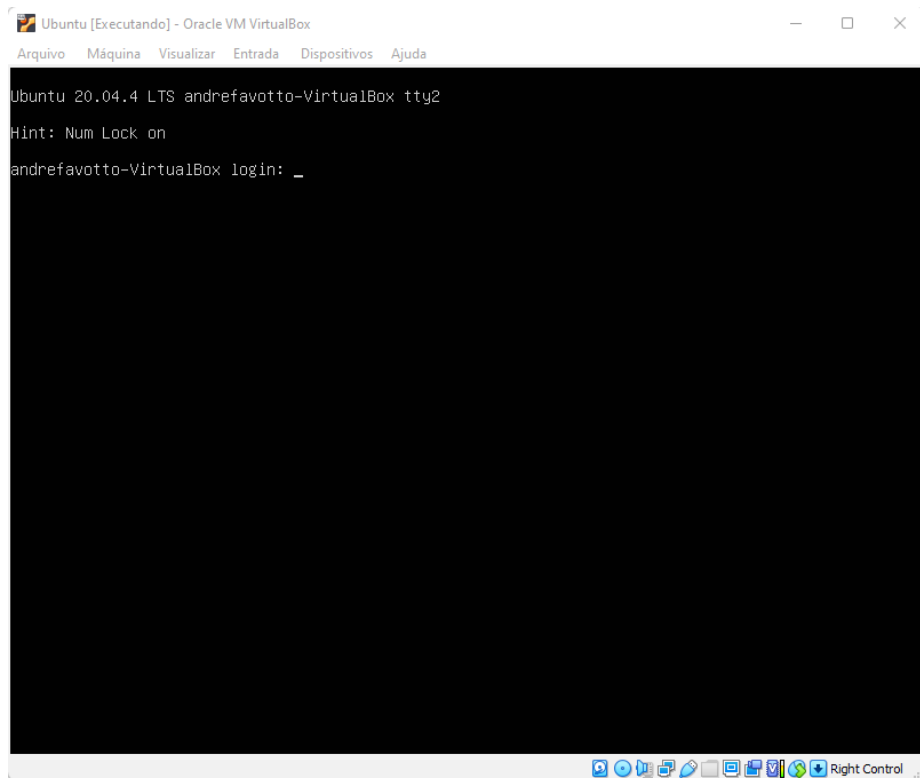


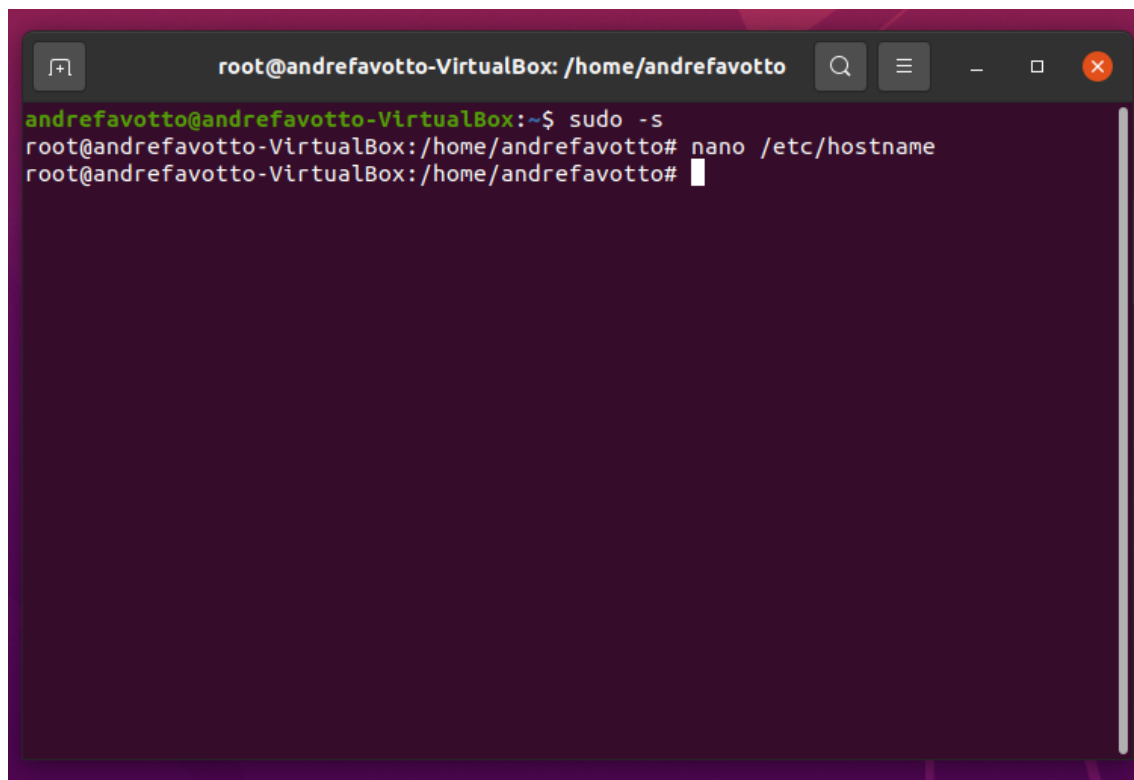
André de Oliveira Águila Favoto - 11811EAU013

- Acessando terminal do Linux – sem interface gráfica

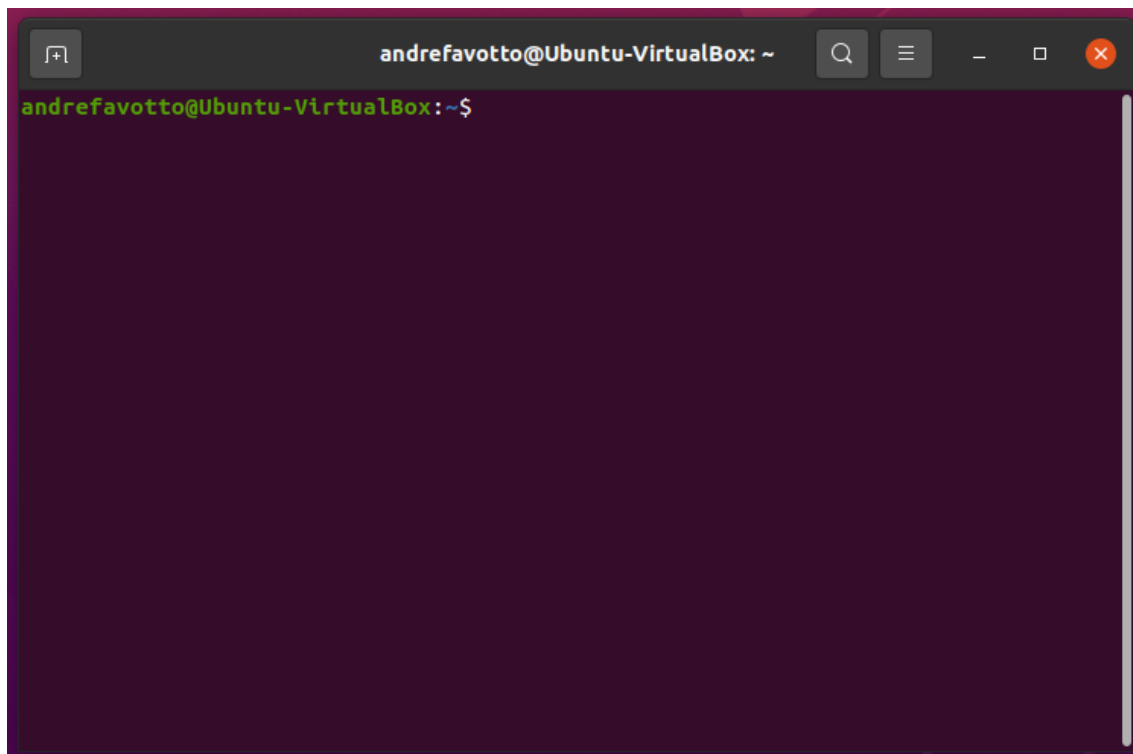


Alterando nome de usuário

Antes:



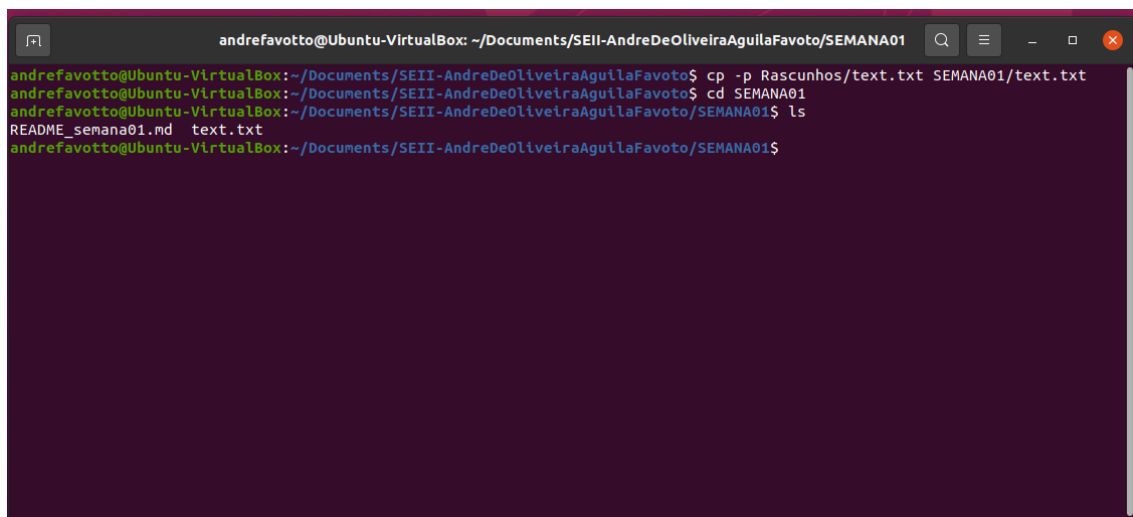
Depois (foi necessário reboot):



```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$
```

A terminal window with a dark purple background. The title bar shows 'andrefavotto@Ubuntu-VirtualBox: ~'. The prompt is 'andrefavotto@Ubuntu-VirtualBox:~\$'.

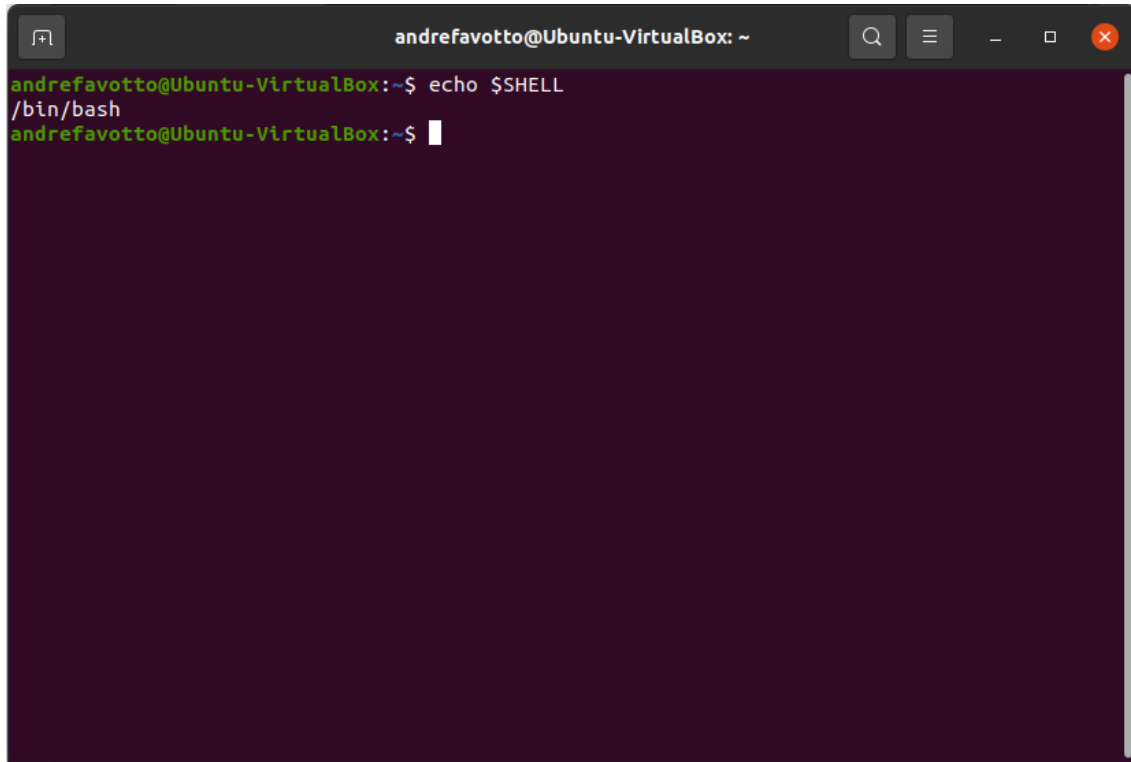
Copiando arquivos



```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ cp -p Rascunhos/text.txt SEMANA01/text.txt  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ cd SEMANA01  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ ls  
README_semana01.md  text.txt  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$
```

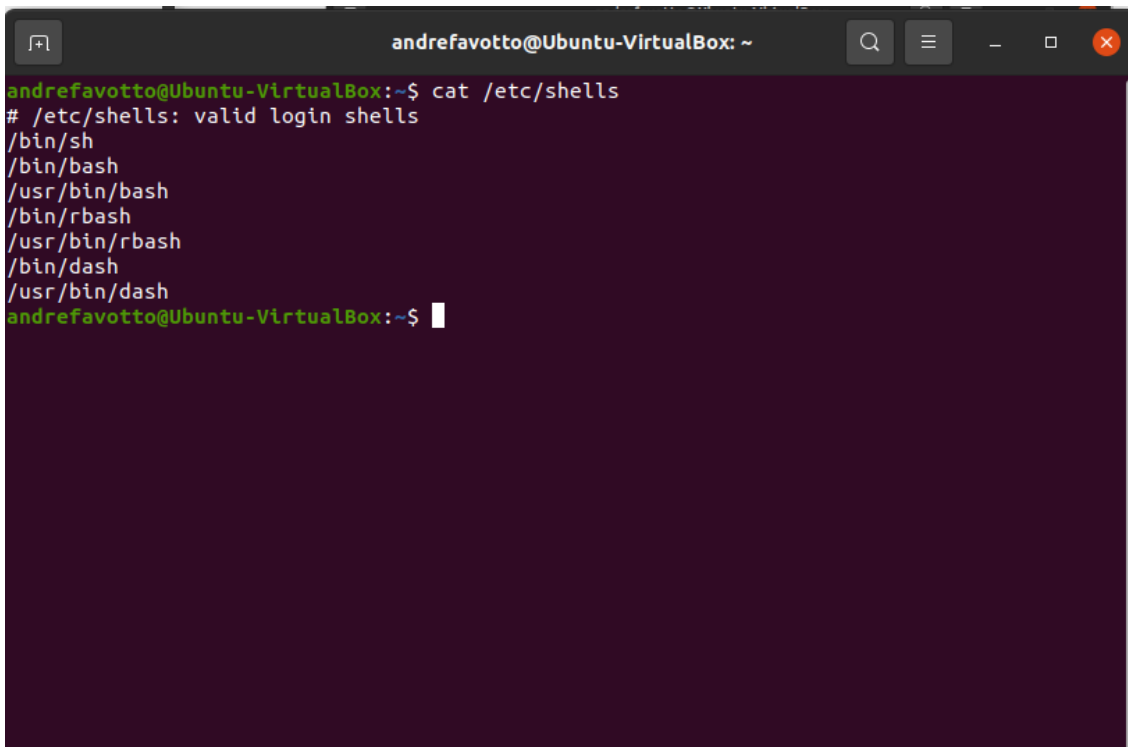
A terminal window with a dark purple background. The title bar shows 'andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01'. The commands and output are as follows:
1. Command: `cp -p Rascunhos/text.txt SEMANA01/text.txt`
2. Command: `cd SEMANA01`
3. Command: `ls`
4. Output: `README_semana01.md text.txt`
5. Prompt: `andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$`

Localizando shell atual

A terminal window titled 'andrefavotto@Ubuntu-VirtualBox: ~' with search, menu, and window control icons. The user enters 'echo \$SHELL' and the output is '/bin/bash'.

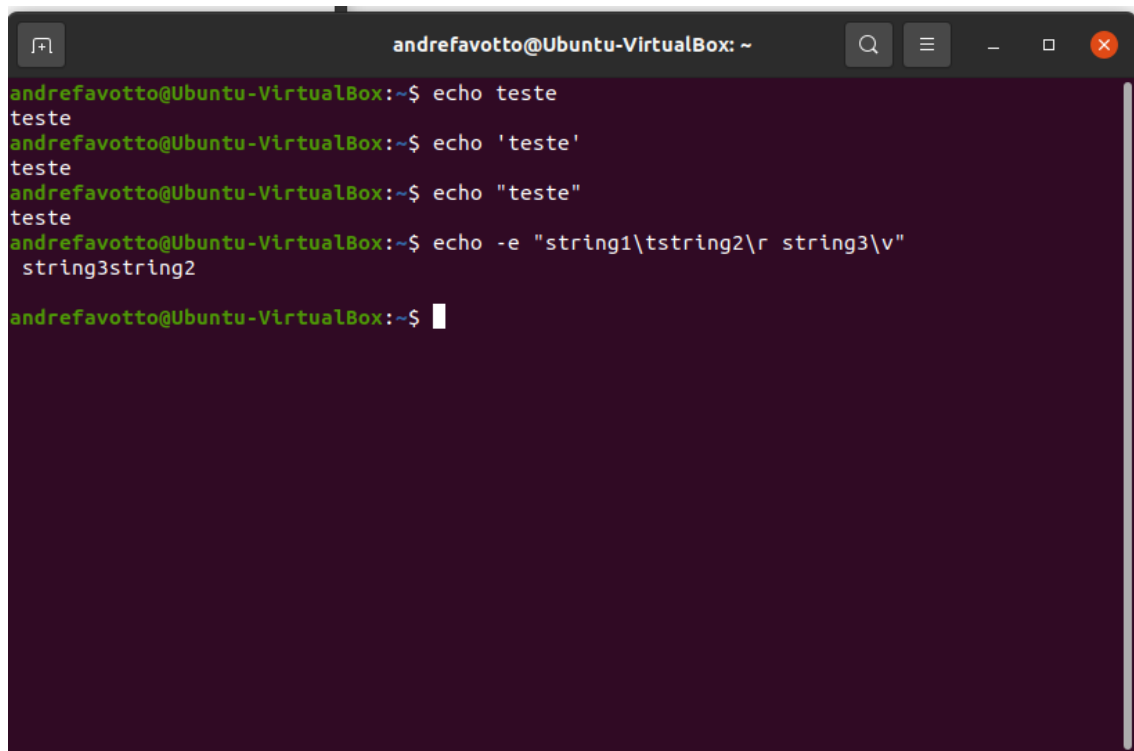
```
andrefavotto@Ubuntu-VirtualBox:~$ echo $SHELL
/bin/bash
andrefavotto@Ubuntu-VirtualBox:~$
```

Identificando shells instalados

A terminal window titled 'andrefavotto@Ubuntu-VirtualBox: ~' with search, menu, and window control icons. The user enters 'cat /etc/shells' and the output lists valid login shells.

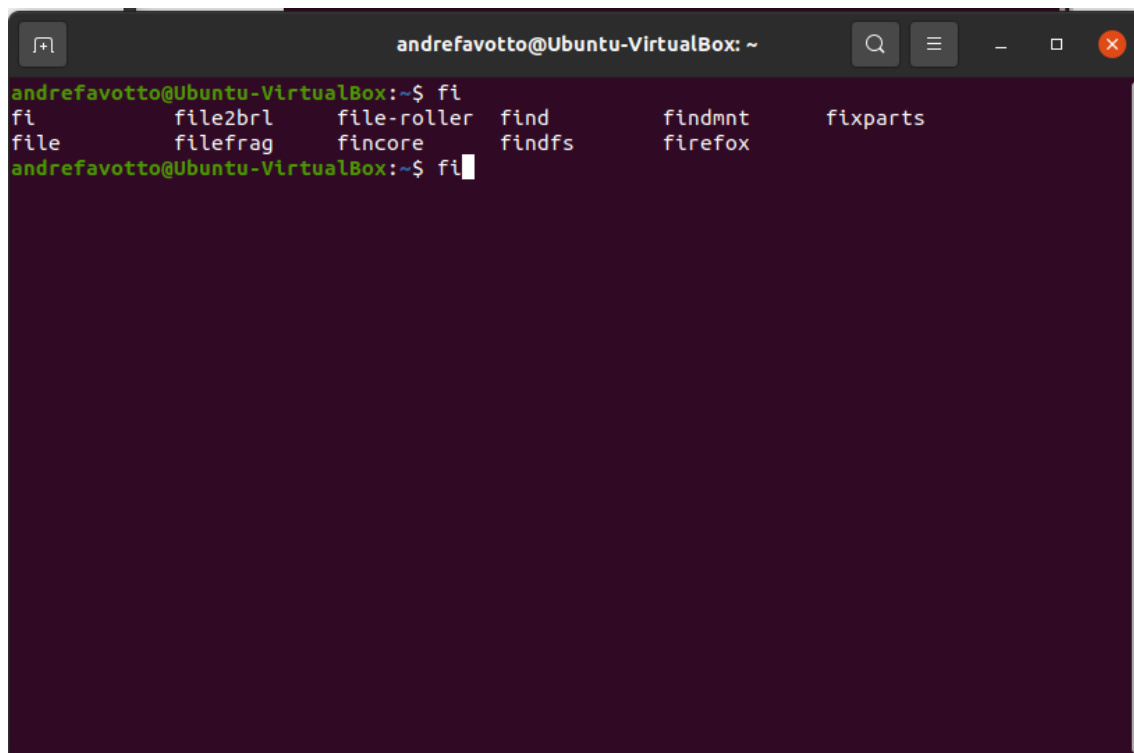
```
andrefavotto@Ubuntu-VirtualBox:~$ cat /etc/shells
# /etc/shells: valid login shells
/bin/sh
/bin/bash
/usr/bin/bash
/bin/rbash
/usr/bin/rbash
/bin/dash
/usr/bin/dash
andrefavotto@Ubuntu-VirtualBox:~$
```

Usando o comando echo e a opção -e



```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ echo teste  
teste  
andrefavotto@Ubuntu-VirtualBox:~$ echo 'teste'  
teste  
andrefavotto@Ubuntu-VirtualBox:~$ echo "teste"  
teste  
andrefavotto@Ubuntu-VirtualBox:~$ echo -e "string1\tstring2\r string3\v"  
string3string2  
andrefavotto@Ubuntu-VirtualBox:~$
```

Usando a busca de comando a partir de um trecho digitado



```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ fi  
fi          file2brl    file-roller find       findmnt    fixparts  
file        filefrag   fincore    findfs     firefox  
andrefavotto@Ubuntu-VirtualBox:~$ fi
```

Comando history + grep

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ history | grep text.txt  
73 nano text.txt  
75 cp -p /Rascunhos/text.txt /SEMANA01/text.txt  
84 cp -p Rascunhos/text.txt SEMANA01/text.txt  
101 history | grep text.txt  
andrefavotto@Ubuntu-VirtualBox:~$
```

Demais comandos referentes ao histórico

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ history | grep text.txt  
73 nano text.txt  
75 cp -p /Rascunhos/text.txt /SEMANA01/text.txt  
84 cp -p Rascunhos/text.txt SEMANA01/text.txt  
101 history | grep text.txt  
104 history | grep text.txt  
andrefavotto@Ubuntu-VirtualBox:~$ #limpando historico  
andrefavotto@Ubuntu-VirtualBox:~$ history -c  
andrefavotto@Ubuntu-VirtualBox:~$ history  
1 history  
andrefavotto@Ubuntu-VirtualBox:~$ #verificando tamanho do historico  
andrefavotto@Ubuntu-VirtualBox:~$ echo $HISTSIZE  
1000  
andrefavotto@Ubuntu-VirtualBox:~$ #acesso direto ao arquivo com histórico  
andrefavotto@Ubuntu-VirtualBox:~$ cat ~/.bash_history  
sudo dpkg --configure -a && sudo apt-get -f install  
sudo apt get --update  
sudo apt get update  
sudo apt update  
apt get upgrade  
sudo apt upgrade  
reboot  
clear  
python3  
clear  
git  
sudo apt install git
```

Foram vistos também os comandos:

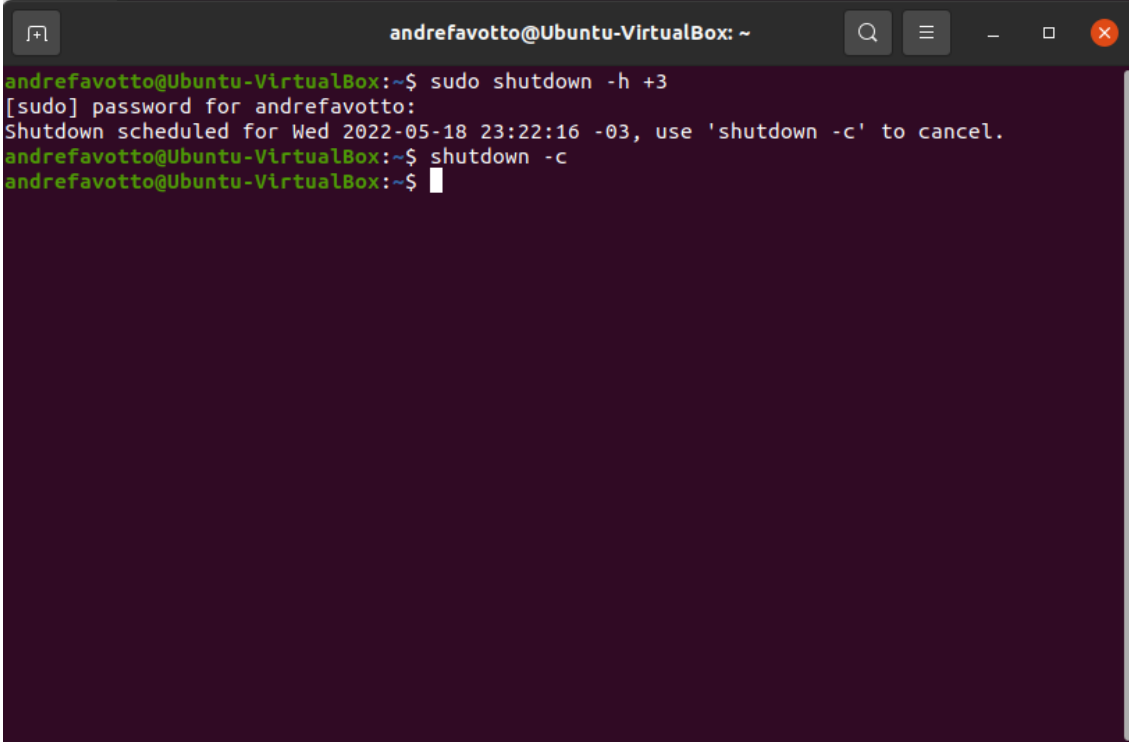
```
andrefavotto@Ubuntu-VirtualBox:~$ sudo shutdown
```

```
andrefavotto@Ubuntu-VirtualBox:~$ sudo shutdown -h now
```

```
andrefavotto@Ubuntu-VirtualBox:~$ sudo poweroff
```

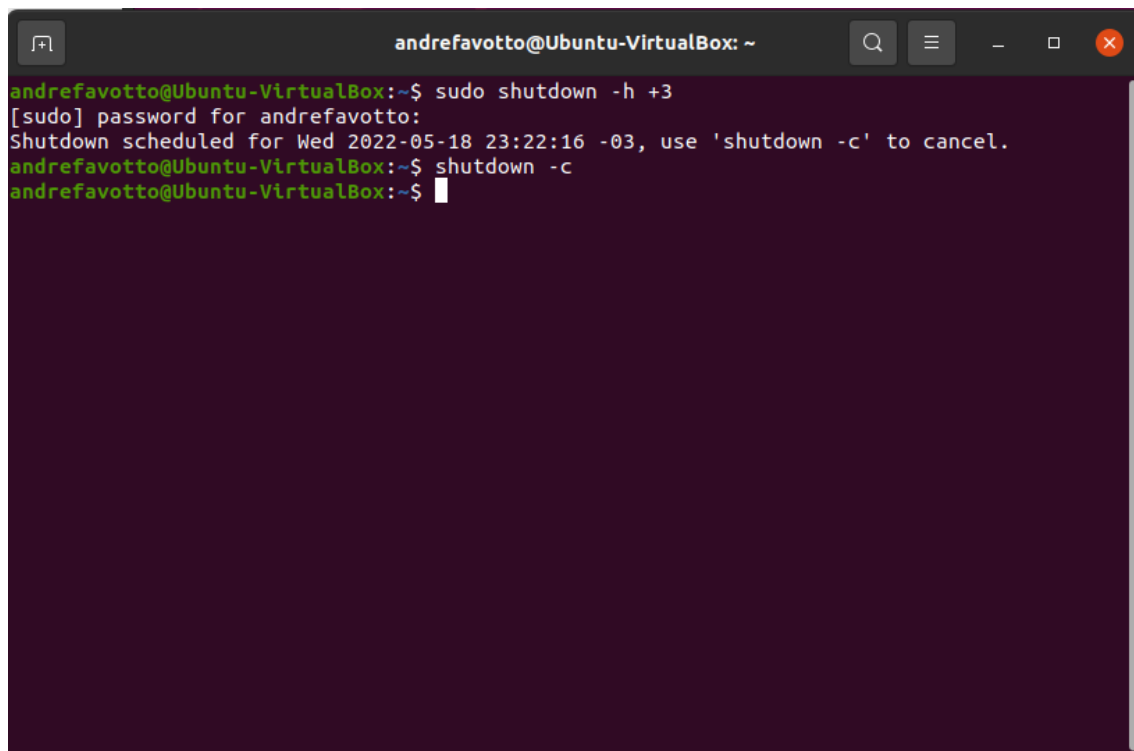
Porém estes não podem ser documentados, já que a máquina efetua o desligamento após a executá-los.

Desligamento programado da máquina:

A terminal window titled 'andrefavotto@Ubuntu-VirtualBox: ~' with standard window controls. The terminal shows the command 'sudo shutdown -h +3' being executed. It prompts for a password, then displays the message 'Shutdown scheduled for Wed 2022-05-18 23:22:16 -03, use 'shutdown -c' to cancel.' followed by the prompt 'andrefavotto@Ubuntu-VirtualBox:~\$ shutdown -c' and another prompt 'andrefavotto@Ubuntu-VirtualBox:~\$' with a cursor.

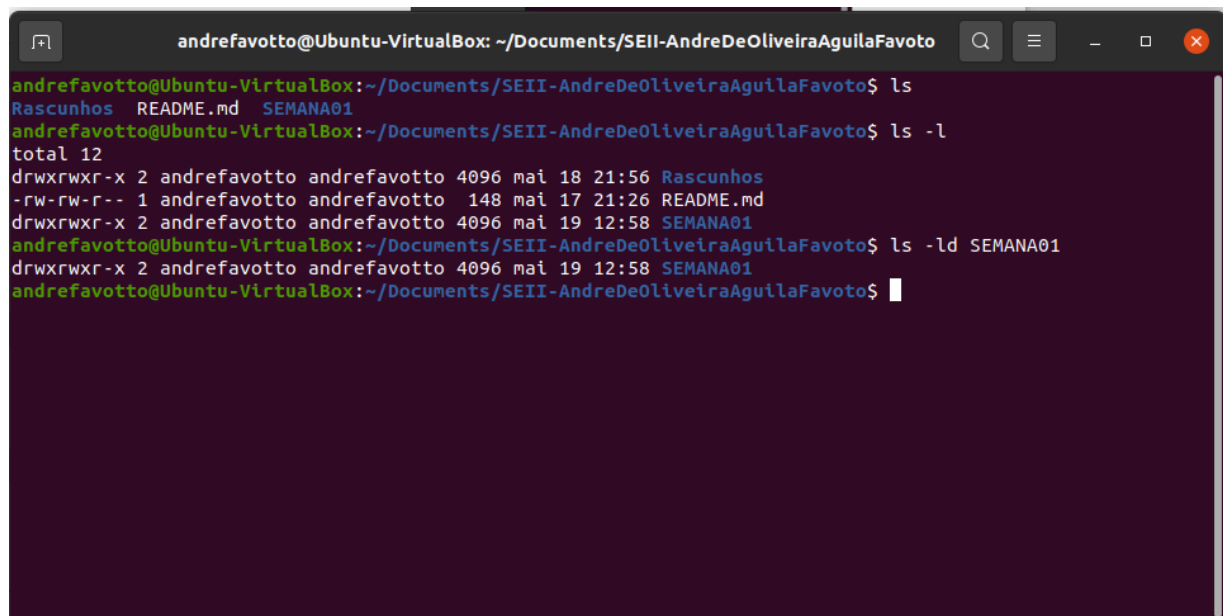
```
andrefavotto@Ubuntu-VirtualBox:~$ sudo shutdown -h +3
[sudo] password for andrefavotto:
Shutdown scheduled for Wed 2022-05-18 23:22:16 -03, use 'shutdown -c' to cancel.
andrefavotto@Ubuntu-VirtualBox:~$ shutdown -c
andrefavotto@Ubuntu-VirtualBox:~$
```

Reinício programado da máquina:



```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ sudo shutdown -h +3  
[sudo] password for andrefavotto:  
Shutdown scheduled for Wed 2022-05-18 23:22:16 -03, use 'shutdown -c' to cancel.  
andrefavotto@Ubuntu-VirtualBox:~$ shutdown -c  
andrefavotto@Ubuntu-VirtualBox:~$
```

Comandos de listagem de itens:



```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls  
Rascunhos  README.md  SEMANA01  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -l  
total 12  
drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 18 21:56 Rascunhos  
-rw-rw-r-- 1 andrefavotto andrefavotto  148 mai 17 21:26 README.md  
drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 19 12:58 SEMANA01  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -ld SEMANA01  
drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 19 12:58 SEMANA01  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$
```

Mais comandos de listagem:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -a
.  ..  .git  Rascunhos  README.md  SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -la
total 24
drwxrwxr-x 5 andrefavotto andrefavotto 4096 mai 18 21:56 .
drwxr-xr-x 3 andrefavotto andrefavotto 4096 mai 18 22:15 ..
drwxrwxr-x 8 andrefavotto andrefavotto 4096 mai 18 23:33 .git
drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 18 21:56 Rascunhos
-rw-rw-r-- 1 andrefavotto andrefavotto 148 mai 17 21:26 README.md
drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 19 12:58 SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -ld .*
drwxr-xr-x 3 andrefavotto andrefavotto 4096 mai 18 22:15 ..
drwxrwxr-x 8 andrefavotto andrefavotto 4096 mai 18 23:33 .git
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -F
Rascunhos/  README.md  SEMANA01/
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -lF
total 12
drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 18 21:56 Rascunhos/
-rw-rw-r-- 1 andrefavotto andrefavotto 148 mai 17 21:26 README.md
drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 19 12:58 SEMANA01/
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$
```

Comandos para identificar tamanho de objetos:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -s
total 12
4 Rascunhos  4 README.md  4 SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -ls
total 12
4 drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 18 21:56 Rascunhos
4 -rw-rw-r-- 1 andrefavotto andrefavotto 148 mai 17 21:26 README.md
4 drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 19 12:58 SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -alF
total 24
drwxrwxr-x 5 andrefavotto andrefavotto 4096 mai 18 21:56 ./
drwxr-xr-x 3 andrefavotto andrefavotto 4096 mai 18 22:15 ../
drwxrwxr-x 8 andrefavotto andrefavotto 4096 mai 18 23:33 .git/
drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 18 21:56 Rascunhos/
-rw-rw-r-- 1 andrefavotto andrefavotto 148 mai 17 21:26 README.md
drwxrwxr-x 2 andrefavotto andrefavotto 4096 mai 19 12:58 SEMANA01/
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$
```


Listando diretórios recursivamente:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls -R
.:
Rascunhos  README.md  SEMANA01

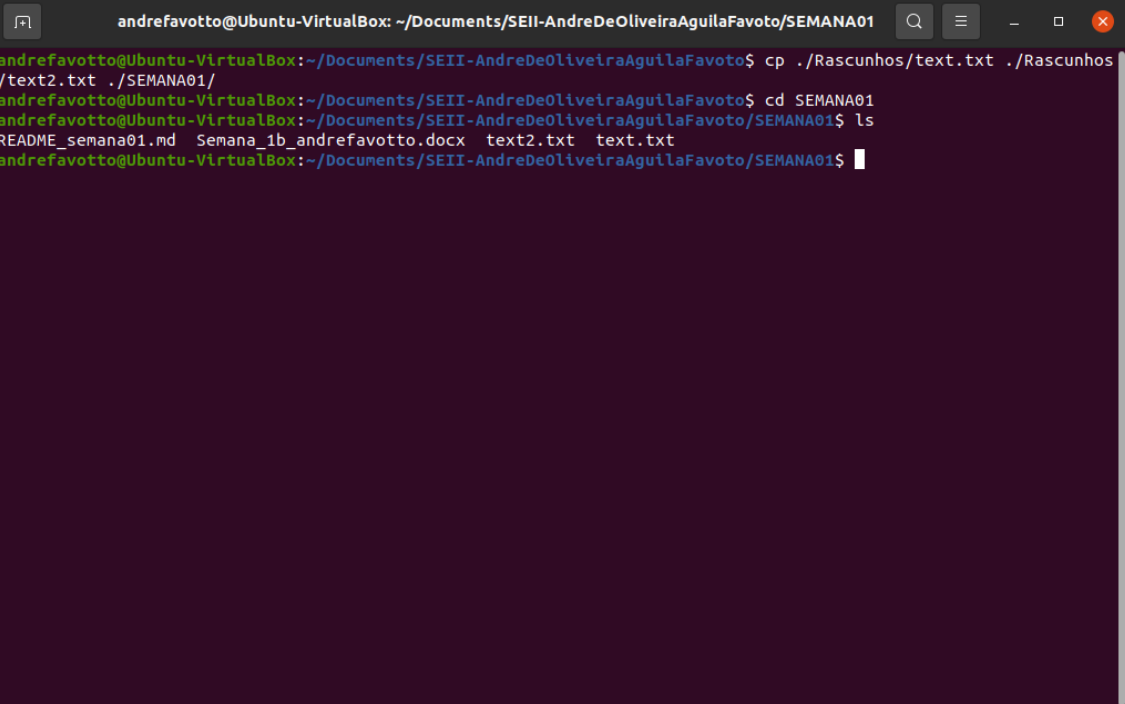
./Rascunhos:
text.txt

./SEMANA01:
README_semana01.md  Semana_1b_andrefavotto.docx  text.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$
```

Navegando entre diretórios:

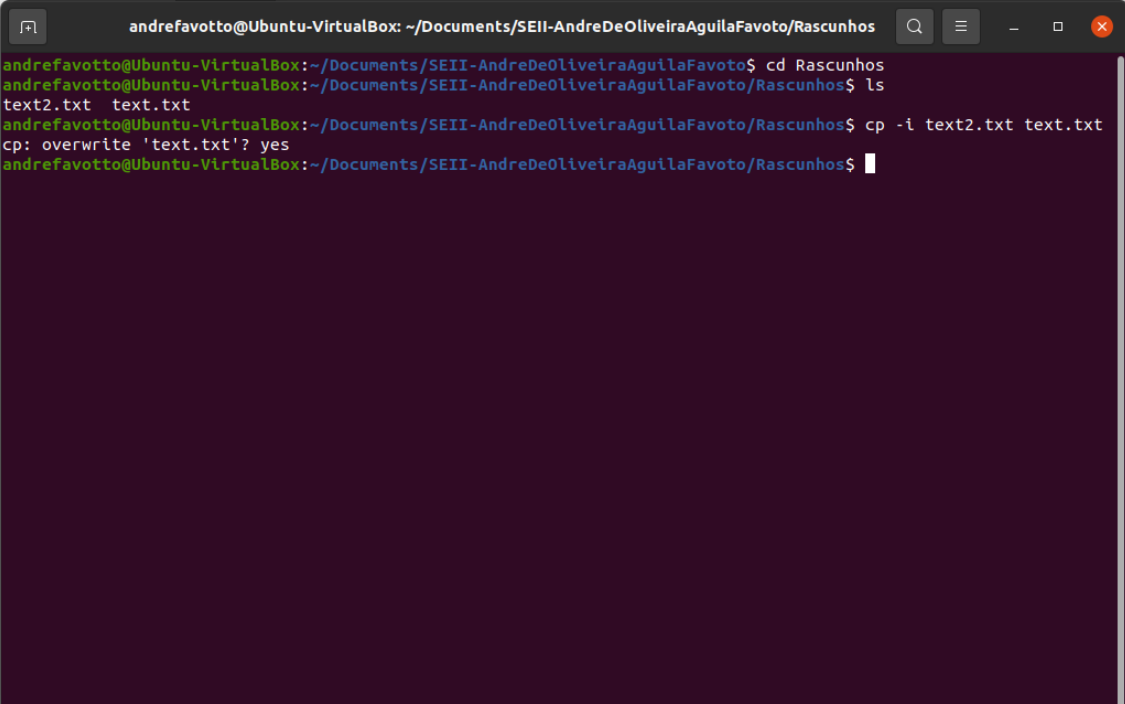
```
andrefavotto@Ubuntu-VirtualBox: ~/Documents
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ cd
andrefavotto@Ubuntu-VirtualBox:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  snap  Templates  Videos
andrefavotto@Ubuntu-VirtualBox:~$ cd Documents
andrefavotto@Ubuntu-VirtualBox:~/Documents$ cd SEII-AndreDeOliveiraAguilaFavoto/
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ cd ..
andrefavotto@Ubuntu-VirtualBox:~/Documents$ cd .
andrefavotto@Ubuntu-VirtualBox:~/Documents$ ls -la .
total 3872
drwxr-xr-x  3 andrefavotto andrefavotto   4096 mai 18 22:15 .
drwxr-xr-x 19 andrefavotto andrefavotto   4096 mai 19 12:57 ..
-rw-rw-rw-  1 andrefavotto andrefavotto 3949217 mai 18 22:15 Linux2aEdicaov1.pdf
drwxrwxr-x  5 andrefavotto andrefavotto   4096 mai 18 21:56 SEII-AndreDeOliveiraAguilaFavoto
andrefavotto@Ubuntu-VirtualBox:~/Documents$ pwd
/home/andrefavotto/Documents
andrefavotto@Ubuntu-VirtualBox:~/Documents$
```

Copiando múltiplos arquivos:

A terminal window titled 'andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01'. The user enters the command 'cp ./Rascunhos/text.txt ./Rascunhos/text2.txt ./SEMANA01/'. The prompt changes to 'andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01\$'. The user then enters 'ls', and the output shows 'README_semana01.md Semana_1b_andrefavotto.docx text2.txt text.txt'.

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ cp ./Rascunhos/text.txt ./Rascunhos/text2.txt ./SEMANA01/
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ ls
README_semana01.md Semana_1b_andrefavotto.docx text2.txt text.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$
```

Copiando arquivos em arquivos, com confirmação (-i):

A terminal window titled 'andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos'. The user enters 'cd Rascunhos'. The prompt changes to 'andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos\$'. The user enters 'ls', and the output shows 'text2.txt text.txt'. The user then enters 'cp -i text2.txt text.txt'. The prompt changes to 'cp: overwrite 'text.txt'? yes'. The user enters 'yes'. The prompt changes to 'andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos\$'.

```
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ cd Rascunhos
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ ls
text2.txt text.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ cp -i text2.txt text.txt
cp: overwrite 'text.txt'? yes
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$
```

Manipulando, criando e apagando arquivos e diretórios:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ touch teste.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ ls
teste.txt  text2.txt  text.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ rm teste.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ ls
text2.txt  text.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ rm *.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ ls
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ cd ..
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ rm -r Rascunhos/
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls
README.md  SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ mkdir Rascunhos
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls
Rascunhos  README.md  SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ rmdir Rascunhos
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls
README.md  SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ mkdir Rascunhos
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$ ls
Rascunhos  README.md  SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto$
```

Criando árvores de diretórios:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos/pasta1
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ mkdir -p pasta1/subpasta1
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ ls
pasta1
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ cd pasta 1
bash: cd: too many arguments
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos$ cd pasta1
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos/pasta1$ ls
subpasta1
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos/pasta1$
```

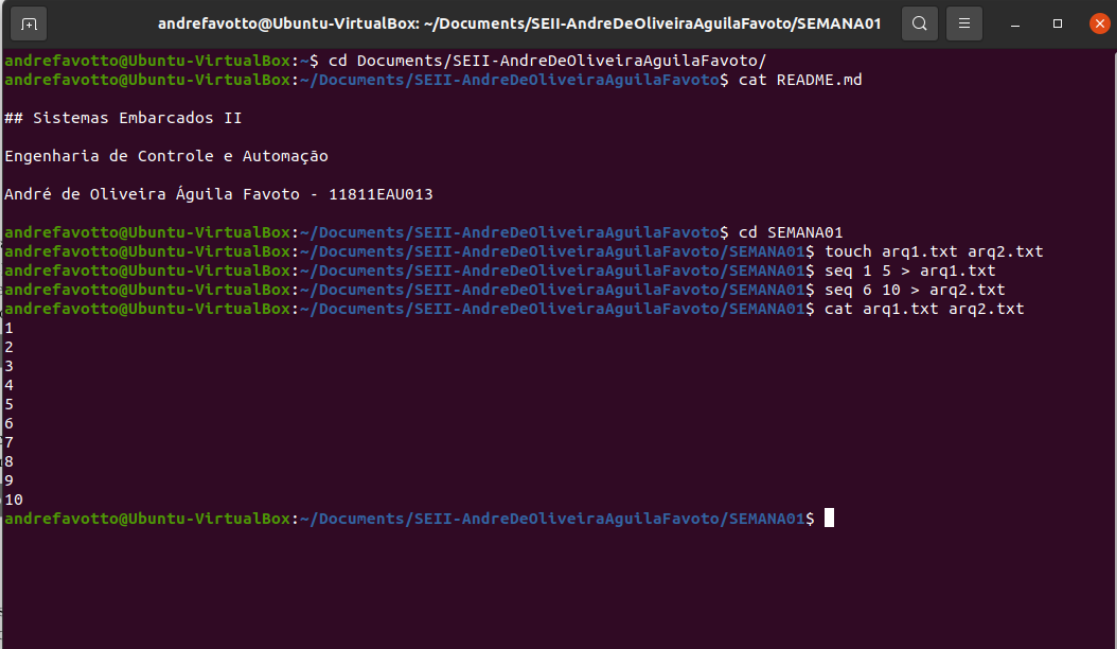
Criando link simbólico para arquivo:

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos/pasta1$ touch arquivo.txt  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos/pasta1$ echo "texto do arquivo" >>  
arquivo.txt  
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos/pasta1$ cd  
andrefavotto@Ubuntu-VirtualBox:~$ ln -s ./Documents/SEII-AndreDeOliveiraAguilaFavoto/Rascunhos/pasta1/arquivo.txt atalho  
andrefavotto@Ubuntu-VirtualBox:~$ cat atalho  
texto do arquivo  
andrefavotto@Ubuntu-VirtualBox:~$ ls  
atalho Desktop Documents Downloads Music Pictures Public snap Templates Videos  
andrefavotto@Ubuntu-VirtualBox:~$
```

Comando echo:

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ echo 'texto'  
texto  
andrefavotto@Ubuntu-VirtualBox:~$ echo -en 'texto \n texto na proxima linha'  
texto  
andrefavotto@Ubuntu-VirtualBox:~$
```

Comando cat:



```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/$ cd Documents/SEII-AndreDeOliveiraAguilaFavoto/
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/$ cat README.md

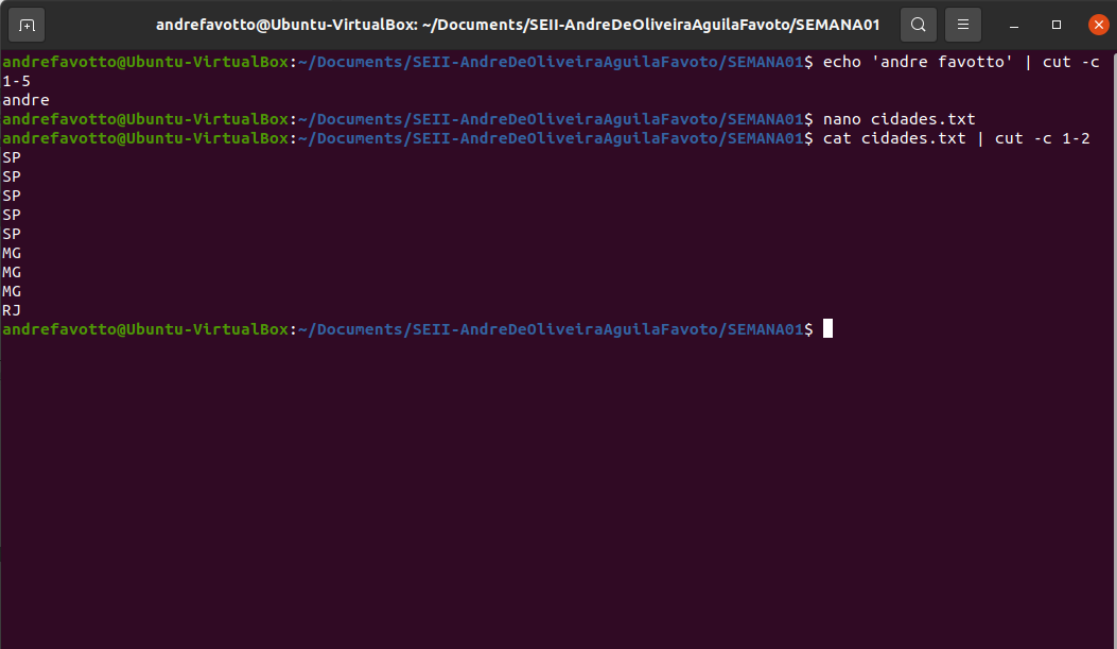
## Sistemas Embarcados II

Engenharia de Controle e Automação

André de Oliveira Águila Favoto - 11811EAU013

andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/$ cd SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ touch arq1.txt arq2.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ seq 1 5 > arq1.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ seq 6 10 > arq2.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ cat arq1.txt arq2.txt
1
2
3
4
5
6
7
8
9
10
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$
```

Comando cut:



```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ echo 'andre favotto' | cut -c 1-5
andre
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ nano cidades.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ cat cidades.txt | cut -c 1-2
SP
SP
SP
SP
MG
MG
MG
RJ
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$
```

Comando tr:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ cat cidades.txt | tr ' ' '_'
SP_Sao_Paulo
SP_Campinas
SP_Sao_Paulo
SP_Campinas
SP_Belo_Horizonte
MG_Diamantina
MG_Lavras
MG_Bom_Sucesso
RJ_Rio_de_Janeiro
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ cat cidades.txt | tr 'A-Z' 'a-z'
sp sao paulo
sp campinas
sp sao paulo
sp campinas
sp belo horizonte
mg diamantina
mg lavras
mg bom sucesso
rj rio de janeiro
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ cidades.txt | tr [:lower:] [:upper:]
cidades.txt: command not found
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ cat cidades.txt | tr [:lower:] [:upper:]
SP_SAO_PAULO
SP_CAMPINAS
SP_SAO_PAULO
SP_CAMPINAS
SP_BELO_HORIZONTE
MG_DIAMANTINA
MG_LAVRAS
MG_BOM_SUCESSO
RJ_RIO_DE_JANEIRO
```

Comando grep e expressões regulares:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ cat text.txt | grep alexandr
o
RJ Rio de Janeiro : alexandro
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ grep '[0-9]' text.txt
SP Campinas : andre :(074) 2233 -1111
MG Belo Horizonte : marta :010 1222 0011
MG Diamantina : lucas :2
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ grep '[0-9]\\{2,\\}' text.txt
SP Campinas : andre :(074) 2233 -1111
MG Belo Horizonte : marta :010 1222 0011
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$
```

Comandos egrep e fgrep:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAgullaFavoto/SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAgullaFavoto/SEMANA01$ dmesg | egrep "firmware|and"
[ 0.000000] Linux version 5.13.0-41-generic (buildd@lcy02-amd64-017) (gcc (Ubuntu 9.4.0-1ubuntu1~20.04.1) 9.4.0
, GNU ld (GNU Binutils for Ubuntu) 2.34) #46~20.04.1-Ubuntu SMP Wed Apr 20 13:16:21 UTC 2022 (Ubuntu 5.13.0-41.46~
20.04.1-generic 5.13.19)
[ 14.618114] 15:56:49.529885 main      VBoxService 6.1.34 r150636 (verbosity: 0) linux.amd64 (Mar 23 2022 00:46:4
9) release log
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAgullaFavoto/SEMANA01$ dmesg | fgrep "@"
[ 0.000000] Linux version 5.13.0-41-generic (buildd@lcy02-amd64-017) (gcc (Ubuntu 9.4.0-1ubuntu1~20.04.1) 9.4.0
, GNU ld (GNU Binutils for Ubuntu) 2.34) #46~20.04.1-Ubuntu SMP Wed Apr 20 13:16:21 UTC 2022 (Ubuntu 5.13.0-41.46~
20.04.1-generic 5.13.19)
[ 0.186049] smpboot: CPU0: Intel(R) Core(TM) i5-9300H CPU @ 2.40GHz (family: 0x6, model: 0x9e, stepping: 0xd)
[ 0.282461] pps_core: Software ver. 5.3.6 - Copyright 2005-2007 Rodolfo Giometti <giometti@linux.it>
[ 0.590289] device-mapper: ioctl: 4.45.0-ioctl (2021-03-22) initialised: dm-devel@redhat.com
[ 1.499341] ata3: SATA max UDMA/133 abar m8192,0xf0806000 port 0xf0806100 irq 21
[ 2.580830] systemd[1]: modprobe.drm.service: Succeeded.
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAgullaFavoto/SEMANA01$
```

Comandos head e tail:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAgullaFavoto/SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAgullaFavoto/SEMANA01$ head -5 text.txt
SP Sao Paulo : pedro
SP Campinas : andre :(074) 2233 -1111
MG Belo Horizonte : marta :010 1222 0011
MG Diamantina : lucas :2
MG Lavras : rafael
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAgullaFavoto/SEMANA01$ tail -5 text.txt
MG Belo Horizonte : marta :010 1222 0011
MG Diamantina : lucas :2
MG Lavras : rafael
MG Bom Sucesso : lisa
RJ Rio de Janeiro : alexandro
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAgullaFavoto/SEMANA01$
```

Comandos look, nl e sort:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ look SP cidades.txt
SP Sao Paulo
SP Campinas
SP Sao Paulo
SP Campinas
SP Belo Horizonte
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ nl cidades.txt
 1 SP Sao Paulo
 2 SP Campinas
 3 SP Sao Paulo
 4 SP Campinas
 5 SP Belo Horizonte
 6 MG Diamantina
 7 MG Lavras
 8 MG Bom Sucesso
 9 RJ Rio de Janeiro
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ cat cidades.txt | sort -n
MG Bom Sucesso
MG Diamantina
MG Lavras
RJ Rio de Janeiro
SP Belo Horizonte
SP Campinas
SP Campinas
SP Sao Paulo
SP Sao Paulo
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$
```

Compgen -c:

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMANA01$ compgen -c
alert
egrep
fgrep
grep
l
la
ll
ls
if
then
else
elif
fi
case
esac
for
select
while
until
do
done
in
function
time
{
}
!
[[
]]
coproc
__expand_tilde_by_ref
__get_cword_at_cursor_by_ref
__git_eread
__git_psi
__git_psi_colorize_gitstring
__git_psi_show_upstream
```


Comando finger:

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ finger andrefavotto  
Login: andrefavotto          Name: AndreFavotto  
Directory: /home/andrefavotto Shell: /bin/bash  
On since Thu May 19 12:57 (-03) on :0 from :0 (messages off)  
No mail.  
No Plan.  
andrefavotto@Ubuntu-VirtualBox:~$ finger -l  
Login: andrefavotto          Name: AndreFavotto  
Directory: /home/andrefavotto Shell: /bin/bash  
On since Thu May 19 12:57 (-03) on :0 from :0 (messages off)  
No mail.  
No Plan.  
andrefavotto@Ubuntu-VirtualBox:~$ finger  
Login      Name      Tty      Idle   Login Time   Office   Office Phone  
andrefavotto AndreFavotto *:0      May 19 12:57 (:0)  
andrefavotto@Ubuntu-VirtualBox:~$
```

Comando free:

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ free  
              total        used        free      shared  buff/cache   available  
Mem:           2980072      1233852       431196        47224       1315024       1529872  
Swap:          2440188         2584       2437604  
andrefavotto@Ubuntu-VirtualBox:~$
```

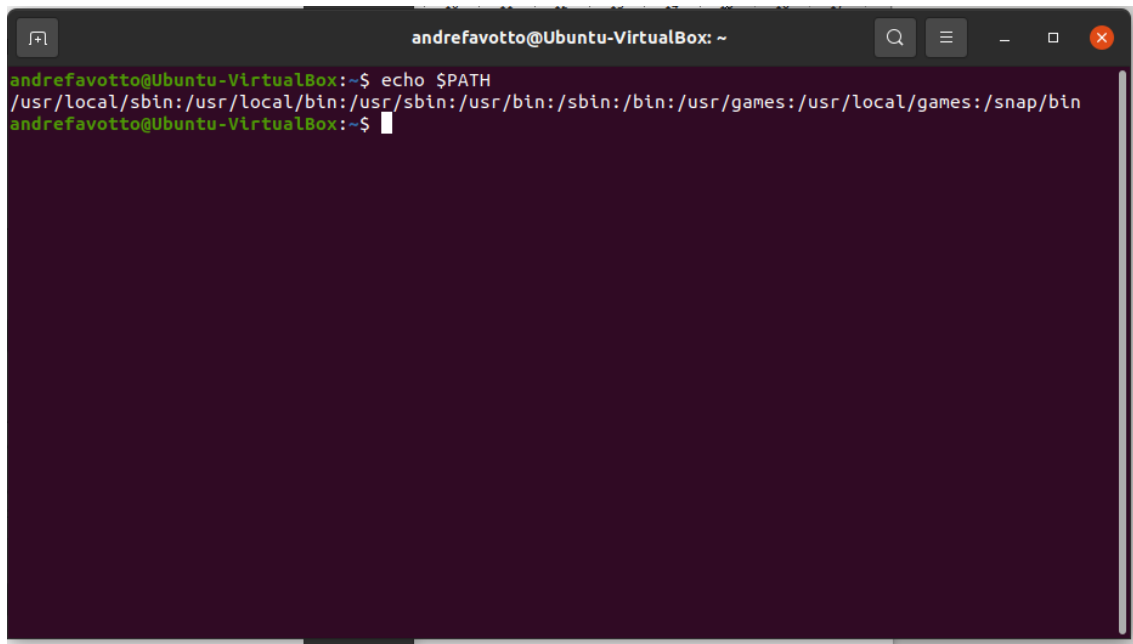
Comando uname:

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ uname -s  
Linux  
andrefavotto@Ubuntu-VirtualBox:~$ uname -r  
5.13.0-41-generic  
andrefavotto@Ubuntu-VirtualBox:~$ uname -m  
x86_64  
andrefavotto@Ubuntu-VirtualBox:~$ uname -n  
Ubuntu-VirtualBox  
andrefavotto@Ubuntu-VirtualBox:~$ uname -a  
Linux Ubuntu-VirtualBox 5.13.0-41-generic #46~20.04.1-Ubuntu SMP Wed Apr 20 13:16:21 UTC 2022  
x86_64 x86_64 x86_64 GNU/Linux  
andrefavotto@Ubuntu-VirtualBox:~$
```

Comandos uptime e --version:

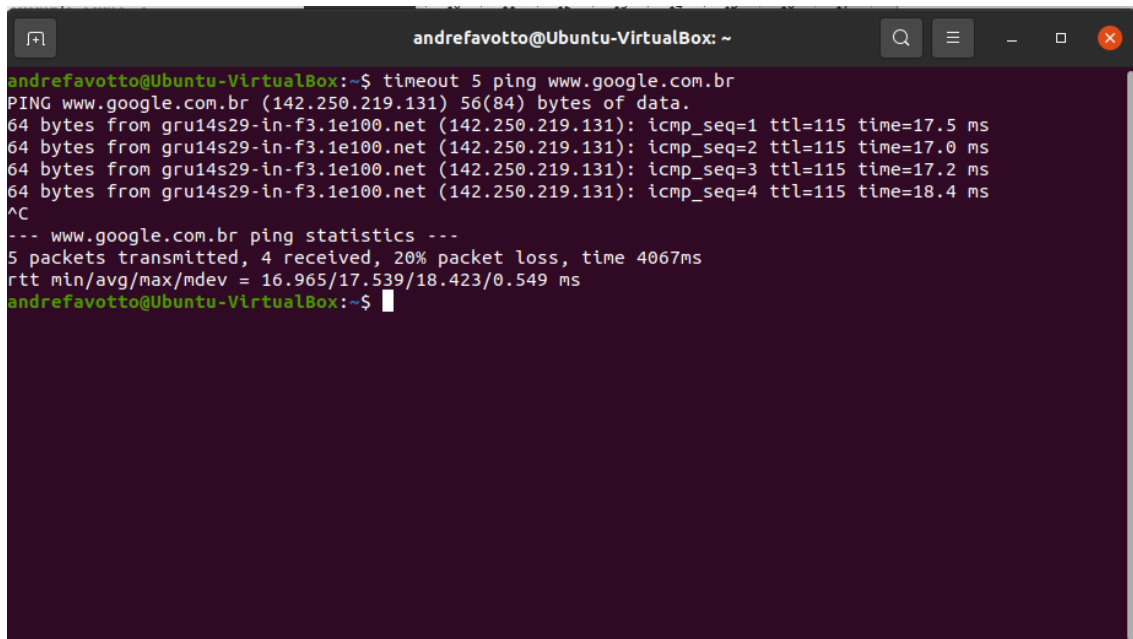
```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ uptime  
18:34:54 up 5:08, 1 user, load average: 0,32, 0,24, 0,20  
andrefavotto@Ubuntu-VirtualBox:~$ ls --version  
ls (GNU coreutils) 8.30  
Copyright (C) 2018 Free Software Foundation, Inc.  
License GPLv3+: GNU GPL version 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.  
andrefavotto@Ubuntu-VirtualBox:~$
```

Comando \$PATH:



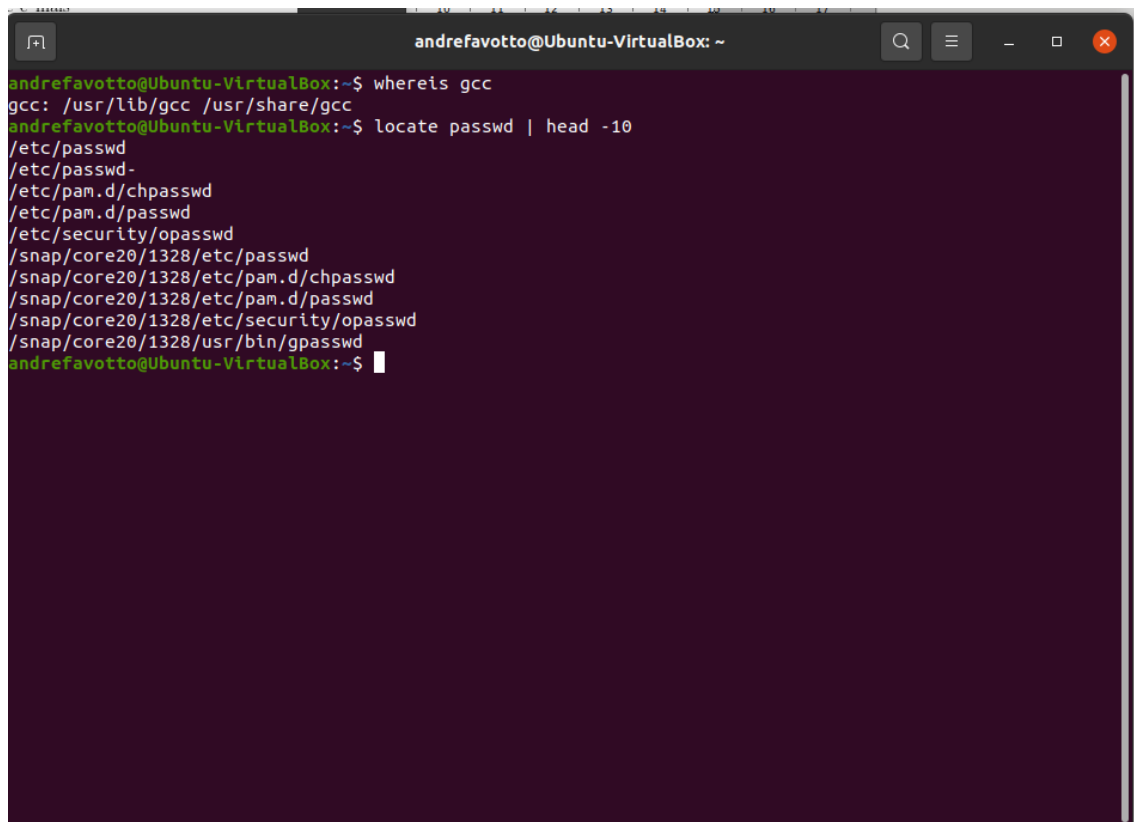
```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ echo $PATH  
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin  
andrefavotto@Ubuntu-VirtualBox:~$
```

Ping timeout:



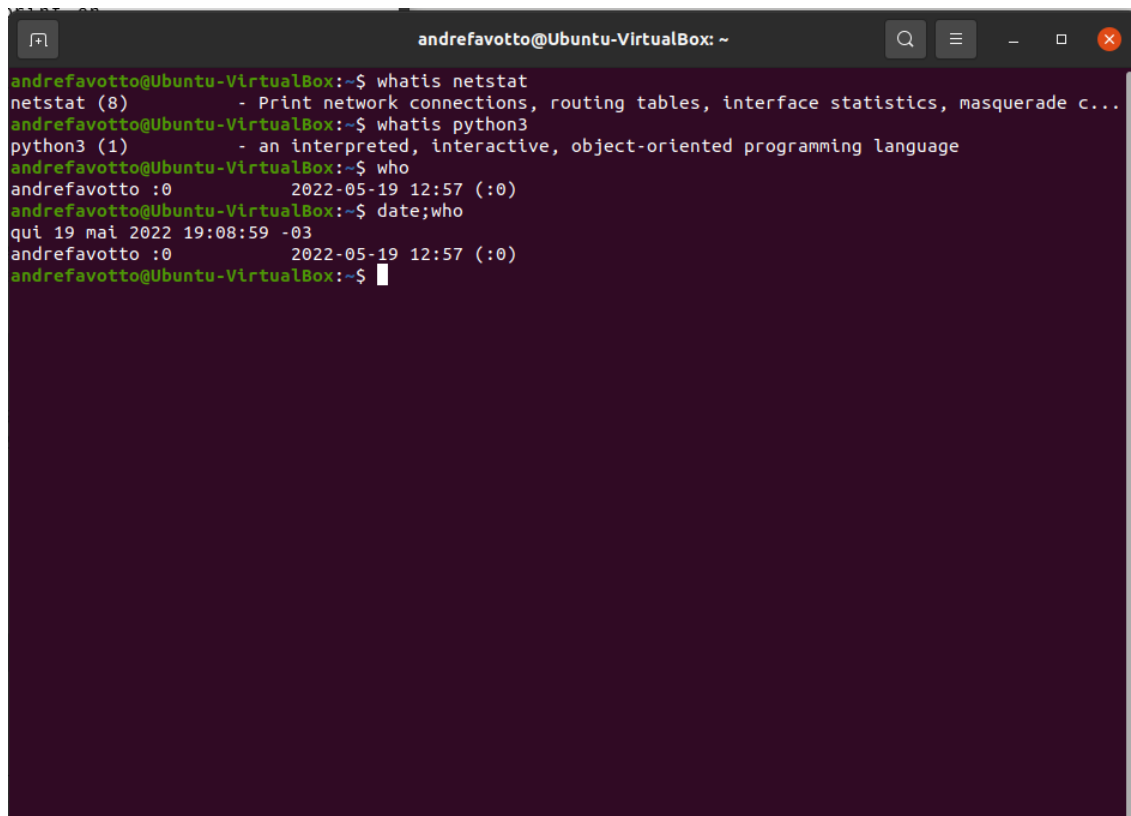
```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ timeout 5 ping www.google.com.br  
PING www.google.com.br (142.250.219.131) 56(84) bytes of data.  
64 bytes from gru14s29-in-f3.1e100.net (142.250.219.131): icmp_seq=1 ttl=115 time=17.5 ms  
64 bytes from gru14s29-in-f3.1e100.net (142.250.219.131): icmp_seq=2 ttl=115 time=17.0 ms  
64 bytes from gru14s29-in-f3.1e100.net (142.250.219.131): icmp_seq=3 ttl=115 time=17.2 ms  
64 bytes from gru14s29-in-f3.1e100.net (142.250.219.131): icmp_seq=4 ttl=115 time=18.4 ms  
^C  
--- www.google.com.br ping statistics ---  
5 packets transmitted, 4 received, 20% packet loss, time 4067ms  
rtt min/avg/max/mdev = 16.965/17.539/18.423/0.549 ms  
andrefavotto@Ubuntu-VirtualBox:~$
```

Comandos whereis e locate:



```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ whereis gcc  
gcc: /usr/lib/gcc /usr/share/gcc  
andrefavotto@Ubuntu-VirtualBox:~$ locate passwd | head -10  
/etc/passwd  
/etc/passwd-  
/etc/pam.d/chpasswd  
/etc/pam.d/passwd  
/etc/security/opasswd  
/snap/core20/1328/etc/passwd  
/snap/core20/1328/etc/pam.d/chpasswd  
/snap/core20/1328/etc/pam.d/passwd  
/snap/core20/1328/etc/security/opasswd  
/snap/core20/1328/usr/bin/gpasswd  
andrefavotto@Ubuntu-VirtualBox:~$
```

Comandos whatis, who e múltiplos comandos em mesma linha:



```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ whatis netstat  
netstat (8) - Print network connections, routing tables, interface statistics, masquerade c...  
andrefavotto@Ubuntu-VirtualBox:~$ whatis python3  
python3 (1) - an interpreted, interactive, object-oriented programming language  
andrefavotto@Ubuntu-VirtualBox:~$ who  
andrefavotto :0 2022-05-19 12:57 (:0)  
andrefavotto@Ubuntu-VirtualBox:~$ date;who  
qui 19 mai 2022 19:08:59 -03  
andrefavotto :0 2022-05-19 12:57 (:0)  
andrefavotto@Ubuntu-VirtualBox:~$
```

Comando ps -aef

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ ps -aef  
UID        PID     PPID  C  STIME TTY          TIME CMD  
root         1         0  0  13:26 ?        00:00:02 /sbin/init splash  
root         2         0  0  13:26 ?        00:00:00 [kthreadd]  
root         3         2  0  13:26 ?        00:00:00 [rcu_gp]  
root         4         2  0  13:26 ?        00:00:00 [rcu_par_gp]  
root         6         2  0  13:26 ?        00:00:00 [kworker/0:0H-events_highpri]  
root         9         2  0  13:26 ?        00:00:00 [mm_percpu_wq]  
root        10         2  0  13:26 ?        00:00:00 [rcu_tasks_rude_]  
root        11         2  0  13:26 ?        00:00:00 [rcu_tasks_trace]  
root        12         2  0  13:26 ?        00:00:00 [ksoftirqd/0]  
root        13         2  0  13:26 ?        00:00:05 [rcu_sched]  
root        14         2  0  13:26 ?        00:00:00 [migration/0]  
root        15         2  0  13:26 ?        00:00:00 [idle_inject/0]  
root        16         2  0  13:26 ?        00:00:00 [cpuhp/0]  
root        17         2  0  13:26 ?        00:00:00 [cpuhp/1]  
root        18         2  0  13:26 ?        00:00:00 [idle_inject/1]  
root        19         2  0  13:26 ?        00:00:00 [migration/1]  
root        20         2  0  13:26 ?        00:00:00 [ksoftirqd/1]  
root        22         2  0  13:26 ?        00:00:00 [kworker/1:0H-events_highpri]  
root        23         2  0  13:26 ?        00:00:00 [cpuhp/2]  
root        24         2  0  13:26 ?        00:00:00 [idle_inject/2]  
root        25         2  0  13:26 ?        00:00:00 [migration/2]  
root        26         2  0  13:26 ?        00:00:00 [ksoftirqd/2]  
root        28         2  0  13:26 ?        00:00:00 [kworker/2:0H-events_highpri]  
root        29         2  0  13:26 ?        00:00:00 [cpuhp/3]  
root        30         2  0  13:26 ?        00:00:00 [idle_inject/3]  
root        31         2  0  13:26 ?        00:00:00 [migration/3]  
root        32         2  0  13:26 ?        00:00:00 [ksoftirqd/3]  
root        34         2  0  13:26 ?        00:00:00 [kworker/3:0H-events_highpri]  
root        35         2  0  13:26 ?        00:00:00 [kdevtmpfs]  
root        36         2  0  13:26 ?        00:00:00 [netns]  
root        37         2  0  13:26 ?        00:00:00 [inet_frag_wq]  
root        38         2  0  13:26 ?        00:00:00 [kauditd]  
root        39         2  0  13:26 ?        00:00:00 [khungtaskd]
```

Comando pstree

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ pstree  
systemd--ModemManager--2*[{ModemManager}]  
--NetworkManager--2*[{NetworkManager}]  
--3*[VBoxClient--VBoxClient--2*[{VBoxClient}]]  
--VBoxClient--VBoxClient--3*[{VBoxClient}]  
--VBoxService--8*[{VBoxService}]  
--accounts-daemon--2*[{accounts-daemon}]  
--acpid  
--avahi-daemon--avahi-daemon  
--colord--2*[{colord}]  
--cron  
--cups-browsed--2*[{cups-browsed}]  
--cupsd--dbus  
--dbus-daemon  
--gdm3--gdm-session-wor--gdm-x-session--Xorg--{Xorg}  
--gdm-x-session--gnome-session-b--ssh-agent  
--gnome-session-b--2*[{gnome-session-b}]  
--2*[{gdm3}]  
--2*[{gdm-session-wor}]  
--gnome-keyring-d--ssh-agent  
--gnome-keyring-d--3*[{gnome-keyring-d}]  
--irqbalance--{irqbalance}  
--2*[{kerneloops}]  
--networkd-dispat  
--polkitd--2*[{polkitd}]  
--rsyslogd--3*[{rsyslogd}]  
--rtkit-daemon--2*[{rtkit-daemon}]  
--snapd--14*[{snapd}]  
--switcheroo-cont--2*[{switcheroo-cont}]  
--systemd--(sd-pam)  
--at-spi-bus-laun--dbus-daemon  
--at-spi-bus-laun--3*[{at-spi-bus-laun}]  
--at-spi2-registr--2*[{at-spi2-registr}]  
--dbus-daemon
```

Comando top

```
andrefavotto@Ubuntu-VirtualBox: ~  
top - 19:39:30 up 6:13, 1 user, load average: 0,44, 0,26, 0,15  
Tasks: 218 total, 1 running, 217 sleeping, 0 stopped, 0 zombie  
%Cpu(s): 8,4 us, 0,5 sy, 0,0 ni, 91,1 id, 0,0 wa, 0,0 hi, 0,1 si, 0,0 st  
MiB Mem : 2910,2 total, 107,1 free, 1271,9 used, 1531,3 buff/cache  
MiB Swap: 2383,0 total, 2380,5 free, 2,5 used. 1403,8 avail Mem  


| PID   | USER     | PR  | NI  | VIRT    | RES    | SHR    | S | %CPU | %MEM | TIME+    | COMMAND                     |
|-------|----------|-----|-----|---------|--------|--------|---|------|------|----------|-----------------------------|
| 1671  | andrefa+ | 20  | 0   | 4993792 | 467344 | 147888 | S | 32,2 | 15,7 | 20:24.95 | gnome-shell                 |
| 1474  | andrefa+ | 20  | 0   | 421464  | 204528 | 86056  | S | 3,7  | 6,9  | 10:11.29 | Xorg                        |
| 1586  | andrefa+ | 20  | 0   | 220916  | 2500   | 2272   | S | 0,3  | 0,1  | 0:57.97  | VBoxClient                  |
| 9672  | root     | 20  | 0   | 0       | 0      | 0      | I | 0,3  | 0,0  | 0:01.25  | kworker/1:0-events          |
| 11309 | andrefa+ | 20  | 0   | 11980   | 3988   | 3192   | R | 0,3  | 0,1  | 0:00.05  | top                         |
| 1     | root     | 20  | 0   | 168700  | 12788  | 8384   | S | 0,0  | 0,4  | 0:02.02  | systemd                     |
| 2     | root     | 20  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.01  | kthreadd                    |
| 3     | root     | 0   | -20 | 0       | 0      | 0      | I | 0,0  | 0,0  | 0:00.00  | rcu_gp                      |
| 4     | root     | 0   | -20 | 0       | 0      | 0      | I | 0,0  | 0,0  | 0:00.00  | rcu_par_gp                  |
| 6     | root     | 0   | -20 | 0       | 0      | 0      | I | 0,0  | 0,0  | 0:00.00  | kworker/0:0H-events_highpri |
| 9     | root     | 0   | -20 | 0       | 0      | 0      | I | 0,0  | 0,0  | 0:00.00  | mm_percpu_wq                |
| 10    | root     | 20  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.00  | rcu_tasks_rude_             |
| 11    | root     | 20  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.00  | rcu_tasks_trace             |
| 12    | root     | 20  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.10  | ksoftirqd/0                 |
| 13    | root     | 20  | 0   | 0       | 0      | 0      | I | 0,0  | 0,0  | 0:06.04  | rcu_sched                   |
| 14    | root     | rt  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.42  | migration/0                 |
| 15    | root     | -51 | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.00  | idle_inject/0               |
| 16    | root     | 20  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.00  | cpuhp/0                     |
| 17    | root     | 20  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.00  | cpuhp/1                     |
| 18    | root     | -51 | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.00  | idle_inject/1               |
| 19    | root     | rt  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.35  | migration/1                 |
| 20    | root     | 20  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.73  | ksoftirqd/1                 |
| 22    | root     | 0   | -20 | 0       | 0      | 0      | I | 0,0  | 0,0  | 0:00.00  | kworker/1:0H-events_highpri |
| 23    | root     | 20  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.00  | cpuhp/2                     |
| 24    | root     | -51 | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.00  | idle_inject/2               |
| 25    | root     | rt  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.50  | migration/2                 |
| 26    | root     | 20  | 0   | 0       | 0      | 0      | S | 0,0  | 0,0  | 0:00.09  | ksoftirqd/2                 |
| 28    | root     | 0   | -20 | 0       | 0      | 0      | I | 0,0  | 0,0  | 0:00.00  | kworker/2:0H-events_highpri |


```

Comando kill e jobs

```
andrefavotto@Ubuntu-VirtualBox: ~  
2723 andrefa+ 20 0 819176 55624 40136 S 0,3 1,9 0:48.60 gnome-terminal-  
11417 andrefa+ 20 0 11984 3900 3108 R 0,3 0,1 0:00.05 top  
1 root 20 0 168700 12788 8384 S 0,0 0,4 0:02.03 systemd  
2 root 20 0 0 0 0 S 0,0 0,0 0:00.01 kthreadd  
3 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 rcu_gp  
4 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 rcu_par_gp  
6 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 kworker/0:0H-events_highpri  
9 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 mm_percpu_wq  
10 root 20 0 0 0 0 S 0,0 0,0 0:00.00 rcu_tasks_rude_  
11 root 20 0 0 0 0 S 0,0 0,0 0:00.00 rcu_tasks_trace  
12 root 20 0 0 0 0 S 0,0 0,0 0:00.10 ksoftirqd/0  
13 root 20 0 0 0 0 I 0,0 0,0 0:06.23 rcu_sched  
14 root rt 0 0 0 S 0,0 0,0 0:00.43 migration/0  
15 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/0  
16 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/0  
17 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/1  
18 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/1  
19 root rt 0 0 0 S 0,0 0,0 0:00.36 migration/1  
20 root 20 0 0 0 0 S 0,0 0,0 0:00.75 ksoftirqd/1  
22 root 0 -20 0 0 0 I 0,0 0,0 0:00.00 kworker/1:0H-events_highpri  
23 root 20 0 0 0 0 S 0,0 0,0 0:00.00 cpuhp/2  
24 root -51 0 0 0 0 S 0,0 0,0 0:00.00 idle_inject/2  
25 root rt 0 0 0 S 0,0 0,0 0:00.51 migration/2  
26 root 20 0 0 0 0 S 0,0 0,0 0:00.09 ksoftirqd/2  
[1]- Stopped top  
[2]+ Stopped top  
andrefavotto@Ubuntu-VirtualBox:~$ jobs -l  
[1]- 11416 Stopped (signal) top  
[2]+ 11417 Stopped (signal) top  
andrefavotto@Ubuntu-VirtualBox:~$ kill -9 11416  
andrefavotto@Ubuntu-VirtualBox:~$ jobs -l  
[1]- 11416 Killed top  
[2]+ 11417 Stopped (signal) top  
andrefavotto@Ubuntu-VirtualBox:~$
```

Comando ps aux

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ ps aux  
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND  
root         1  0.2  0.3 167612 11184 ?        Ss   18:43   0:01 /sbin/init sp  
root         2  0.0  0.0      0     0 ?        S    18:43   0:00 [kthreadd]  
root         3  0.0  0.0      0     0 ?        I<   18:43   0:00 [rcu_gp]  
root         4  0.0  0.0      0     0 ?        I<   18:43   0:00 [rcu_par_gp]  
root         5  0.0  0.0      0     0 ?        I    18:43   0:00 [kworker/0:0-  
root         6  0.0  0.0      0     0 ?        I<   18:43   0:00 [kworker/0:0H  
root         9  0.0  0.0      0     0 ?        I<   18:43   0:00 [mm_percpu_wq  
root        10  0.0  0.0      0     0 ?        S    18:43   0:00 [rcu_tasks_ru  
root        11  0.0  0.0      0     0 ?        S    18:43   0:00 [rcu_tasks_tr  
root        12  0.0  0.0      0     0 ?        S    18:43   0:00 [ksoftirqd/0]  
root        13  0.0  0.0      0     0 ?        I    18:43   0:00 [rcu_sched]  
root        14  0.0  0.0      0     0 ?        S    18:43   0:00 [migration/0]  
root        15  0.0  0.0      0     0 ?        S    18:43   0:00 [idle_inject/  
root        16  0.0  0.0      0     0 ?        S    18:43   0:00 [cpuhp/0]  
root        17  0.0  0.0      0     0 ?        S    18:43   0:00 [cpuhp/1]  
root        18  0.0  0.0      0     0 ?        S    18:43   0:00 [idle_inject/  
root        19  0.0  0.0      0     0 ?        S    18:43   0:00 [migration/1]  
root        20  0.0  0.0      0     0 ?        S    18:43   0:00 [ksoftirqd/1]  
root        22  0.0  0.0      0     0 ?        I<   18:43   0:00 [kworker/1:0H  
root        23  0.0  0.0      0     0 ?        S    18:43   0:00 [cpuhp/2]  
root        24  0.0  0.0      0     0 ?        S    18:43   0:00 [idle_inject/  
root        25  0.0  0.0      0     0 ?        S    18:43   0:00 [migration/2]
```

ps x --forest

```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ ps x --forest  
    PID TTY      STAT    TIME COMMAND  
  1441 tty2      Ssl+    0:00 /usr/lib/gdm3/gdm-x-session --run-script env GNOME_  
  1446 tty2      Sl+     0:49  \_ /usr/lib/xorg/Xorg vt2 -displayfd 3 -auth /run/  
  1469 tty2      Sl+     0:00  \_ /usr/libexec/gnome-session-binary --systemd --s  
  1574 ?        Ss      0:00  \_ /usr/bin/ssh-agent /usr/bin/im-launch env G  
  1566 ?        S       0:00 /usr/bin/VBoxClient --vmsvga  
  1567 ?        Sl      0:00  \_ /usr/bin/VBoxClient --vmsvga  
  1561 ?        S       0:00 /usr/bin/VBoxClient --draganddrop  
  1563 ?        Sl      0:01  \_ /usr/bin/VBoxClient --draganddrop  
  1554 ?        S       0:00 /usr/bin/VBoxClient --seamless  
  1556 ?        Sl      0:00  \_ /usr/bin/VBoxClient --seamless  
  1542 ?        S       0:00 /usr/bin/VBoxClient --clipboard  
  1544 ?        Sl      0:00  \_ /usr/bin/VBoxClient --clipboard  
  1391 ?        Sl      0:00 /usr/bin/gnome-keyring-daemon --daemonize --login  
  1362 ?        Ss      0:00 /lib/systemd/systemd --user  
  1363 ?        S       0:00  \_ (sd-pam)  
  1368 ?        S<sl    0:00  \_ /usr/bin/pulseaudio --daemonize=no --log-target  
  1370 ?        SNsl    0:00  \_ /usr/libexec/tracker-miner-fs  
  1373 ?        Ss      0:00  \_ /usr/bin/dbus-daemon --session --address=system  
  1389 ?        Ssl     0:00  \_ /usr/libexec/gvfsd  
  1761 ?        Sl      0:00 | \_ /usr/libexec/gvfsd-trash --spawner :1.3 /or  
  1399 ?        Sl      0:00  \_ /usr/libexec/gvfsd-fuse /run/user/1000/gvfs -f  
  1405 ?        Ssl     0:00  \_ /usr/libexec/gvfs-udisks2-volume-monitor
```

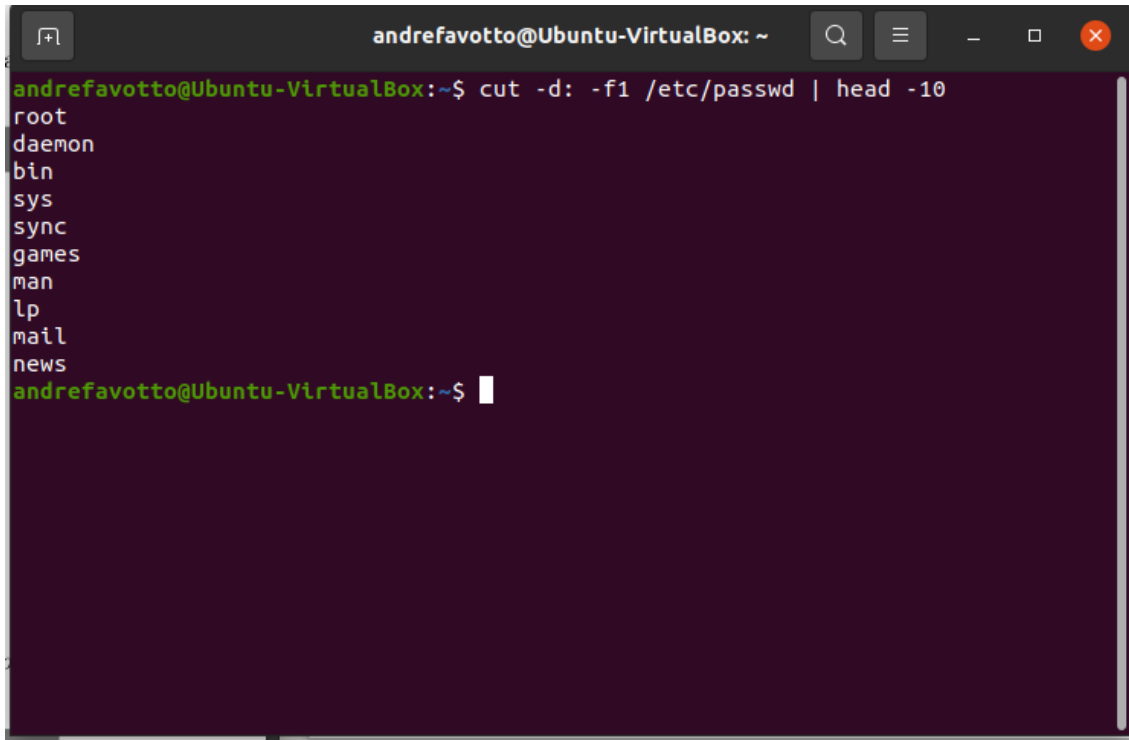

Alterando permissões de leitura e escrita

```
andrefavotto@Ubuntu-VirtualBox: ~/Documents/SEII-Andre...
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMA
NA01/arquivos$ ls -l permissoes.txt
--w--w---- 1 andrefavotto andrefavotto 0 mai 20 19:11 permissoes.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMA
NA01/arquivos$ chmod g-r permissoes.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMA
NA01/arquivos$ ls -l permissoes.txt
--w--w---- 1 andrefavotto andrefavotto 0 mai 20 19:11 permissoes.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMA
NA01/arquivos$ chmod g-r-w permissoes.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMA
NA01/arquivos$ ls -l permissoes.txt
--w----- 1 andrefavotto andrefavotto 0 mai 20 19:11 permissoes.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMA
NA01/arquivos$ chmod g+r+w permissoes.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMA
NA01/arquivos$ ls -l permissoes.txt
--w-rw---- 1 andrefavotto andrefavotto 0 mai 20 19:11 permissoes.txt
andrefavotto@Ubuntu-VirtualBox:~/Documents/SEII-AndreDeOliveiraAguilaFavoto/SEMA
NA01/arquivos$
```

Visualizando usuários do sistema (apenas os 10 primeiros):

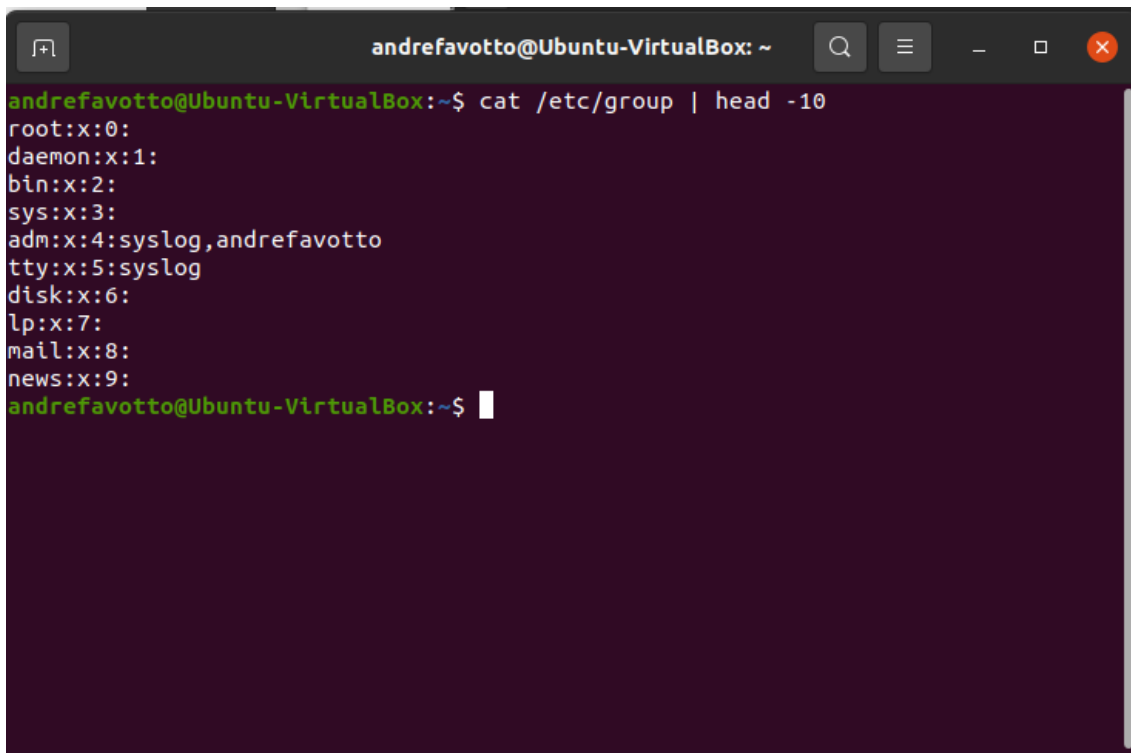
```
andrefavotto@Ubuntu-VirtualBox: ~
andrefavotto@Ubuntu-VirtualBox:~$ cat /etc/passwd | head -10
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
andrefavotto@Ubuntu-VirtualBox:~$
```


Aplicando o comando cut:



```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ cut -d: -f1 /etc/passwd | head -10  
root  
daemon  
bin  
sys  
sync  
games  
man  
lp  
mail  
news  
andrefavotto@Ubuntu-VirtualBox:~$
```

Listando grupos:



```
andrefavotto@Ubuntu-VirtualBox: ~  
andrefavotto@Ubuntu-VirtualBox:~$ cat /etc/group | head -10  
root:x:0:  
daemon:x:1:  
bin:x:2:  
sys:x:3:  
adm:x:4:syslog,andrefavotto  
tty:x:5:syslog  
disk:x:6:  
lp:x:7:  
mail:x:8:  
news:x:9:  
andrefavotto@Ubuntu-VirtualBox:~$
```

Criando usuário:

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

Comandos de rede:

```
andrefavotto@Ubuntu-VirtualBox: ~
andrefavotto@Ubuntu-VirtualBox:~$ hostname
Ubuntu-VirtualBox
andrefavotto@Ubuntu-VirtualBox:~$ arp -a
_gateway (10.0.2.2) at 52:54:00:12:35:02 [ether] on enp0s3
andrefavotto@Ubuntu-VirtualBox:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::da35:87e1:2889:a7aa prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:ff:fa:d6 txqueuelen 1000 (Ethernet)
    RX packets 4365 bytes 6109050 (6.1 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 765 bytes 81493 (81.4 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 261 bytes 22669 (22.6 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 261 bytes 22669 (22.6 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

andrefavotto@Ubuntu-VirtualBox:~$
```