xdefaults
-rw-r--r--  1 user user 14 mai 10 21:14 .xscreensaver
-rw-r----- 1 user user 13520 mai 14 19:49 .xsession-errors
-rw-r----- 1 user user 8322 mai 13 21:46 .xsession-errors.old
user@user-VirtualBox:~$ pwd
/home/user
user@user-VirtualBox:~$ rename teste . txt teste2 . txt
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
Terminal - user@user-VirtualBox:~
user@user-VirtualBox:~$ rm teste .txt
user@user-VirtualBox:~$ 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique L... Terminal - user@user-Virtua...
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ mkdir teste/
user@user-VirtualBox:~$ rmdir teste/
user@user-VirtualBox:~$ ls
Desktop Documents Downloads Music Pictures projeto Public SEII-SamuelHenriqueLimaDaSilva snap Templates Videos
user@user-VirtualBox:~$ ll
total 152
drwxr-x-- 19 user user 4096 mai 14 19:57 .
drwxr-x-- 3 root root 4096 mai 10 21:14 ..
-rw----- 1 user user 1369 mai 14 17:49 .bash_history
-rw-r--r-- 1 user user 220 mai 10 21:14 .bash_logout
-rw-r--r-- 1 user user 3771 mai 10 21:14 .bashrc
-rw-r--r-- 11 user user 4096 mai 10 21:14 .cache/
drwxr-xr-x 13 user user 4096 mai 14 18:44 .config/
drwxr-xr-x 2 user user 4096 mai 10 21:51 Desktop/
-rw-r--r-- 1 user user 26 mai 10 21:51 .dmrc
drwxr-xr-x 2 user user 4096 mai 10 21:51 Documents/
drwxr-xr-x 3 user user 4096 mai 11 13:47 Downloads/
-rw----- 1 user user 0 mai 10 21:51 .ICEauthority
drwxrwxr-x 3 user user 4096 mai 10 21:51 .local/
drwxr-xr-x 2 user user 4096 mai 14 18:43 .mozilla/
drwxr-xr-x 2 user user 4096 mai 10 21:51 .Music/
drwxr-xr-x 2 user user 4096 mai 14 19:55 .Pictures/
-rw-r--r-- 1 user user 807 mai 10 21:14 .profile
drwxrwxr-x 12 user user 4096 mai 12 08:18 projeto/
drwxr-xr-x 2 user user 4096 mai 10 21:51 Public/
drwxrwxr-x 3 user user 4096 mai 11 19:07 SEII-SamuelHenriqueLimaDaSilva/
drwxr-xr-x 3 user user 4096 mai 11 13:47 snap/
drwxr-xr-x 2 user user 4096 mai 11 19:09 ssh/
-rw-r--r-- 1 user user 8 mai 11 13:47 sudo_as_admin_successful/
drwxr-xr-x 2 user user 4096 mai 10 21:51 .thumbnails/
drwxr-xr-x 6 user user 4096 mai 14 18:43 .Thunderbird/
-rw-r--r-- 1 user user 5 mai 14 16:56 .vboxclient-clipboard.pid
-rw-r--r-- 1 user user 5 mai 14 16:56 .vboxclient-display-svga-x11.pid
-rw-r--r-- 1 user user 5 mai 14 16:56 .vboxclient-draganddrop.pid
-rw-r--r-- 1 user user 5 mai 14 16:56 .vboxclient-seamless.pid
drwxr-xr-x 2 user user 4096 mai 10 21:51 Videos/
-rw----- 1 user user 60 mai 14 16:56 .Xauthority
-rw-r--r-- 1 user user 1600 mai 10 21:14 .Xdefaults
-rw-r--r-- 1 user user 14 mai 10 21:14 .xscreensaver
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique L... Terminal - user@user-Virtua...
File Edit View Terminal Tabs Help
total 152
drwxr-x-- 19 user user 4096 mai 14 19:57 .
drwxr-x-- 3 root root 4096 mai 10 21:14 ..
-rw----- 1 user user 1369 mai 14 17:49 .bash_history
-rw-r--r-- 1 user user 220 mai 10 21:14 .bash_logout
-rw-r--r-- 1 user user 3771 mai 10 21:14 .bashrc
drwxr-xr-x 11 user user 4096 mai 14 18:44 .cache/
drwxr-xr-x 13 user user 4096 mai 10 21:51 Desktop/
-rw-r--r-- 1 user user 26 mai 10 21:51 .dmrc
drwxr-xr-x 2 user user 4096 mai 10 21:51 Documents/
drwxr-xr-x 3 user user 4096 mai 11 13:47 Downloads/
-rw----- 1 user user 0 mai 10 21:51 .ICEauthority
drwxrwxr-x 3 user user 4096 mai 14 18:43 .local/
drwxr-xr-x 2 user user 4096 mai 14 19:55 .mozilla/
drwxr-xr-x 2 user user 4096 mai 10 21:51 .Music/
drwxr-xr-x 2 user user 4096 mai 12 08:18 projeto/
drwxr-xr-x 2 user user 4096 mai 11 19:07 SEII-SamuelHenriqueLimaDaSilva/
drwxr-xr-x 3 user user 4096 mai 11 13:47 snap/
drwxr-xr-x 2 user user 4096 mai 11 19:09 ssh/
-rw-r--r-- 1 user user 8 mai 11 13:47 sudo_as_admin_successful/
drwxr-xr-x 2 user user 4096 mai 10 21:51 .Templates/
drwxr-xr-x 6 user user 4096 mai 14 18:43 .Thunderbird/
-rw-r--r-- 1 user user 5 mai 14 16:56 .vboxclient-clipboard.pid
-rw-r--r-- 1 user user 5 mai 14 16:56 .vboxclient-display-svga-x11.pid
-rw-r--r-- 1 user user 5 mai 14 16:56 .vboxclient-draganddrop.pid
-rw-r--r-- 1 user user 5 mai 14 16:56 .vboxclient-seamless.pid
drwxr-xr-x 2 user user 4096 mai 10 21:51 .Videos/
-rw----- 1 user user 60 mai 14 16:56 .Xauthority
-rw-r--r-- 1 user user 1600 mai 10 21:14 .Xdefaults
-rw-r--r-- 1 user user 14 mai 10 21:14 .xscreensaver
-rw----- 1 user user 14618 mai 14 19:55 .xsession-errors
-rw----- 1 user user 8322 mai 13 21:46 .xsession-errors.old
user@user-VirtualBox:~$ mkdir tempdir1/ tempdir2/ tempdir3/
user@user-VirtualBox:~$ rmdir tempdir1/ tempdir2/ tempdir3/
user@user-VirtualBox:~$ mkdir -p temp / temp1 / tempdir1[]
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique L... Terminal - user@user-Virtua...
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ mkdir tempdir1/ tempdir2/ tempdir3/
user@user-VirtualBox:~$ rmdir tempdir1/ tempdir2/ tempdir3/
user@user-VirtualBox:~$ touch 'Laranja' >> arq1
user@user-VirtualBox:~$ ls -s arq1 arq1 - soft
In: target 'soft': No such file or directory
user@user-VirtualBox:~$ ls -l arq1 +
-rw-rw-r-- 1 user user 16 mai 14 20:02 arq1
-rw-rw-r-- 1 user user 16 mai 14 20:02 arq1

Desktop:
total 0

Documents:
total 0

Downloads:
total 4
drwx---- 3 user user 4096 mai 14 19:25 firefox.tmp

Music:
total 0

Pictures:
total 2172
-rw-rw-r-- 1 user user 128883 mai 14 18:43 Screenshot_2022-05-14_18-42-48.png
-rw-rw-r-- 1 user user 120695 mai 14 18:48 Screenshot_2022-05-14_18-48-51.png
-rw-rw-r-- 1 user user 104719 mai 14 18:49 Screenshot_2022-05-14_18-49-05.png
-rw-rw-r-- 1 user user 79751 mai 14 18:50 Screenshot_2022-05-14_18-50-06.png
-rw-rw-r-- 1 user user 80555 mai 14 18:50 Screenshot_2022-05-14_18-50-07.png
-rw-rw-r-- 1 user user 61775 mai 14 18:59 Screenshot_2022-05-14_18-59-42.png
-rw-rw-r-- 1 user user 137234 mai 14 19:35 Screenshot_2022-05-14_19-35-30.png
-rw-rw-r-- 1 user user 144581 mai 14 19:35 Screenshot_2022-05-14_19-35-48.png
-rw-rw-r-- 1 user user 144878 mai 14 19:37 Screenshot_2022-05-14_19-37-45.png
-rw-rw-r-- 1 user user 144871 mai 14 19:41 Screenshot_2022-05-14_19-41-05.png
-rw-rw-r-- 1 user user 145021 mai 14 19:42 Screenshot_2022-05-14_19-42-27.png
-rw-rw-r-- 1 user user 132173 mai 14 19:48 Screenshot_2022-05-14_19-48-03.png
-rw-rw-r-- 1 user user 85303 mai 14 19:49 Screenshot_2022-05-14_19-48-58.png
-rw-rw-r-- 1 user user 66172 mai 14 19:49 Screenshot_2022-05-14_19-49-09.png
```

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... Terminal - user@user-VirtualBox...
File Edit View Terminal Tabs Help
-rw-rw-r-- 1 user user 66172 mai 14 19:49 Screenshot_2022-05-14_19-49-09.png
-rw-rw-r-- 1 user user 141537 mai 14 19:52 Screenshot_2022-05-14_19-52-05.png
-rw-rw-r-- 1 user user 27044 mai 14 19:53 Screenshot_2022-05-14_19-53-48.png
-rw-rw-r-- 1 user user 27824 mai 14 19:57 Screenshot_2022-05-14_19-57-48.png
-rw-rw-r-- 1 user user 149124 mai 14 19:57 Screenshot_2022-05-14_19-57-41.png
-rw-rw-r-- 1 user user 149755 mai 14 20:00 Screenshot_2022-05-14_20-00-07.png

projeto:
total 40
drwxrwxr-x 3 user user 4096 mai 11 19:17 SEII-SamuelHenriqueLimaDaSilva
drwxrwxr-x 2 user user 4096 mai 14 19:10 Semana01
drwxrwxr-x 2 user user 4096 mai 11 19:22 Semana02
drwxrwxr-x 2 user user 4096 mai 11 19:33 Semana03
drwxrwxr-x 2 user user 4096 mai 11 19:39 Semana04
drwxrwxr-x 2 user user 4096 mai 11 19:41 Semana05
drwxrwxr-x 2 user user 4096 mai 11 19:41 Semana06
drwxrwxr-x 2 user user 4096 mai 11 19:42 Semana07
drwxrwxr-x 2 user user 4096 mai 11 19:42 Semana08
drwxrwxr-x 2 user user 4096 mai 12 08:18 Semana09

Public:
total 0

SEII-SamuelHenriqueLimaDaSilva:
total 4
-rw-rw-r-- 1 user user 32 mai 11 19:07 README.md

snap:
total 4
drwxr-xr-x 4 user user 4096 mai 11 13:47 firefox

Templates:
total 16
-rw-r--r-- 1 user user 6859 abr 9 09:17 'OpenDocument Spreadsheet.ods'
-rw-r--r-- 1 user user 7388 abr 9 09:17 'OpenDocument Text.odt'
-rw-r--r-- 1 user user 0 abr 9 09:17 'Plain Text.txt'

Videos:
total 0

```

Prints capítulo 4

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-VirtualBox...
File Edit View Terminal Tabs Help
Terminal - user@user-VirtualBox:~
drwxr-xr-x 2 user user 4096 mai 10 21:51 Documents/
drwxr-xr-x 3 user user 4096 mai 11 13:47 Downloads/
-rw----- 1 user user 0 mai 10 21:51 .ICEauthority
drwxrwxr-x 3 user user 4096 mai 10 21:51 local/
drwxrwxr-x 3 user user 4096 mai 14 18:43 mozilla/
drwxr-xr-x 2 user user 4096 mai 10 21:51 Music/
drwxrwxr-x 2 user user 4096 mai 14 22:00 Pictures/
-rw-r--r-- 1 user user 807 mai 10 21:14 profile
drwxrwxr-x 12 user user 4096 mai 12 08:18 projeto/
drwxr-xr-x 2 user user 4096 mai 10 21:51 Public/
drwxrwxr-x 3 user user 4096 mai 11 19:07 SEII-SamuelHenriqueLimaDaSilva/
drwxrwxr-x 3 user user 4096 mai 11 13:47 snap/
drwxrwxr-x 2 user user 4096 mai 11 19:09 ssh/
-rw-r--r-- 1 user user 0 mai 11 11:57 sudo as admin successful
drwxr-xr-X 2 user user 4096 mai 10 21:51 templates/
drwxrwxr-x 6 user user 4096 mai 14 10:43 .VirtualBox/
-rw-r--r-- 1 user user 5 mai 15 10:23 vboxclient-clipboard.pid
-rw-r--r-- 1 user user 5 mai 15 10:23 vboxclient-display-svga-x11.pid
-rw-r----- 1 user user 5 mai 15 10:23 vboxclient-draganddrop.pid
-rw-r----- 1 user user 5 mai 15 10:23 vboxclient-seamless.pid
drwxr-xr-x 2 user user 4096 mai 10 21:51 Videos/
-rw-r----- 1 user user 60 mai 15 10:22 .Xauthority
-rw-r--r-- 1 user user 1600 mai 10 21:14 .Xdefaults
-rw-r--r-- 1 user user 14 mai 10 21:14 xscreensaver
-rw-r----- 1 user user 8001 mai 15 10:39 xsession-errors
-rw----- 1 user user 7518 mai 14 23:09 xsession-errors.old
user@user-VirtualBox:~$ ls
Desktop Documents Downloads Music Pictures projeto Public SEII-SamuelHenriqueLimaDaSilva snap Templates Videos
user@user-VirtualBox:~$ cat a.txt
user@user-VirtualBox:~$ cat a.txt b.txt
user@user-VirtualBox:~$ cat a.txt | expand -t 1
user@user-VirtualBox:~$ cat a.txt | expand -t 10
cat: cidades: No such file or directory
cat: :: Is a directory
cat: txt: No such file or directory
cat: txt: Is a directory
cat: txt: No such file or directory
cat: txt: Extra operand `\''
Try `tr --help' for more information.
user@user-VirtualBox:~$ 

```

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-VirtualBox...
File Edit View Terminal Tabs Help
Terminal - user@user-VirtualBox:~
drwxrwxr-x 6 user user 4096 mai 14 18:43 thunderbird/
-rw-r--r-- 1 user user 5 mai 15 10:23 vboxclient-clipboard.pid
-rw-r----- 1 user user 5 mai 15 10:23 vboxclient-display-svga-x11.pid
-rw-r----- 1 user user 5 mai 15 10:23 vboxclient-draganddrop.pid
-rw-r----- 1 user user 5 mai 15 10:23 vboxclient-seamless.pid
drwxr-xr-x 2 user user 4096 mai 10 21:51 Videos/
-rw-r----- 1 user user 60 mai 15 10:22 .Xauthority
-rw-r--r-- 1 user user 1600 mai 10 21:14 .Xdefaults
-rw-r--r-- 1 user user 14 mai 10 21:14 xscreensaver
-rw----- 1 user user 8001 mai 15 10:39 xsession-errors
-rw----- 1 user user 7518 mai 14 23:09 xsession-errors.old
user@user-VirtualBox:~$ ls
Desktop Documents Downloads Music Pictures projeto Public SEII-SamuelHenriqueLimaDaSilva snap Templates Videos
user@user-VirtualBox:~$ cat a.txt
user@user-VirtualBox:~$ cat a.txt b.txt
user@user-VirtualBox:~$ cat a.txt | expand -t 1
user@user-VirtualBox:~$ cat a.txt | expand -t 10
user@user-VirtualBox:~$ cat cidades.txt | tr '\t' ' '
cat: cidades: No such file or directory
cat: :: Is a directory
cat: txt: No such file or directory
cat: txt: Extra operand `\''
Try `tr --help' for more information.
user@user-VirtualBox:~$ tr -dc 'aeiouAEIOU' < a . txt
bash: a: No such file or directory
user@user-VirtualBox:~$ fmt - w10 a . txt
bash: a: No such file or directory
user@user-VirtualBox:~$ 

```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-Virtua... Terminal - user@user-Virtua... 15 mai, 11:39
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ fold -s -w 20 a .txt
fold: a: No such file or directory
fold: .: Is a directory
fold: txt: No such file or directory
user@user-VirtualBox:~$ cat a .txt | grep alexandro
cat: a: No such file or directory
cat: .: Is a directory
cat: txt: No such file or directory
user@user-VirtualBox:~$ grep '[0 -9]' a .txt
grep: invalid option -- '
Usage: grep [OPTION]... PATTERN [FILE]...
Try `grep --help' for more information.
user@user-VirtualBox:~$ grep '[0 -9]\(2 \)' a .txt
grep: invalid option --
Usage: grep [OPTION]... PATTERN [FILE]...
Try `grep --help' for more information.
user@user-VirtualBox:~$ dmesg | egrep "firmware | amd "
dmesg: read kernel buffer failed: Operation not permitted
user@user-VirtualBox:~$ dmesg | fgrep "@"
dmesg: read kernel buffer failed: Operation not permitted
user@user-VirtualBox:~$ head a .txt
head: Cannot open 'a' for reading: No such file or directory
head: .
head: error reading ':': Is a directory
head: cannot open 'txt' for reading: No such file or directory
user@user-VirtualBox:~$ head -2 a .txt
head: cannot open 'a' for reading: No such file or directory
<=> . <=
head: error reading ':': Is a directory
head: cannot open 'txt' for reading: No such file or directory
user@user-VirtualBox:~$ tail a .txt
tail: cannot open 'a.' for reading: No such file or directory
tail: cannot open 'txt' for reading: No such file or directory
user@user-VirtualBox:~$ look a .txt
look: bad usage
Try `look --help' for more information.
user@user-VirtualBox:~$ nl a.txt
      1
      2
      3
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-Virtua... Terminal - user@user-Virtua... 15 mai, 11:46
File Edit View Terminal Tabs Help
=> . <=
head: error reading ':': Is a directory
head: cannot open 'txt' for reading: No such file or directory
user@user-VirtualBox:~$ head -2 a .txt
head: cannot open 'a' for reading: No such file or directory
head: error reading ':': Is a directory
head: cannot open 'txt' for reading: No such file or directory
user@user-VirtualBox:~$ tail a .txt
tail: cannot open 'a.' for reading: No such file or directory
tail: cannot open 'txt' for reading: No such file or directory
user@user-VirtualBox:~$ look a .txt
look: bad usage
Try `look --help' for more information.
user@user-VirtualBox:~$ nl a.txt
      1
      2
      3
      4
      5
      6

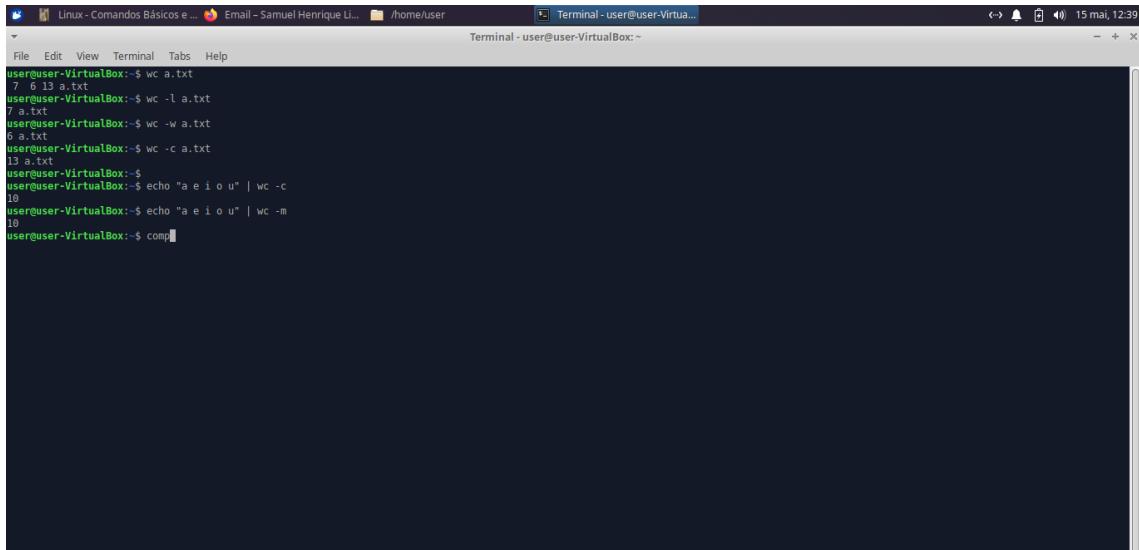
user@user-VirtualBox:~$ cat a .txt
cat: a: No such file or directory
cat: .txt: No such file or directory
user@user-VirtualBox:~$ cat b.txt
user@user-VirtualBox:~$ paste a.txt b.txt
1
2
3
4
5
6

user@user-VirtualBox:~$ paste -d , < seq 1 3 ) < seq 4 6 ) < seq 7 9 )
1,4,7
2,5,8
3,6,9
user@user-VirtualBox:~$
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-Virtua... Terminal - user@user-Virtua... 15 mai, 11:57
File Edit View Terminal Tabs Help
4 4
5 5
6 6

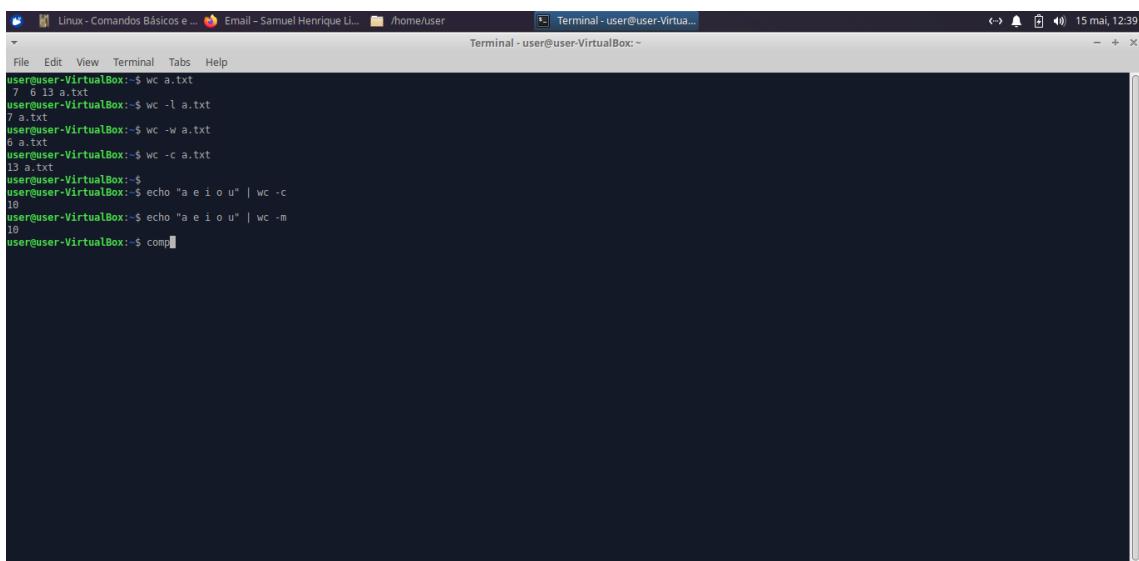
user@user-VirtualBox:~$ cat a .txt
cat: a: No such file or directory
cat: .txt: No such file or directory
user@user-VirtualBox:~$ cat b.txt
user@user-VirtualBox:~$ paste a.txt b.txt
1
2
3
4
5
6

user@user-VirtualBox:~$ paste -d , < seq 1 3 ) < seq 4 6 ) < seq 7 9 )
1,4,7
2,5,8
3,6,9
user@user-VirtualBox:~$ paste -d , < seq 1 3 ) < seq 4 6 ) < seq 7 9 )
1,4,7
2,5,8
3,6,9
user@user-VirtualBox:~$ cat arquivo | rev
cat: arquivo: No such file or directory
user@user-VirtualBox:~$ cat a | rev
cat: a: No such file or directory
user@user-VirtualBox:~$ echo 'teste' | rev
etset
user@user-VirtualBox:~$ cat a.txt | sort -n
1
2
3
4
5
6
user@user-VirtualBox:~$
```

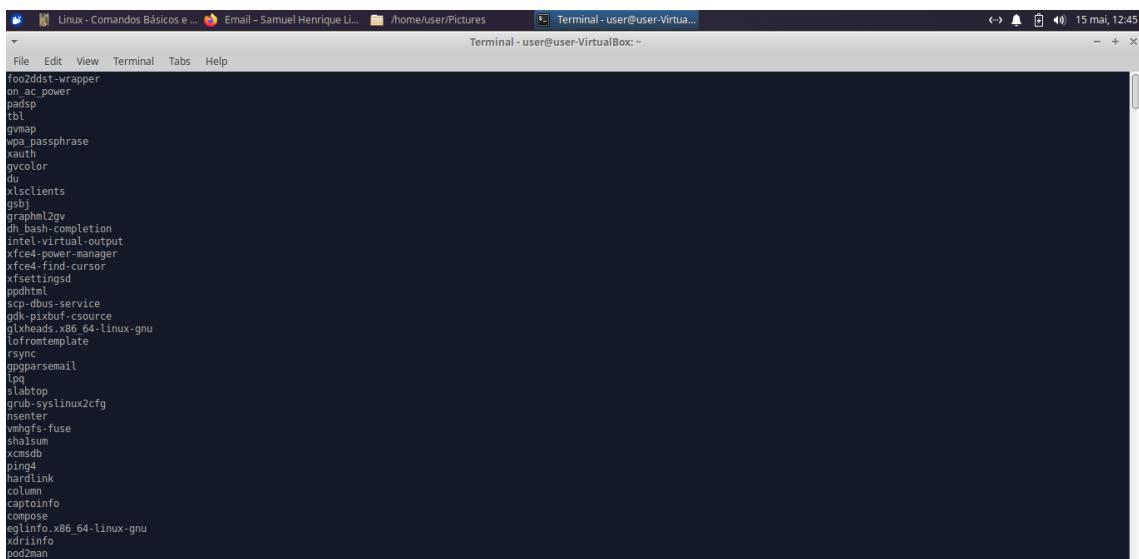


```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-Virtua... Terminal - user@user-Virtua... File Edit View Terminal Tabs Help user@user-VirtualBox:~$ wc a.txt 7 6 13 a.txt user@user-VirtualBox:~$ wc -l a.txt 7 a.txt user@user-VirtualBox:~$ wc -w a.txt 6 a.txt user@user-VirtualBox:~$ wc -c a.txt 13 a.txt user@user-VirtualBox:~$ echo "a e i o u" | wc -c 10 user@user-VirtualBox:~$ echo "a e i o u" | wc -m 10 user@user-VirtualBox:~$ comp
```

Print capítulo 5



```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-Virtua... Terminal - user@user-Virtua... File Edit View Terminal Tabs Help user@user-VirtualBox:~$ wc a.txt 7 6 13 a.txt user@user-VirtualBox:~$ wc -l a.txt 7 a.txt user@user-VirtualBox:~$ wc -w a.txt 6 a.txt user@user-VirtualBox:~$ wc -c a.txt 13 a.txt user@user-VirtualBox:~$ echo "a e i o u" | wc -c 10 user@user-VirtualBox:~$ echo "a e i o u" | wc -m 10 user@user-VirtualBox:~$ comp
```



```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-Virtua... Terminal - user@user-Virtua... File Edit View Terminal Tabs Help foo2ddst-wrapper on_ac_power padsdp tbt gvmap vpa_passphrase xauth gvcolor xkb xslclients gsbj graphml2gv dh_bash-completion intel-virtual-output xrced-power-manager xrced-find-cursor xrdSettingsd pndttml scp-dbus-service gdk-pixbuf-csource glxheads.x86_64-linux-gnu lofromtemplate rsync gpgparsemail gpgsm elabtop grub-syslinux2cfg nsenter vmhgfs-fuse sha1sum xcmsdb ping4 hardlink column getoptinfo compose eglinfo.x86_64-linux-gnu xdrinfo pod2man
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
sgt-lightup
sgt-net
gnome-sudoku
sgt-puzzles
sgt-cube
sgt-launcher
sgt-galaxies
sgt-pattern
sgt-keen
sgt-palisade
sgt-tracks
sgt-map
sgt-silant
sgt-undead
sgt-filling
sgt-magnets
sgt-sixteen
sgt-loopy
sgt-unruly
sgt-solo
sgt-towers
sgt-flood
sgt-blackbox
sgt-samegame
sgt-singles
sgt-signpost
sgt-untangle
sgt-bridges
sgt-nines
sgt-equival
sgt-flip
sgt-rect
sgt-pearl
sgt-inertia
sgt-dominosa
sgt-twiddle
gnome-mines
firefox
user@user-VirtualBox:~ clear[]
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
user@user-VirtualBox:~ whoami
user
user@user-VirtualBox:~ pwd
/home/user
user@user-VirtualBox:~ id
uid=1000(user) gid=1000(user) groups=1000(user),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),122(lpadmin),132(lxd),133(sambashare)
user@user-VirtualBox:~$ passwd
Changing password for user.
Current password:
New password:
Retype new password:
The password has not been changed.
New password:
Retype new password:
The password has not been changed.
New password: []
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ su
Password:
root@user-VirtualBox:/home/user# exit
exit
user@user-VirtualBox:~$ whoami
user
user@user-VirtualBox:~$ users
user
user@user-VirtualBox:~$ sudo apt - get install finger
[sudo] password for user:
E: Invalid operation get
user@user-VirtualBox:~$ finger user
Command 'finger' not found, but can be installed with:
sudo apt-get install finger
user@user-VirtualBox:~$ finger l- user
Command 'finger' not found, but can be installed with:
sudo apt-get install finger
user@user-VirtualBox:~$ finger
Command 'finger' not found, but can be installed with:
sudo apt-get install finger
user@user-VirtualBox:~$ free
              total        used        free      shared  buff/cache   available
Mem:       247692       1409016      97028       24832      970488      871068
Swap:      2244604        25728     2218876
user@user-VirtualBox:~$ su
Password:
root@user-VirtualBox:/home/user# exit
exit
user@user-VirtualBox:~$ uname
Linux
user@user-VirtualBox:~$ uname -m
x86_64
user@user-VirtualBox:~$ uname -n
user-VirtualBox
user@user-VirtualBox:~$ []
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ sudo apt - get install finger
[sudo] password for user:
E: Invalid operation: get
user@user-VirtualBox:~$ finger user
Command 'finger' not found, but can be installed with:
sudo apt install finger
user@user-VirtualBox:~$ finger l- user
Command 'finger' not found, but can be installed with:
sudo apt install finger
user@user-VirtualBox:~$ finger
Command 'finger' not found, but can be installed with:
sudo apt install finger
user@user-VirtualBox:~$ free
              total        used        free      shared  buff/cache   available
Mem:       2476532     1409016     97028    24832     970488     871068
Swap:      2244684      25728    2218876
user@user-VirtualBox:~$ su
Password:
root@user-VirtualBox:/home/user# exit
exit
user@user-VirtualBox:~$ uname
Linux
user@user-VirtualBox:~$ uname -m
x86_64
user@user-VirtualBox:~$ uname -n
user-VirtualBox
user@user-VirtualBox:~$ uname -a
Linux user-VirtualBox 5.15.0-27-generic #28-Ubuntu SMP Thu Apr 14 04:55:28 UTC 2022 x86_64 x86_64 x86_64 GNU/Linux
user@user-VirtualBox:~$ uptime
12:57:04 up 2:24,  1 user,  load average: 0.10, 0.12, 0.14
user@user-VirtualBox:~$ ls --version
ls (GNU coreutils) 8.32
Copyright (C) 2020 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.
Written by Richard M. Stallman and David MacKenzie.
user@user-VirtualBox:~$ 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/bin:/usr/games:/usr/local/games:/snap/bin
user@user-VirtualBox:~$ timeout
Timed out - help for more information.
user@user-VirtualBox:~$ w
13:03:43 up 2:54,  1 user,  load average: 0.00, 0.06, 0.09
USER   TTY   FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
user   tty7 :0          10:22   2:51m  1:59   0.66s xfce4-session
user@user-VirtualBox:~$ whence gcc
gcc: /usr/lib/gcc /usr/share/gcc
user@user-VirtualBox:~$ locate passwd
/etc/passwd
/etc/pwconvd
/etc/pam.d/chpasswd
/etc/pam.d/passwd
/etc/security/opasswd
/snap/core20/1405/etc/pam.d/chpasswd
/snap/core20/1405/etc/pam.d/passwd
/snap/core20/1405/etc/security/opasswd
/snap/core20/1405/usr/lib/chpasswd
/snap/core20/1405/usr/lib/pam/passwd
/snap/core20/1405/usr/lib/tmpfiles.d/passwd.conf
/snap/core20/1405/usr/sbin/chpasswd
/snap/core20/1405/usr/sbin/chpasswd
/snap/core20/1405/usr/share/base-passwd
/snap/core20/1405/usr/share/base-passwd/group.master
/snap/core20/1405/usr/share/base-passwd/passwd.master
/snap/core20/1405/usr/share/bash-completion/completions/chpasswd
/snap/core20/1405/usr/share/bash-completion/completions/pwd
/snap/core20/1405/usr/share/bash-completion/completions/tpasswd
/snap/core20/1405/usr/share/bash-completion/completions/dapasswd
/snap/core20/1405/usr/share/bash-completion/completions/passwd
/snap/core20/1405/usr/share/bash-completion/completions/smbpasswd
/snap/core20/1405/usr/share/doc/base-passwd
/snap/core20/1405/usr/share/doc/passwd
/snap/core20/1405/usr/share/doc/passwd 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
/usr/share/man/man1/passwd.1ssl.gz
/usr/share/man/man3/passwd.5.gz
/usr/share/man/man3/chpasswd.8.gz
/usr/share/man/man3/chpasswd.8.gz
/usr/share/man/man3/getpwnam_r.8.gz
/usr/share/man/man8/update-passwd.8.gz
/usr/share/man/man8/BR/man1/gpasswd.1.gz
/usr/share/man/man8/BR/man5/gpasswd.5.gz
/usr/share/man/man1/gpasswd.1.gz
/usr/share/man/man1/gpasswd.5.gz
/usr/share/man/man1/chpasswd.8.gz
/usr/share/man/man1/chpasswd.8.gz
/usr/share/man/man1/gpasswd.1.gz
/usr/share/man/man1/gpasswd.5.gz
/usr/share/man/man1/gpasswd.8.gz
/usr/share/man/man1/gpasswd.8.gz
/usr/share/man/man5/gpasswd.5.gz
/usr/share/man/man5/gpasswd.5.gz
/usr/share/man/tr/man1/gpasswd.1.gz
/usr/share/man/tr/man5/gpasswd.5.gz
/usr/share/man/tr/CN/man1/gpasswd.1.gz
/usr/share/man/tr/CN/man1/passwd.1.gz
/usr/share/man/tr/CN/man1/passwd.5.gz
/usr/share/man/tr/CN/man1/chpasswd.8.gz
/usr/share/man/tr/TW/man5/gpasswd.5.gz
/usr/share/man/tr/TW/man8/chpasswd.8.gz
/var/lib/dpkg/info/base-passwd.list
/var/lib/dpkg/info/base-passwd.md5sums
/var/lib/dpkg/info/base-passwd.postinst
/var/lib/dpkg/info/base-passwd.postrm
/var/lib/dpkg/info/base-passwd.preinst
/var/lib/dpkg/info/base-passwd.templates
/var/lib/dpkg/info/base-passwd.confines
/var/lib/dpkg/info/passwd.list
/var/lib/dpkg/info/passwd.md5sums
/var/lib/dpkg/info/passwd.postinst
/var/lib/dpkg/info/passwd.postrm
/var/lib/dpkg/info/passwd.preinst
/var/lib/dpkg/info/passwd.prem 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~  
File Edit View Terminal Tabs Help  
user@user-VirtualBox:~$ which ls  
/usr/bin/ls  
user@user-VirtualBox:~$ whatis clear  
clear (1) - clear the terminal screen  
user@user-VirtualBox:~$ whatis ps  
ps (1) - report a snapshot of the current processes.  
user@user-VirtualBox:~$ whatis netstat  
netstat: nothing appropriate.  
user@user-VirtualBox:~$ whatis netstat  
netstat: nothing appropriate.  
user@user-VirtualBox:~$ whatis route  
route (8) - manage traffic control filter  
user@user-VirtualBox:~$ whatis ls  
ls (1) - list directory contents  
user@user-VirtualBox:~$ whatis touch  
touch (1) - change file timestamps  
user@user-VirtualBox:~$ whatis cat  
cat (1) - concatenate files and print on the standard output  
user@user-VirtualBox:~$ whatis date  
date (1) - print or set the system date and time  
user@user-VirtualBox:~$ who  
user   tty7          2022-05-15 10:22 (:0)  
user@user-VirtualBox:~$ hostname ; date ; ls ;  
user@VirtualBox  
dom 15 mai 2022 13:12:31 -03  
a.txt b.txt Desktop Documents Downloads Music Pictures projeto Public SEII-SamuelHenriqueLimaDaSilva snap Templates Videos  
user@user-VirtualBox:~$
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-VirtualBox:~  
File Edit View Terminal Tabs Help  
user@user-VirtualBox:~$ test -f teste . existe && echo ' existe '  
bash: test: too many arguments  
user@user-VirtualBox:~$ test -f teste . existe || echo ' existe '  
bash: test: too many arguments  
user@user-VirtualBox:~$ existe  
user@user-VirtualBox:~$ touch teste . existe && test -f teste . existe && echo 'existe '  
bash: test: too many arguments  
user@user-VirtualBox:~$
```

Prints capítulo 6

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/projeto/Seman... Terminal - user@user-VirtualBox:~  
File Edit View Terminal Tabs Help  
user@user-VirtualBox:~$ ps - aef  
error: garbage option  
Usage:  
ps [options]  
Try 'ps --help <simple|list|output|threads|misc|all>'  
or 'ps --help <s|l|o|t|m|a>'  
for additional help text.  
For more details see ps(1).  
user@user-VirtualBox:~$ ps -u  
USER          PID %CPU %MEM    VSZ   RSS TTY      STAT START    TIME COMMAND  
user        1772  0.0  0.2 21676 5024 pts/0    Ss  15:47  0:00 bash  
user        2767  0.0  0.1 23072 3576 pts/0    R+  16:01  0:00 ps -u  
user@user-VirtualBox:~$ ps - aef -r | head -5  
error: garbage option  
Usage:  
ps [options]  
Try 'ps --help <simple|list|output|threads|misc|all>'  
or 'ps --help <s|l|o|t|m|a>'  
for additional help text.  
For more details see ps(1).  
user@user-VirtualBox:~$ ps - aef -m | head -5  
error: garbage option  
Usage:  
ps [options]  
Try 'ps --help <simple|list|output|threads|misc|all>'  
or 'ps --help <s|l|o|t|m|a>'  
for additional help text.  
For more details see ps(1).  
user@user-VirtualBox:~$
```

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/projeto/Seman... /home/user/Pictures Terminal - user@user-Virtua...
File Edit View Terminal Tabs Help Terminal - user@user-Virtua... ~
user@user-VirtualBox:~$ ps - aef | grep firefox
error: garbage option

Usage:
ps [options]

Try 'ps --help <simple|list|output|threads|misc|all>' or 'ps --help <s|l|o|t|m|a>' for additional help text.

For more details see ps(1).
user@user-VirtualBox:~$ pstree
systemd[1]—/sbin/init[2]—{ModemManager}[3]—{NetworkManager}[4]—{VBoxClient}[5]—{VBoxClient}[6]—{VBoxClient}[7]—{VBoxService}[8]—accounts-daemon[9]—acpid[10]—agetty[11]—apache2[12]—{aprfile}[13]—avahi-daemon[14]—colord[15]—cron[16]—cups-browsed[17]—cupsd[18]—dbus-daemon[19]—firefox[20]—{isolated Web Co}[10]—{isolated Web Co}[14]—{isolated Web Co}[18]—{isolated Web Co}[22]—{Privileged Cont}[14]—{RDD Process}[2]—{Socket Process}[4]—{Web Content}[12]—{Web Content}[13]—{WebExtensions}[14]—{firefox}[8]—gnome-keyring-d[3]—{gnome-keyring-d}

```

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/projeto/Seman... /home/user/Pictures Terminal - user@user-Virtua...
File Edit View Terminal Tabs Help Terminal - user@user-Virtua... ~
user@user-VirtualBox:~$ pstree
dconf-service[1]—{dconf-service}[2]—gvfs-afc-volume[3]—{gvfs-afc-volume}[4]—gvfs-goa-volume[5]—{gvfs-goa-volume}[6]—gvfs-ghphoto2-vo[7]—{gvfs-ghphoto2-vo}[8]—gvfs-ntp-volume[9]—{gvfs-ntp-volume}[10]—udisksd[11]—{gvfs-udisks2-vo}[12]—gvfsd[13]—{gvfsd-dnssd}[2]—{gvfsd-network}[14]—{gvfsd-trash}[15]—{gvfsd}[16]—fuse[5]—{gvfsd-fuse}[17]—gvfsd-metadata[2]—{gvfsd-metadata}[18]—obexd[19]—{obexd}[20]—pipewire[21]—{pipewire}[22]—pipewire-media[23]—pulseaudio[3]—{pulseaudio}[4]—snap[6]—{snap}[5]—tumblerd[5]—{tumblerd}[1]—xdg-desktop-por[4]—{xdg-desktop-por}[2]—xdg-desktop-por[3]—{xdg-desktop-por}[1]—xdg-document-po[5]—{xdg-document-po}[4]—xdg-permission[2]—{xdg-permission}[1]—xfce4-notifyd[2]—{xfce4-notifyd}[1]—xfce4-screensav[2]—{xfce4-screensav}[1]—xfconfd[2]—{xfconfd}[1]—systemd-journal[1]—systemd-logind[1]—systemd-resolve[1]—systemd-timesyn[1]—{systemd-timesyn}[1]—systemd-udevd[1]—udisksd[4]—{udisksd}[1]—unattended-upgr[2]—{unattended-upgr}[1]—upowerd[2]—{upowerd}[1]—wayland[1]—{wayland}[1]—xcape[1]—{xcape}[1]—xfce4-terminal[1]—bash[1]—{xfce4-terminal}[2]
user@user-VirtualBox:~$ 

```

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/projeto/Seman... /home/user/Pictures Terminal - user@user-Virtua...
File Edit View Terminal Tabs Help Terminal - user@user-Virtua... ~
Top - 16:08:08 up 43 min, 1 user, load average: 0,58, 0,41, 0,37
Tasks: 209 total, 1 running, 198 sleeping, 0 stopped, 0 zombie
%Cpu(s): 3,9 us, 0,3 sy, 0,0 ni, 95,8 id, 0,0 wa, 0,0 hi, 0,0 si, 0,0 st
Mem Mem : 2418,5 total, 75,9 free, 1279,9 used, 1062,6 buff/cache
Mib Swap: 2192,0 total, 2190,2 free, 1,8 used, 951,0 avail Mem
PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND
037 root 20 0 371496 128516 60328 5 5,6 5,2 0:31,49 Xorg
1753 user 28 0 493996 47044 36268 5 2,0 1,9 0:04,51 rxfed-terminal
3022 user 20 0 23600 4260 3432 R 0,7 0,2 0:00,07 top
1261 user 28 0 163936 2476 2232 5 0,3 0,1 0:05,74 VBoxClient
1397 user 20 0 903404 84816 64836 5 0,3 3,4 0:06,21 xfwm4
1440 user 20 0 666796 40924 31832 5 0,3 1,7 0:02,61 panel9-pulseau
1 root 20 0 166400 11644 8236 5 0,0 0,5 0:01,04 systemd
2 root 28 0 0 0 0 0 0,0 0,0 0:00,00 rcu_tasks_rude
3 root 20 0 0 0 0 0 0,0 0,0 0:00,00 rcu_tasks_trace
4 root 0 20 0 0 0 0 0,1 0,0 0,0 0:00,00 rcu_gp
6 root 0 20 0 0 0 0 0,1 0,0 0,0 0:00,00 rcu_gp
9 root 0 20 0 0 0 0 0,1 0,0 0,0 0:00,00 rcu_kworker/0:0H-events_highpri
10 root 20 0 0 0 0 0 0,5 0,0 0,0 0:00,00 mm_percpu_wq
11 root 20 0 0 0 0 0 0,5 0,0 0,0 0:00,00 rcu_tasks_rude
12 root 20 0 0 0 0 0 0,5 0,0 0,0 0:00,07 ksoftirqd/0
13 root 20 0 0 0 0 0 0,1 0,0 0,0 0:00,72 rcu_sched
14 root rt 0 0 0 0 0 0,0 0,0 0,0 0:00,02 migration/0
15 root 0 20 0 0 0 0 0,5 0,0 0,0 0:00,00 idle/inject/0
16 root 20 0 0 0 0 0 0,5 0,0 0,0 0:00,00 cpuhp/1
17 root 28 0 0 0 0 0 0,5 0,0 0,0 0:00,00 cpuhp/1
18 root -51 0 0 0 0 0 0,5 0,0 0,0 0:00,00 idle/inject/1
19 root rt 0 0 0 0 0 0,5 0,0 0,0 0:00,21 migration/1
20 root 20 0 0 0 0 0 0,5 0,0 0,0 0:00,25 ksoftirqd/1
22 root 0 20 0 0 0 0 0,1 0,0 0,0 0:00,00 kworker/1:0H-events_highpri
23 root 20 0 0 0 0 0 0,5 0,0 0,0 0:00,00 kdevtmpfs
24 root 0 20 0 0 0 0 0,1 0,0 0,0 0:00,00 netns
25 root 0 20 0 0 0 0 0,0 0,0 0,0 0:00,00 frag_wq
26 root 20 0 0 0 0 0 0,5 0,0 0,0 0:00,00 kauditd
27 root 28 0 0 0 0 0 0,5 0,0 0,0 0:00,00 khungttskd
28 root 28 0 0 0 0 0 0,5 0,0 0,0 0:00,00 com_reaper
29 root 0 20 0 0 0 0 0,1 0,0 0,0 0:00,00 writeback
30 root 20 0 0 0 0 0 0,5 0,0 0,0 0:00,12 kcompactd0

```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/projeto/Seman... /home/user/Pictures Terminal - user@user-Virtua... File Edit View Terminal Tabs Help top - 16:11:28 up 46 min, 1 user, load average: 0,21, 0,29, 0,33 Tasks: 202 total, 1 running, 201 sleeping, 0 stopped, 0 zombie Cpu(s): 0,5 user, 0,2 sy, 0,0 ni, 99,3 id, 0,0 wa, 0,0 hi, 0,0 si, 0,0 st Mem: 2418,5 total, 66,5 free, 1288,4 used, 1053,6 buff/cache Mib Swap: 2192,0 total, 2190,2 free, 1,8 used, 942,7 avail Mem PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND 937 root 20 0 371624 128756 60324 S 0,3 5,2 0:36.98 Xorg 1261 user 20 0 163936 2476 2232 S 0,3 0,1 0:06.24 VBoxClient 1397 user 20 0 903404 84816 64836 S 0,3 3,4 0:07.37 xfwm4 2327 user 20 0 2757596 373112 96460 S 0,3 15,1 0:46.14 Isolated Web Co
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/projeto/Seman... /home/user/Pictures Terminal - user@user-Virtua... File Edit View Terminal Tabs Help user@user-VirtualBox:~$ kill -1 1) SIGHUP 2) SIGINT 3) SIGQUIT 4) SIGILL 5) SIGTRAP 6) SIGABRT 7) SIGBUS 8) SIGFPE 9) SIGKILL 10) SIGUSR1 11) SIGSEGV 12) SIGUSR2 13) SIGPIPE 14) SIGALRM 15) SIGTERM 16) SIGSTXFLT 17) SIGCHLD 18) SIGCONT 19) SIGSTOP 20) SIGTSTP 21) SIGTTIN 22) SIGTTOU 23) SIGURG 24) SIGXCPU 25) SIGXFSZ 26) SIGVTALRM 27) SIGPROF 28) SIGINCH 29) SIGIO 30) SIGPWR 31) SIGSYS 34) SIGRMIN 35) SIGRMIN+1 36) SIGRMIN+2 37) SIGRMIN+3 38) SIGRMIN+4 39) SIGRMIN+5 40) SIGRMIN+6 41) SIGRMIN+7 42) SIGRMIN+8 43) SIGRMIN+9 44) SIGRMIN+10 45) SIGRMIN+11 46) SIGRMIN+12 47) SIGRMIN+13 48) SIGRMIN+14 49) SIGRMIN+15 50) SIGRMAX+14 51) SIGRMAX+13 52) SIGRMAX+12 53) SIGRMAX+11 54) SIGRMAX+10 55) SIGRMAX+9 56) SIGRMAX+8 57) SIGRMAX+7 58) SIGRMAX+6 59) SIGRMAX+5 60) SIGRMAX+4 61) SIGRMAX+3 62) SIGRMAX+2 user@user-VirtualBox:~$ ps - aef | grep paint error: garbage option Usage: ps [options] Try 'ps --help <simple|list|output|threads|misc|all>' or 'ps --help <s|l|o|t|m|a>' for additional help text. For more details see ps(1). user@user-VirtualBox:~$ 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/projeto/Seman... /home/user/Pictures Terminal - user@user-Virtua... File Edit View Terminal Tabs Help user@user-VirtualBox:~$ ps PID TTY TIME CMD 3283 pts/0 00:00:00 bash 3388 pts/0 00:00:00 ps user@user-VirtualBox:~$ ps u USER PID %CPU %MEM VSZ RSS TTY STAT START TIME COMMAND user 3283 0,0 0,2 21676 5444 pts/0 Ss 16:11 0:00 bash user 3620 0,0 0,1 23072 3544 pts/0 R+ 16:27 0:00 ps -u user@user-VirtualBox:~$ ps u USER PID %CPU %MEM VSZ RSS TTY STAT START TIME COMMAND user 3283 0,0 0,2 21676 5444 pts/0 Ss 16:11 0:00 bash user 3622 0,0 0,1 23072 3536 pts/0 R+ 16:28 0:00 ps u user@user-VirtualBox:~$ top & [1]+ 3623 Stopped (signal) top user@user-VirtualBox:~$ jobs -l [1]+ 3623 Stopped (signal) top user@user-VirtualBox:~$ 
```

Capítulo 7 prints

```
user@user-VirtualBox:~$ ls -l
total 44
drwxr-xr-x 2 user user 4096 mai 10 21:51 Desktop
drwxr-xr-x 2 user user 4096 mai 10 21:51 Documents
drwxr-xr-x 3 user user 4096 mai 11 13:47 Downloads
drwxr-xr-x 2 user user 4096 mai 10 21:51 Music
drwxr-xr-x 2 user user 4096 mai 15 17:22 Pictures
drwxrwxr-x 12 user user 4096 mai 12 08:18 projeto
drwxr-xr-x 2 user user 4096 mai 10 21:51 Public
drwxrwxr-x 3 user user 4096 mai 11 19:07 SEII-SamuelHenriqueLimaDaSilva
drwxr-xr-x 2 user user 4096 mai 11 13:47 snap
drwxr-xr-x 2 user user 4096 mai 11 21:51 Templates
drwxr-xr-x 2 user user 4096 mai 10 21:51 Videos
user@user-VirtualBox:~$ touch a.txt
user@user-VirtualBox:~$ chmod 777 myfile
chmod: cannot access 'myfile': No such file or directory
user@user-VirtualBox:~$ chmod u + x arquivo
chmod: invalid mode: 'u'
Try 'chmod -help' for more information.
user@user-VirtualBox:~$ chmod u - rx
chmod: invalid mode: 'u'
Try 'chmod --help' for more information.
user@user-VirtualBox:~$
```

Capítulo 8 prints

```
user@user-VirtualBox:~$ sudo adduser aluno
[sudo] password for user:
Sorry, try again.
[sudo] password for user:
Adding user 'aluno' ...
Adding new group 'aluno' (1001) ...
Creating new user 'aluno' (1001) with group 'aluno' ...
Creating home directory '/home/aluno' ...
Copying files from '/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for aluno
Enter the new value, or press ENTER for the default
  Full Name []: aluno
  Room Number []: 345
  Work Phone []: 9999999999
  Home Phone []: 4444444
  Other []:
Is the information correct? [Y/n] 
```

```
user@user-VirtualBox:~$ sudo userdel aluno
user@user-VirtualBox:~$ sudo userdel -r aluno
userdel: user 'aluno' does not exist
user@user-VirtualBox:~$ 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-VirtualBox:~ 18 mai, 18:57
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ sudo usermod -e
usermod: option requires an argument -- 'e'
Usage: usermod [options] LOGIN
Options:
  -b, --badnames      allow bad names
  -c, --comment COMMENT    new value of the GECOS field
  -d, --home HOME_DIR    new home directory for the user account
  -e, --expiredate EXPIRE_DATE   set account expiration date to EXPIRE_DATE
  -f, --inactive INACTIVE    set password inactive after expiration
                             to INACTIVE
  -g, --gid GROUP        force GROUP as new primary group
  -G, --groups GROUPS    new list of supplementary GROUPS
  -a, --append            append the user to the supplemental GROUPS
                             mentioned by the -G option without removing
                             the user from other groups
  -h, --help              display this help message and exit
  -l, --login NEW_LOGIN   new value of the login name
  -L, --lock               lock the user account
  -m, --move-home         move contents of the home directory to the
                             new location specified with -d)
  -o, --non-unique        allow to use a duplicate (non-unique) UID
  -p, --password PASSWORD  use encrypted password for the new password
  -R, --root CHROOT_DIR    directory to chroot into
  -P, --prefix PREFIX_DIR  prefix directory where are located the /etc/* files
  -s, --shell SHELL        new login shell for the user account
  -u, --uid UID           new UID for the user account
  -U, --unlock             unlock the user account
  -v, --add-suids FIRST-LAST  add range of subordinate uids
  -V, --del-suids FIRST-LAST  remove range of subordinate uids
  -w, --add-subgids FIRST-LAST  add range of subordinate gids
  -W, --del-subgids FIRST-LAST  remove range of subordinate gids
  -Z, --selinux-user SEUSER  new SELinux user mapping for the user account
user@user-VirtualBox:~$ 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-VirtualBox:~ 18 mai, 18:59
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ sudo usermod -e
usermod: option requires an argument -- 'e'
Usage: usermod [options] LOGIN
Options:
  -b, --badnames      allow bad names
  -c, --comment COMMENT    new value of the GECOS field
  -d, --home HOME_DIR    new home directory for the user account
  -e, --expiredate EXPIRE_DATE   set account expiration date to EXPIRE_DATE
  -f, --inactive INACTIVE    set password inactive after expiration
                             to INACTIVE
  -g, --gid GROUP        force GROUP as new primary group
  -G, --groups GROUPS    new list of supplementary GROUPS
  -a, --append            append the user to the supplemental GROUPS
                             mentioned by the -G option without removing
                             the user from other groups
  -h, --help              display this help message and exit
  -l, --login NEW_LOGIN   new value of the login name
  -L, --lock               lock the user account
  -m, --move-home         move contents of the home directory to the
                             new location specified with -d)
  -o, --non-unique        allow to use a duplicate (non-unique) UID
  -p, --password PASSWORD  use encrypted password for the new password
  -R, --root CHROOT_DIR    directory to chroot into
  -P, --prefix PREFIX_DIR  prefix directory where are located the /etc/* files
  -s, --shell SHELL        new login shell for the user account
  -u, --uid UID           new UID for the user account
  -U, --unlock             unlock the user account
  -v, --add-suids FIRST-LAST  add range of subordinate uids
  -V, --del-suids FIRST-LAST  remove range of subordinate uids
  -w, --add-subgids FIRST-LAST  add range of subordinate gids
  -W, --del-subgids FIRST-LAST  remove range of subordinate gids
  -Z, --selinux-user SEUSER  new SELinux user mapping for the user account
user@user-VirtualBox:~$ sudo groupadd professores
user@user-VirtualBox:~$ sudo groupdel professores
user@user-VirtualBox:~$ 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user Terminal - user@user-VirtualBox:~ 18 mai, 19:03
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ sudo groupmod -n professores
Usage: groupmod [options] GROUP
Options:
  -g, --gid GID          change the group ID to GID
  -h, --help              display this help message and exit
  -n, --new-name NEW_GROUP  change the name to NEW_GROUP
  -o, --non-unique        allow to use a duplicate (non-unique) GID
  -p, --password PASSWORD  change the password to this (encrypted)
                            PASSWORD
  -R, --root CHROOT_DIR    directory to chroot into
  -P, --prefix PREFIX_DIR  prefix directory where are located the /etc/* files
user@user-VirtualBox:~$ 
```

Capítulo 9 prints

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/projeto/Seman... Terminal - user@user-Virtua...
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ apt install net - tools
E: Could not open lock file /var/lib/dpkg/lock-frontend - open (13: Permission denied)
E: Unable to acquire the dpkg frontend lock (/var/lib/dpkg/lock-frontend), are you root?
user@user-VirtualBox:~$ su apt install net - tools
su: user apt does not exist or the user entry does not contain all the required fields
user@user-VirtualBox:~$ sudo apt install net - tools
[sudo] password for user:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Package tools is not available, but is referred to by another package.
This may mean that the package is missing, has been obsoleted, or
is only available from another source
E: Unable to locate package net
E: Package 'tools' has no installation candidate
user@user-VirtualBox:~$ hostname
user@user-VirtualBox
user@user-VirtualBox:~$ apt - a
Command 'apt' not found, but can be installed with:
sudo apt install net-tools
user@user-VirtualBox:~$ ifconfig
Command 'ifconfig' not found, but can be installed with:
sudo apt install net-tools
user@user-VirtualBox:~$ 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-Virtua...
File Edit View Terminal Tabs Help
root@user-VirtualBox:/home/user# apt install net-tools
root@user-VirtualBox:/home/user# exit
user@user-VirtualBox:~$ su
Password:
root@user-VirtualBox:/home/user# ping
ping: usage error: Destination address required
root@user-VirtualBox:/home/user# ping www.ufu.br
PING www.ufu.br (200.19.145.55) 56(84) bytes of data.
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=1 ttl=51 time=39.5 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=2 ttl=51 time=33.0 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=3 ttl=51 time=40.0 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=4 ttl=51 time=33.8 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=5 ttl=51 time=38.1 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=6 ttl=51 time=40.9 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=7 ttl=51 time=39.5 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=8 ttl=51 time=38.5 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=9 ttl=51 time=39.5 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=10 ttl=51 time=31.8 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=11 ttl=51 time=33.8 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=12 ttl=51 time=33.8 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=13 ttl=51 time=34.3 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=14 ttl=51 time=36.4 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=15 ttl=51 time=34.0 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=16 ttl=51 time=42.4 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=17 ttl=51 time=33.3 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=18 ttl=51 time=54.4 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=19 ttl=51 time=33.4 ms
`[A64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=20 ttl=51 time=32.6 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=21 ttl=51 time=35.8 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=22 ttl=51 time=34.2 ms
`[B64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=23 ttl=51 time=33.8 ms
`[D64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=24 ttl=51 time=33.9 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=25 ttl=51 time=33.3 ms
-- www.ufu.br ping statistics --
25 packets transmitted, 25 received, 0% packet loss, time 24237ms
rtt min/avg/max/mdev = 31.784/36.631/54.360/5.190 ms
root@user-VirtualBox:/home/user# 
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-Virtua...
File Edit View Terminal Tabs Help
root@user-VirtualBox:/home/user# ping
ping: usage error: Destination address required
root@user-VirtualBox:/home/user# ping www.ufu.br
PING www.ufu.br (200.19.145.55) 56(84) bytes of data.
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=1 ttl=51 time=39.5 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=2 ttl=51 time=33.0 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=3 ttl=51 time=40.0 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=4 ttl=51 time=33.8 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=5 ttl=51 time=38.1 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=6 ttl=51 time=40.9 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=7 ttl=51 time=39.5 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=8 ttl=51 time=38.5 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=9 ttl=51 time=39.5 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=10 ttl=51 time=31.8 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=11 ttl=51 time=33.8 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=12 ttl=51 time=33.8 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=13 ttl=51 time=34.3 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=14 ttl=51 time=36.4 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=15 ttl=51 time=34.0 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=16 ttl=51 time=42.4 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=17 ttl=51 time=33.3 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=18 ttl=51 time=54.4 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=19 ttl=51 time=33.4 ms
`[A64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=20 ttl=51 time=32.6 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=21 ttl=51 time=35.8 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=22 ttl=51 time=34.2 ms
`[B64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=23 ttl=51 time=33.8 ms
`[D64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=24 ttl=51 time=33.9 ms
64 bytes from bulma.dr.ufu.br (200.19.145.55): icmp_seq=25 ttl=51 time=33.3 ms
-- www.ufu.br ping statistics --
25 packets transmitted, 25 received, 0% packet loss, time 24237ms
rtt min/avg/max/mdev = 31.784/36.631/54.360/5.190 ms
root@user-VirtualBox:/home/user# ping -c 10 www . google . com
ping: br: Temporary failure in name resolution
root@user-VirtualBox:/home/user# ping -c 10 www . google . com
ping: com: Temporary failure in name resolution
root@user-VirtualBox:/home/user# 
```

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-Virtual...
File Edit View Terminal Tabs Help Terminal - root@user-VirtualBox:/home/user
Got answer:
-->>HEADER<- opcode: QUERY, status: SERVFAIL, id: 51032
flags: qr aa rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 0, ADDITIONAL: 1
OPT PSEUDOSECTION:
EDNS: version: 0, flags: udp: 65494
QUESTION SECTION:
www. IN A
Query time: 0 msec
SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
WHEN: Thu May 19 09:32:43 -03 2022
MSG SIZE rcvd: 32

Got answer:
-->>HEADER<- opcode: QUERY, status: NOERROR, id: 11686
flags: qr aa rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 0, ADDITIONAL: 1
OPT PSEUDOSECTION:
EDNS: version: 0, flags: udp: 65494
QUESTION SECTION:
IN A
Query time: 0 msec
SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
WHEN: Thu May 19 09:32:43 -03 2022
MSG SIZE rcvd: 28

Got answer:
-->>HEADER<- opcode: QUERY, status: SERVFAIL, id: 11686
flags: qr aa rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 0, ADDITIONAL: 1
OPT PSEUDOSECTION:
EDNS: version: 0, flags: udp: 65494
QUESTION SECTION:
google. IN A
Query time: 0 msec
SERVER: 127.0.0.53#53(127.0.0.53) (UDP)

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-Virtual...
File Edit View Terminal Tabs Help Terminal - root@user-VirtualBox:/home/user
OPT PSEUDOSECTION:
EDNS: version: 0, flags: udp: 65494
QUESTION SECTION:
google. IN A
Query time: 0 msec
SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
WHEN: Thu May 19 09:32:43 -03 2022
MSG SIZE rcvd: 35

Got answer:
-->>HEADER<- opcode: QUERY, status: NOERROR, id: 45576
flags: qr aa rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 0, ADDITIONAL: 1
OPT PSEUDOSECTION:
EDNS: version: 0, flags: udp: 65494
QUESTION SECTION:
IN A
Query time: 0 msec
SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
WHEN: Thu May 19 09:32:43 -03 2022
MSG SIZE rcvd: 28

Got answer:
-->>HEADER<- opcode: QUERY, status: SERVFAIL, id: 62898
flags: qr aa rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 0, ADDITIONAL: 1
OPT PSEUDOSECTION:
EDNS: version: 0, flags: udp: 65494
QUESTION SECTION:
com. IN A
Query time: 0 msec
SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
WHEN: Thu May 19 09:32:43 -03 2022
MSG SIZE rcvd: 32
root@user-VirtualBox:/home/user# 

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-Virtual...
File Edit View Terminal Tabs Help Terminal - root@user-VirtualBox:/home/user
Query time: 0 msec
SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
WHEN: Thu May 19 09:32:43 -03 2022
MSG SIZE rcvd: 32
root@user-VirtualBox:/home/user# nslookup www . google . com
Usage:
nslookup [-opt ...]           # interactive mode using default server
nslookup [-opt ...] -server    # interactive mode using 'server'
nslookup [-opt ...] host       # just look up 'host' using default server
nslookup [-opt ...] host server # just look up 'host' using 'server'
root@user-VirtualBox:/home/user# sudo apt install traceroute
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland2
Use 'sudo apt autoremove' to remove them.
The following NEW packages will be installed:
traceroute
0 upgraded, 0 newly installed, 0 to remove and 45 not upgraded.
After this operation, 152 kB of additional disk space will be used.
Get:1 http://br.archive.ubuntu.com/ubuntu jammy/universe amd64 traceroute amd64 1:2.1.0-2 [45,4 kB]
Fetched 45,4 kB in 8s (5,616 B/s)
Selecting previously unselected package traceroute.
(Reading database ... 203942 files and directories currently installed.)
Preparing to unpack .../traceroute_1%{ver}-%{rel}.deb ...
Unpacking traceroute (1:2.1.0-2) ...
Setting up traceroute (1:2.1.0-2) ...
update-alternatives: using /usr/bin/traceroute.db to provide /usr/bin/traceroute (traceroute) in auto mode
update-alternatives: using /usr/bin/traceroute6.db to provide /usr/bin/traceroute6 (traceroute6) in auto mode
update-alternatives: using /usr/bin/lft.db to provide /usr/bin/lft (lft) in auto mode
update-alternatives: using /usr/bin/traceproto.db to provide /usr/bin/traceproto (traceproto) in auto mode
update-alternatives: using /usr/bin/tcptraceroute.db to provide /usr/sbin/tcptraceroute (tcptraceroute) in auto mode
Processing triggers for man-db (2.10.2-1) ...
root@user-VirtualBox:/home/user# 

```

```

Usage:
nslookup [-opt ...]          # interactive mode using default server
nslookup [-opt ...] host      # interactive mode using 'host'
nslookup [-opt ...] host server # just look up 'host' using default server
nslookup [-opt ...] host server # just look up 'host' using 'server'
root@user-VirtualBox:/home/user# sudo apt install traceroute
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland2
Use 'apt autoremove' to remove them.
The following NEW packages will be installed:
traceroute
0 upgraded, 1 newly installed, 0 to remove and 45 not upgraded.
Need to get 45,4 kB of archives.
After this operation, 152 kB of additional disk space will be used.
Get:1 http://br.archive.ubuntu.com/ubuntu jammy/universe amd64 traceroute amd64 1:2.1.0-2 [45,4 kB]
Fetched 45,4 kB in 8s (5.616 B/s)
Selecting previously unselected package traceroute.
(Reading database ... 29942 files and directories currently installed.)
Preparing to unpack .../traceroute_1%{v}a2.1.0-2_amd64.deb ...
Unpacking traceroute (1:2.1.0-2) ...
Setting up traceroute (1:2.1.0-2) ...
update-alternatives: using /usr/bin/traceroute_db to provide /usr/bin/traceroute (traceroute) in auto mode
update-alternatives: using /usr/bin/traceroute6_db to provide /usr/bin/traceroute6 (traceroute6) in auto mode
update-alternatives: using /usr/bin/lft_db to provide /usr/bin/lft (lft) in auto mode
update-alternatives: using /usr/bin/traceproto_db to provide /usr/bin/traceproto (traceproto) in auto mode
update-alternatives: using /usr/bin/tcptraceroute_db to provide /usr/sbin/tcptraceroute (tcptraceroute) in auto mode
Processing triggers for man-db (2.10.2-1) ...
root@user-VirtualBox:/home/user# traceroute www.google.com.br
traceroute to www.google.com.br (142.251.128.3), 30 hops max, 60 byte packets
 1  gateway (10.0.2.2)  1.857 ms  1.828 ms  1.737 ms
 2  * *
 3  * *
 4  * *
 5  * *
 6  * *
 7  * *
 8  * *
 9  * *
10  * *
11  * *
12  * *
13  * *
14  * *
15  * *
16  * *
17  * *
18  * *
19  * *
20  * *
21  * *
22  * *
23  * *
24  * *
25  * *
26  * *
27  * *
28  * *
29  * *
30  * *
root@user-VirtualBox:/home/user# exit

```

```

root@user-VirtualBox:/home/user# traceroute www.google.com.br
traceroute to www.google.com.br (142.251.128.3), 30 hops max, 60 byte packets
 1  gateway (10.0.2.2)  1.857 ms  1.828 ms  1.737 ms
 2  * *
 3  * *
 4  * *
 5  * *
 6  * *
 7  * *
 8  * *
 9  * *
10  * *
11  * *
12  * *
13  * *
14  * *
15  * *
16  * *
17  * *
18  * *
19  * *
20  * *
21  * *
22  * *
23  * *
24  * *
25  * *
26  * *
27  * *
28  * *
29  * *
30  * *
root@user-VirtualBox:/home/user# exit

```

Capítulo 10 prints

```

root@user-VirtualBox:/home/user# apt update
Hit:1 http://br.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://br.archive.ubuntu.com/ubuntu jammy-updates InRelease [109 kB]
Get:3 http://security.ubuntu.com/ubuntu jammy-security InRelease [118 kB]
Get:4 http://br.archive.ubuntu.com/ubuntu jammy-backports InRelease [699 kB]
Get:5 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [157 kB]
Get:6 http://br.archive.ubuntu.com/ubuntu jammy-security/main amd64 Packages [82,4 kB]
Get:7 http://br.archive.ubuntu.com/ubuntu jammy-updates/main i386 Packages [81,6 kB]
Get:8 http://br.archive.ubuntu.com/ubuntu jammy-security/main i386 Packages [27,7 kB]
Get:9 http://br.archive.ubuntu.com/ubuntu jammy-security/main Translation-en [23,2 kB]
Get:10 http://br.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [41,4 kB]
Get:11 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [53,1 kB]
Get:12 http://br.archive.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [6,628 B]
Get:13 http://br.archive.ubuntu.com/ubuntu jammy-updates/main c-n-f Metadata [8 B]
Get:14 http://br.archive.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [105 kB]
Get:15 http://br.archive.ubuntu.com/ubuntu jammy-updates/main DEP-11 48x48 Icons [28,0 kB]
Get:16 http://br.archive.ubuntu.com/ubuntu jammy-security/restricted i386 Packages [19,4 kB]
Get:17 http://br.archive.ubuntu.com/ubuntu jammy-security/restricted Translation-en [15,7 kB]
Get:18 http://br.archive.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [456 B]
Get:19 http://br.archive.ubuntu.com/ubuntu jammy-security/universe i386 Packages [13,1 kB]
Get:20 http://br.archive.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [53,8 kB]
Get:21 http://br.archive.ubuntu.com/ubuntu jammy-security/universe Translation-en [16,0 kB]
Get:22 http://br.archive.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [1208 B]
Get:23 http://br.archive.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [716 B]
Get:24 http://br.archive.ubuntu.com/ubuntu jammy-updates/main DEP-11 64x64 Icons [30,3 kB]
Get:25 http://br.archive.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [4,192 kB]
Get:26 http://br.archive.ubuntu.com/ubuntu jammy-security/multiverse i386 Packages [1,032 kB]
Get:27 http://br.archive.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [900 B]
Get:28 http://br.archive.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [228 B]
72% [24 icons-64x64 22,4 kB/30,3 kB 74%]

```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-Virtual... Terminal - root@user-VirtualBox:/home/user
File Edit View Terminal Tabs Help
systemd-sysctl timed-timesyncd ubuntu-adantage-tools udev uno-libs-private ure wpasupplicant zenity zenity-common
62 upgraded, 5 newly installed, 0 to remove and 0 not upgraded.
12 standard releases
Need to get 224 MB/493 MB of archives.
After this operation, 559 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpxc3 amd64 2:8.39-13ubuntu0.22.04.1 [246 kB]
Get:2 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libxml2 amd64 2:9.13+dfsg-lubuntu0.1 [763 kB]
Get:3 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 bind9-host amd64 1:9.18.1-lubuntu1.1 [43,7 kB]
Get:4 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 bind9-dnsutils amd64 1:9.18.1-lubuntu1.1 [149 kB]
Get:5 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 bind9-lib amd64 1:9.18.1-lubuntu1.1 [1,215 kB]
Get:6 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3-problem-report all 2.20.11-0ubuntu0.22.04.1 [10,2 kB]
Get:7 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libtinfo5 amd64 1:6.5.1+dfsg-1+lubuntu0.1 [108,0 kB]
Get:8 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apport all 2.20.11-0ubuntu0.22.04.1 [98,0 kB]
Get:9 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apport-gtk all 2.20.11-0ubuntu0.22.04.1 [133 kB]
Get:10 http://br.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 dnsutils all 1:9.18.3-lubuntu1.1 [3,916 kB]
Get:11 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 fonts-opensymbol all 2:10.12+1b07.3.3-0ubuntu0.22.04.1 [101 kB]
Get:12 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 gnome-desktop-data all 42.1-lubuntu1 [2,8 kB]
Get:13 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libgname-desktop-3:19 amd64 42.1-lubuntu1 [120 kB]
Get:14 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libldap-2.5.9+ amd64 2.5.11+dfsg-1-explubuntu1 [184 kB]
Get:15 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libldap-common all 2.5.11+dfsg-1-explubuntu1 [16,8 kB]
Get:16 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 liblouis-salhelperc3-3 amd64 1:7.3.3-0ubuntu0.22.04.1 [195 kB]
Get:17 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 liblouis-salhelperc3-3 amd64 1:7.3.3-0ubuntu0.22.04.1 [17,0 kB]
Get:18 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 liblouis-cpu3 amd64 1:7.3.3-0ubuntu0.22.04.1 [87,8 kB]
Get:19 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 liblouis-cpuhelpc3-3 amd64 1:7.3.3-0ubuntu0.22.04.1 [343 kB]
Get:20 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 ure amd64 1:7.3.3-0ubuntu0.22.04.1 [1,311 kB]
Get:21 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 uno-libs-private amd64 1:7.3.3-0ubuntu0.22.04.1 [232 kB]
Get:22 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libuno-purprenvhelpc3-3 amd64 1:7.3.3-0ubuntu0.22.04.1 [15,8 kB]
Get:23 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-help-common all 17.3.3-0ubuntu0.22.04.1 [2,832 kB]
Get:24 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-impress amd64 1:7.3.3-0ubuntu0.22.04.1 [1,398 kB]
Get:25 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-impress amd64 1:7.3.3-0ubuntu0.22.04.1 [1,368 kB]
Get:26 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-draw amd64 1:7.3.3-0ubuntu0.22.04.1 [3,228 kB]
Get:27 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-draw amd64 1:7.3.3-0ubuntu0.22.04.1 [72,9 kB]
Get:28 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-qm amd64 1:7.3.3-0ubuntu0.22.04.1 [568 kB]
Get:29 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3-uno amd64 1:7.3.3-0ubuntu0.22.04.1 [148 kB]
Get:30 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-math amd64 1:7.3.3-0ubuntu0.22.04.1 [597 kB]
Get:31 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-base-core amd64 1:7.3.3-0ubuntu0.22.04.1 [973 kB]
Get:32 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-writer amd64 1:7.3.3-0ubuntu0.22.04.1 [10,3 MB]
Get:33 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-core amd64 1:7.3.3-0ubuntu0.22.04.1 [48,4 MB]
7% [39 liboffice-writer 57,2 MB/16,3 MB 1%
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-Virtual... Terminal - root@user-VirtualBox:/home/user
File Edit View Terminal Tabs Help
62 upgraded, 5 newly installed, 0 to remove and 0 not upgraded.
12 standard releases
Need to get 224 MB/493 MB of archives.
After this operation, 559 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpxc3 amd64 2:8.39-13ubuntu0.22.04.1 [246 kB]
Get:2 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libxml2 amd64 2:9.13+dfsg-lubuntu0.1 [763 kB]
Get:3 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 bind9-host amd64 1:9.18.1-lubuntu1.1 [43,7 kB]
Get:4 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 bind9-dnsutils amd64 1:9.18.1-lubuntu1.1 [149 kB]
Get:5 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 bind9-lib amd64 1:9.18.1-lubuntu1.1 [1,215 kB]
Get:6 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3-problem-report all 2.20.11-0ubuntu0.22.04.1 [10,2 kB]
Get:7 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libtinfo5 amd64 1:6.5.1+dfsg-1+lubuntu0.1 [108,0 kB]
Get:8 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apport all 2.20.11-0ubuntu0.22.04.1 [98,0 kB]
Get:9 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apport-gtk all 2.20.11-0ubuntu0.22.04.1 [133 kB]
Get:10 http://br.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 dnsutils all 1:9.18.3-lubuntu1.1 [3,916 kB]
Get:11 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 fonts-opensymbol all 2:10.12+1b07.3.3-0ubuntu0.22.04.1 [101 kB]
Get:12 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 gnome-desktop-data all 42.1-lubuntu1 [2,8 kB]
Get:13 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libgname-desktop-3:19 amd64 42.1-lubuntu1 [120 kB]
Get:14 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libldap-2.5.9+ amd64 2.5.11+dfsg-1-explubuntu1 [184 kB]
Get:15 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libldap-common all 2.5.11+dfsg-1-explubuntu1 [16,8 kB]
Get:16 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 liblouis-salhelperc3-3 amd64 1:7.3.3-0ubuntu0.22.04.1 [195 kB]
Get:17 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 liblouis-salhelperc3-3 amd64 1:7.3.3-0ubuntu0.22.04.1 [17,0 kB]
Get:18 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 liblouis-cpu3 amd64 1:7.3.3-0ubuntu0.22.04.1 [87,8 kB]
Get:19 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 liblouis-cpuhelpc3-3 amd64 1:7.3.3-0ubuntu0.22.04.1 [343 kB]
Get:20 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 ure amd64 1:7.3.3-0ubuntu0.22.04.1 [1,311 kB]
Get:21 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 uno-libs-private amd64 1:7.3.3-0ubuntu0.22.04.1 [232 kB]
Get:22 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libuno-purprenvhelpc3-3 amd64 1:7.3.3-0ubuntu0.22.04.1 [15,8 kB]
Get:23 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-help-common all 17.3.3-0ubuntu0.22.04.1 [2,832 kB]
Get:24 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-impress amd64 1:7.3.3-0ubuntu0.22.04.1 [1,398 kB]
Get:25 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-impress amd64 1:7.3.3-0ubuntu0.22.04.1 [1,368 kB]
Get:26 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-draw amd64 1:7.3.3-0ubuntu0.22.04.1 [3,228 kB]
Get:27 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-draw amd64 1:7.3.3-0ubuntu0.22.04.1 [72,9 kB]
Get:28 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-qm amd64 1:7.3.3-0ubuntu0.22.04.1 [568 kB]
Get:29 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3-uno amd64 1:7.3.3-0ubuntu0.22.04.1 [148 kB]
Get:30 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-math amd64 1:7.3.3-0ubuntu0.22.04.1 [597 kB]
Get:31 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-base-core amd64 1:7.3.3-0ubuntu0.22.04.1 [973 kB]
Get:32 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-writer amd64 1:7.3.3-0ubuntu0.22.04.1 [10,3 MB]
Get:33 http://br.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libreoffice-core amd64 1:7.3.3-0ubuntu0.22.04.1 [48,4 MB]
7% [39 liboffice-writer 40,4 MB/48,4 MB 100%]
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-Virtual... Terminal - root@user-VirtualBox:/home/user
File Edit View Terminal Tabs Help
Processing triggers for desktop-file-utils (0.26-1ubuntu3) ...
Processing triggers for initramfs-tools (0.140ubuntu13) ...
update-initramfs: generating boot/initrd.img-5.15.0-27-generic
The initramfs will attempt to mount /rescue on /dev/sda1
i: Set the RESUME variable to override this.
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnomemenu (3.36.0-lubuntu3) ...
Processing triggers for libglib2.0-0:amd64 (2.72.1-1) ...
Processing triggers for linux-image-5.15.0-30-generic (5.15.0-30.31) ...
/etc/kernel/postinst.d/initramfs-tools:
update-initramfs: generating /boot/initrd.img-5.15.0-30-generic
The initramfs will attempt to mount /rescue on /dev/sda1
i: Set the RESUME variable to override this.
/etc/kernel/postinst.d/vboxadd:
VirtualBox Guest Additions: Building the modules for kernel 5.15.0-30-generic.

This system is currently not set up to build kernel modules.
Please install the gcc make perl packages from your distribution.
/etc/kernel/postinst.d/dz-update-grub:
Sourcing file '/etc/default/grub'
Generating grub configuration file ...
Generating grub configuration file ...
Found Linux image: /boot/vmlinuz-5.15.0-30-generic
Found initrd image: /boot/initrd.img-5.15.0-30-generic
Found Linux image: /boot/vmlinuz-5.15.0-27-generic
Found initrd image: /boot/initrd.img-5.15.0-27-generic
Found Linux image: /boot/vmlinuz-5.15.0-25-generic
Found initrd image: /boot/initrd.img-5.15.0-25-generic
Found memtest86+ image: /boot/memtest86+.elf
memtest86+ will not be executed to detect other bootable partitions.
Warning: os-prober will not be executed to detect other bootable partitions.
Systems on them will not be added to the GRUB boot configuration.
Check GRUB_DISABLE_OS_PROBER documentation entry.
done
root@user-VirtualBox:/home/user# apt list -- upgradeable
Listing... Done
root@user-VirtualBox:/home/user#
```

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-VirtualBox: /home/user
Terminal - root@user-VirtualBox: /home/user
File Edit View Terminal Tabs Help
Check GRUB_DISABLE_OS_PROBER documentation entry.
done
root@user-VirtualBox:/home/user# apt list --upgradable
Listing... Done
root@user-VirtualBox:/home/user# apt install vim
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
vim is already the newest version (2:8.2.3995-1ubuntu2).
The following packages were automatically installed and are no longer required:
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland2 linux-headers-5.15.0-25 linux-headers-5.15.0-25-generic linux-image-5.15.0-25-generic
Use 'apt autoremove' to remove them
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@user-VirtualBox:/home/user# apt install vim
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
vim is already the newest version (2:8.2.3995-1ubuntu2).
The following packages were automatically installed and are no longer required:
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland2 linux-headers-5.15.0-25 linux-headers-5.15.0-25-generic linux-image-5.15.0-25-generic
Use 'apt autoremove' to remove them
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@user-VirtualBox:/home/user# apt remove vim
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland2 linux-headers-5.15.0-25 linux-headers-5.15.0-25-generic linux-image-5.15.0-25-generic
Use 'apt autoremove' to remove them
The following packages will be REMOVED:
  vim
0 upgraded, 0 newly installed, 1 to remove and 0 not upgraded.
After this operation, 4.010 kB disk space will be freed.
Do you want to continue? [Y/n] y
[Reading database ... 95%

```

Prints capítulo 14

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-Virtua... Terminal - user@user-VirtualBox -
Terminal - user@user-VirtualBox: ~
File Edit View Terminal Tabs Help
user@user-VirtualBox:~$ uname -a
Linux user-VirtualBox 5.15.0-27-generic #28-Ubuntu SMP Thu Apr 14 04:55:28 UTC 2022 x86_64 x86_64 x86_64 GNU/Linux
user@user-VirtualBox:~$ uname -s
Linux
user@user-VirtualBox:~$ uname -n
user-VirtualBox
user@user-VirtualBox:~$ uname -r
5.15.0-27-generic
user@user-VirtualBox:~$ uname -v
#28-Ubuntu SMP Thu Apr 14 04:55:28 UTC 2022
user@user-VirtualBox:~$ head - n1
<-- standard input <-->
`|[C][[B][[D]

^C
user@user-VirtualBox:~$ lscpu
Architecture:          x86_64
CPU op-mode(s):        32-bit, 64-bit
Address sizes:         39 bits physical, 48 bits virtual
Byte Order:            Little Endian
CPU(s):                2
On-line CPU(s) list:  1,2
Vendor ID:             GenuineIntel
Model name:            Intel(R) Core(TM) i5-6200U CPU @ 2.30GHz
CPU family:            6
Model:                 78
Thread(s) per core:   1
Core(s) per socket:   2
Socket(s):            1
Stepping:              9
BogomIPS:              4799.99
Flags:                 fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx rdtscp lm constant_tsc rep_good nopl xtopology nonstop_tsc cpuid tsc_known_freq pni pclmulqdq ssse3 cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx rdrand hypervisor lahf_lm abm 3dnowprefetch invpcid_single pti fsgsbase avx2 invpcid rdseed clflushopt md_clear flush_lid
Virtualization features:
  Hypervisor vendor:   KVM
  Virtualization type: full
  Caches (sum of all):
```

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
CPU op-mode(s): 32-bit, 64-bit
Address sizes: 39 bits physical, 48 bits virtual
Byte Order: Little Endian
CPU(s): 2
On-line CPU(s) list: 0,1
Vendor ID: GenuineIntel
Model name: Intel(R) Core(TM) i5-6200U CPU @ 2.30GHz
CPU family: 6
Model: 78
Threads(s) per core: 1
Core(s) per socket: 2
Socket(s): 1
Stepping: 3
BogomIPS: 4799.99
Flags: fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pce cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx rdtscp lm constant_tsc rep_good nopl xttopology nonstop_tsc cpuid tsc freq_pni pclmulqdq ssse3 cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx rdrand hypervisor lahf_lm abm 3dnowprefetch invpcid_single pti fsgsbbase avx2 invpcid rdseed clflushopt md_clear flush_l1d
Virtualization features:
Hypervisor vendor: KVM
Virtualization type: full
Caches (sum of all):
L1d: 64 KiB (2 instances)
L1i: 64 KiB (2 instances)
L2: 512 KiB (2 instances)
L3: 6 MiB (2 instances)
NUMA:
NUMA node(s): 1
NUMA node0 CPU(s): 0,1
Vulnerabilities:
L1tf: Mitigation: VMX unsupported
L1tf: Mitigation: PTE Inversion
Mds: Mitigation: Clear CPU buffers; SMT Host state unknown
Meltdown: Mitigation: PTI
Spec store bypass: Vulnerable
Spectre v1: Mitigation: usercopy/swaps barriers and user pointer sanitization
Spectre v2: Mitigation: Retpolines, STIBP disabled, RSB filling
Srbds: Unknown: Dependent on hypervisor status
Tsx async abort: Not affected
user@user-VirtualBox:~ [ ]

```

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
user@user-VirtualBox:~ $ lsusb
Command 'lsusb' not found, did you mean:
command 'lsusb' from deb usbutils (1:0.14-1build1)
command 'lsusb' from deb libgimpimage-client (8.1.9+dfsg-10build1)
command 'lsusb' from deb slurm-clint-torque (21.08.5-2ubuntu1)
Try: sudo apt install <deb name>
user@user-VirtualBox:~ $ lsusb
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 002 Device 002: ID 80ee:0021 VirtualBox USB Tablet
Bus 002 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
user@user-VirtualBox:~ $ lspci
00:00.0 Host bridge: Intel Corporation 400FX - 82441FX PMC [Natoma] (rev 02)
00:00.1 IDE interface: Intel Corporation 82371SB PIIX3 ISA [Natoma/Triton II]
00:01.1 IDE interface: Intel Corporation 82371AB/EB/MB PIIX4 IDE (rev 01)
00:02.0 VGA compatible controller: VMware SVGA II Adapter
00:03.0 Ethernet controller: Intel Corporation 02540EM Gigabit Ethernet Controller (rev 02)
00:04.0 System peripheral: InnoTek Systemberatung GmbH VirtualBox Guest Service
00:05.0 Multimedia audio controller: Intel Corporation 82801AA AC'97 Audio Controller (rev 01)
00:06.0 USB controller: Apple Inc. KeyLargo/Intrepid USB
00:07.0 Bridge: Intel Corporation 82371AB/EB/MB PIIX4 ACPI (rev 08)
00:08.0 Multimedia controller: Intel Corporation 82801FB/FRM/FRW (ICH8 Family) USB2 EHCI Controller
00:09.0 SATA controller: Intel Corporation 82801HM/HEM (ICH8M/ICH8M-E) SATA Controller [AHCI mode] (rev 02)
user@user-VirtualBox:~ $ lsbk
NAME   MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0   7:0    0   4K  1 loop /snap/bare/5
loop1   7:1    0 61.9M 1 loop /snap/core20/1405
loop2   7:2    0 248.8M 1 loop /snap/gnome-3-38-2004/99
loop3   7:3    0 160.6M 1 loop /snap/firefox/1351
loop4   7:4    0 61.9M 1 loop /snap/core20/1434
loop5   7:5    0 160.4M 1 loop /snap/firefox/100
loop6   7:6    0 32.3M 1 loop /snap/common-themes/1534
loop7   7:7    0 43.2M 1 loop /snap/snappy/15177
loop8   7:8    0 44.7M 1 loop /snap/snappy/15534
sda    8:0    0 150G 0 disk
└─sda1  8:1    0 2,1G 0 part [SWAP]
└─sda2  8:2    0  95M 0 part /boot/efi
└─sda3  8:3    0 147.8G 0 part /
sr0   11:0   1 58.4M 0 rom
user@user-VirtualBox:~ [ ]

```

```

Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-VirtualBox:/home/user
File Edit View Terminal Tabs Help
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/sda: 150 GiB, 161061273600 bytes, 314572800 sectors
Disk model: VBOX HARDDISK
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
Disk identifier: 469b1980-56f6-4e0e-9251-d8bf800756f9

Device      Start    End  Sectors  Size Type
/dev/sda1    2048 440163 4389196  2.1G Linux Swap
/dev/sda2  4491264 4685823 194560  95M EFI System
/dev/sda3  4685824 314570751 309884928 147.8G Linux filesystem

Disk /dev/loop8: 44.68 MiB, 46845952 bytes, 91496 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
user@user-VirtualBox:~ $ apt - get install pmciautols
E: Invalid operation get
root@user-VirtualBox:/home/user# apt-get install pmciautols
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
 chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland2 linux-headers-5.15.0-25 generic linux-headers-5.15.0-25-generic linux-image-5.15.0-25-generic
 linux-modules-5.15.0-25-generic linux-modules-extra-5.15.0-25-generic vim-runtime
Use 'apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@user-VirtualBox:/home/user# [ ]

```

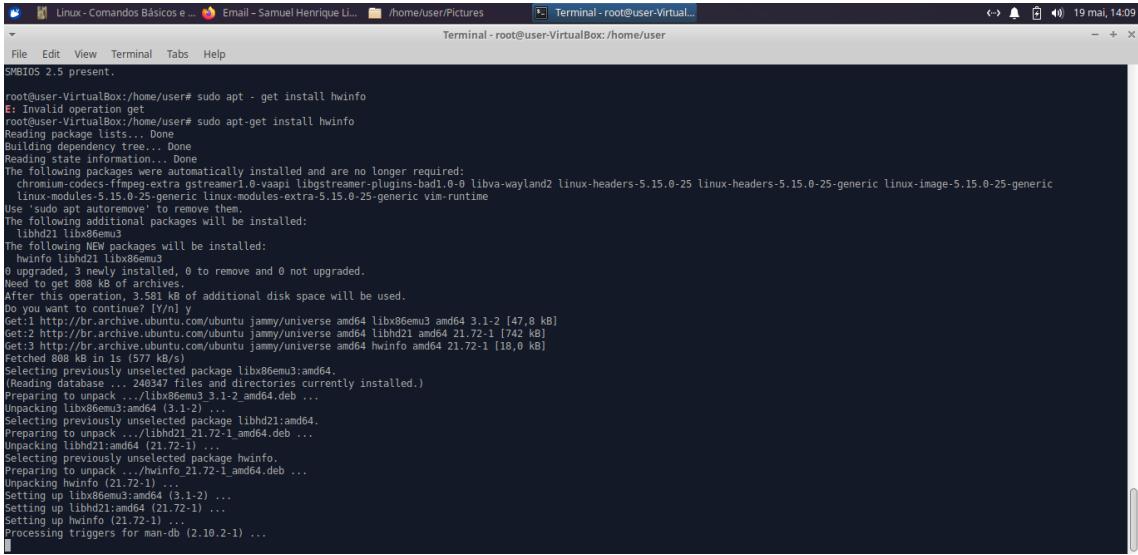
```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
Disk identifier: 4696198D-56F6-4E0E-9251-D88FB00756F9

Device      Start    End  Sectors  Size Type
/dev/sda1       2048   4491263   4489216  2.1G Linux swap
/dev/sda2     4491264   4685823   194560   95M EFI System
/dev/sda3     4685824 314570751 309884928 147.8G Linux filesystem

Disk /dev/loop0: 44.68 MiB, 46845952 bytes, 91496 sectors
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
user@user-VirtualBox:~$ apt - get install pcmciautils
E: Invalid operation get
user@user-VirtualBox:~$ su
Password:
root@user-VirtualBox:/home/user# apt - get install pcmciautils
E: Invalid operation get
root@user-VirtualBox:/home/user# apt-get install pcmciautils
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
pcmciautils is already the newest version (0.18-13build1).
pcmciautils set to manually installed.
The following packages were automatically installed and are no longer required:
  chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0 libva-wayland2 linux-headers-5.15.0-25 linux-headers-5.15.0-25-generic linux-image-5.15.0-25-generic vim-runtime
Use 'apt autoremove' to remove them
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@user-VirtualBox:/home/user# lpcmcia
root@user-VirtualBox:/home/user# exit
exit
user@user-VirtualBox:~$ free
              total        used        free      shared  buff/cache   available
Mem:      2476532     1228380      80472     25080     1167680     1033500
Swap:     2244604      330212     1914392
user@user-VirtualBox:~$
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - user@user-VirtualBox:~
File Edit View Terminal Tabs Help
root@user-VirtualBox:/home/user# lpcmcia
root@user-VirtualBox:/home/user# exit
exit
user@user-VirtualBox:~$ free -m
              total        used        free      shared  buff/cache   available
Mem:      2476532     1228380      80472     25080     1167680     1033500
Swap:     2244604      330212     1914392
user@user-VirtualBox:~$ free -m
              total        used        free      shared  buff/cache   available
Mem:      2418         1204         77        24      1136        1004
Swap:     2191         322        1869
user@user-VirtualBox:~$ vmstat -s
2476532 K total memory
1237504 K used memory
1084012 K active memory
1046716 K inactive memory
77064 K free memory
31184 K buffer memory
1130780 K swap cache
2244604 K total swap
330212 K used swap
1914392 K free swap
158887 non-nice user cpu ticks
6761 nice user cpu ticks
56571 system cpu ticks
3504651 idle cpu ticks
291362 IO-wait cpu ticks
    0 IRQ cpu ticks
    17708 softirq cpu ticks
    0 stolen cpu ticks
4533958 pages paged in
6138577 pages paged out
21055 pages swapped in
96551 pages swapped out
9123603 interrupts
13997869 CPU context switches
1652959488 boot time
    41087 forks
user@user-VirtualBox:~$
```

```
Linux - Comandos Básicos e ... Email - Samuel Henrique Li... /home/user/Pictures Terminal - root@user-VirtualBox:/home/user
File Edit View Terminal Tabs Help
          6761 nice user cpu ticks
          56571 system cpu ticks
          3504651 idle cpu ticks
          291362 IO-wait cpu ticks
            0 IRQ cpu ticks
          17708 softirq cpu ticks
            0 stolen cpu ticks
        4533958 pages paged in
        6138577 pages paged out
        21055 pages swapped in
        96551 pages swapped out
        9123603 interrupts
        13997869 CPU context switches
      1652959488 boot time
        41087 forks
user@user-VirtualBox:~$ lsmem
Command 'lsmem' not found, did you mean:
  command 'lsmem' from deb util-linux (2.37.2-4ubuntu3)
Try: sudo apt install <deb name>
user@user-VirtualBox:~$ lsmem
          RANGE           SIZE STATE REMOVABLE BLOCK
0x0000000000000000-0x000000009fffffff 2,56 online      yes 0-19
Memory block size:      128M
Total online memory:    2.5G
Total offline memory:   0B
user@user-VirtualBox:~$ dmidecode -t 17
# dmidecode 3.3
/sys/firmware/dmi/tables/smbios_entry_point: Permission denied
Scanning /dev/mem for entry point.
/dev/mem: Permission denied
user@user-VirtualBox:~$ su
Password:
root@user-VirtualBox:/home/user# dmidecode -t 17
# dmidecode 3.3
Getting SMBIOS data from sysfs.
SMBIOS 2.5 present.
root@user-VirtualBox:/home/user#
```



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```
SMBIOS 2.5 present.  
root@user-VirtualBox:/home/user# sudo apt - get install hwinfo  
E: Invalid operation: get  
root@user-VirtualBox:/home/user# sudo apt-get install hwinfo  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libgstreamer-plugins-bad1.0-0 libva-wayland2 linux-headers-5.15.0-25 linux-headers-5.15.0-25-generic linux-image-5.15.0-25-generic  
Use 'apt autoremove' to remove them.  
The following additional packages will be installed:  
  libhd21 libx86emu3  
The following NEW packages will be installed:  
  hwinfo libhd21 libx86emu3  
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.  
Need to get 888 kB of archives.  
After this operation, 3,581 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://br.archive.ubuntu.com/ubuntu jammy/universe amd64 libx86emu3 amd64 3.1-2 [47,8 kB]  
Get:2 http://br.archive.ubuntu.com/ubuntu jammy/universe amd64 libhd21 amd64 21.72-1 [742 kB]  
Get:3 http://br.archive.ubuntu.com/ubuntu jammy/universe amd64 hwinfo amd64 21.72-1 [18,0 kB]  
Fetched 808 kB in 0s (577 kB/s)  
Selecting previously unselected package libx86emu3:amd64.  
(Reading database... 240347 files and directories currently installed.)  
Preparing to unpack .../libx86emu3_3.1-2_amd64.deb ...  
Unpacking libx86emu3:amd64 (3.1-2)...  
Selecting previously unselected package libhd21:amd64.  
Preparing to unpack .../libhd21_21.72-1_amd64.deb ...  
Unpacking libhd21:amd64 (21.72-1)...  
Selecting previously unselected package hwinfo.  
Preparing to unpack .../hwinfo_21.72-1_amd64.deb ...  
Unpacking hwinfo (21.72-1) ...  
Setting up libx86emu3:amd64 (3.1-2) ...  
Setting up libhd21:amd64 (21.72-1) ...  
Setting up hwinfo (21.72-1) ...  
Processing triggers for man-db (2.10.2-1) ...
```