NÚCLEO DE TECNOLOGIA
DEPARTAMENTO ACADÊMICO DE CIÊNCIA DA COMPUTAÇÃO
INSTITUTO ELDORADO
DISCIPLINA: DESENVOLVIMENTO LINUX EMBARCADO
LABORATÓRIOS PRÁTICOS - INTRODUÇÃO AO LINUX
DOCENTE: LUCAS MARQUES DA CUNHA
DISCENTE: JONATHAN OLIVEIRA PINHEIRO DA COSTA

A Seguir as imagens acerca dos tópicos feitos em sala, no módulo Desenvolvimento Linux embarcado, referente aos itens 1 até 7.

```
jonathan@jonathan:~$ cd /var/lo
local/  lock/   log/
jonathan@jonathan:~$ cd /var/log
jonathan@jonathan:/var/log$ pwd
/var/log
jonathan@jonathan:/var/log$ cd ~
jonathan@jonathan:~$ pwd
/home/jonathan
jonathan@jonathan:~$ cd /var/log
jonathan@jonathan:/var/log$ cd
jonathan@jonathan:~$ pwd
/home/jonathan
jonathan@jonathan:~$ cd .
jonathan@jonathan:~$ pwd
/home/jonathan
jonathan@jonathan:~$ cd ..
jonathan@jonathan:/home$ pwd
/home
jonathan@jonathan:/home$ cd -
/home/jonathan
jonathan@jonathan:~$ pwd
/home/jonathan
jonathan@jonathan:~$ 
```

```
jonathan@jonathan:~$ cat /etc/hostname
jonathan
jonathan@jonathan:~$ more /etc/login.defs
#
# /etc/login.defs - Configuration control definitions for the login package.
#
# Three items must be defined:  MAIL_DIR, ENV_SUPATH, and ENV_PATH.
# If unspecified, some arbitrary (and possibly incorrect) value will
# be assumed.  All other items are optional - if not specified then
# the described action or option will be inhibited.
#
# Comment lines (lines beginning with "#") and blank lines are ignored.
#
# Modified for Linux.  --marekm

# REQUIRED for useradd/userdel/usermod
#   Directory where mailboxes reside, _or_ name of file, relative to the
#   home directory.  If you _do_ define MAIL_DIR and MAIL_FILE,
#   MAIL_DIR takes precedence.
#
#   Essentially:
#      - MAIL_DIR defines the location of users mail spool files
#        (for mbox use) by appending the username to MAIL_DIR as defined
#        below.
#      - MAIL_FILE defines the location of the users mail spool files as the
#        fully-qualified filename obtained by prepending the user home
#        directory before $MAIL_FILE
#
# NOTE: This is no more used for setting up users MAIL environment variable
#       which is, starting from shadow 4.0.12-1 in Debian, entirely the
#       job of the pam_mail PAM modules
#       See default PAM configuration files provided for
#       login, su, etc.
#
# This is a temporary situation: setting these variables will soon
# move to /etc/default/useradd and the variables will then be
# no more supported
MAIL_DIR        /var/mail
#MAIL_FILE       .mail


#
jonathan@jonathan:~$ head -5 /etc/passwd
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
```

```
jonathan@jonathan:~$ tail -f /var/log/syslog
Oct 13 20:20:09 jonathan kernel: [ 2839.732168] audit: type=1400 audit(1665706809.750:34850): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:09 jonathan kernel: [ 2839.732186] audit: type=1400 audit(1665706809.750:34851): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:09 jonathan kernel: [ 2839.732466] audit: type=1400 audit(1665706809.754:34852): apparmor="DENIED" operation="open" profile="snap.discord.discord" name="/proc/1655/cmdline" pid=19306 comm="Utils" requested_mask="r" denied_mask="r" fsuid=1000 ouid=0
Oct 13 20:20:09 jonathan kernel: [ 2839.732511] audit: type=1400 audit(1665706809.754:34853): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:09 jonathan kernel: [ 2839.732679] audit: type=1400 audit(1665706809.754:34854): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:09 jonathan kernel: [ 2839.732696] audit: type=1400 audit(1665706809.754:34855): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:09 jonathan kernel: [ 2839.732835] audit: type=1400 audit(1665706809.754:34856): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:09 jonathan kernel: [ 2839.732963] audit: type=1400 audit(1665706809.754:34857): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:09 jonathan kernel: [ 2839.732992] audit: type=1400 audit(1665706809.754:34858): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:09 jonathan kernel: [ 2839.733168] audit: type=1400 audit(1665706809.754:34859): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:14 jonathan kernel: [ 2844.766108] kauditd_printk_skb: 153 callbacks suppressed
Oct 13 20:20:14 jonathan kernel: [ 2844.766115] audit: type=1400 audit(1665706814.787:35013): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:14 jonathan kernel: [ 2844.766129] audit: type=1400 audit(1665706814.787:35014): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:14 jonathan kernel: [ 2844.766374] audit: type=1400 audit(1665706814.787:35015): apparmor="DENIED" operation="open" profile="snap.discord.discord" name="/proc/1655/cmdline" pid=19306 comm="Utils" requested_mask="r" denied_mask="r" fsuid=1000 ouid=0
Oct 13 20:20:14 jonathan kernel: [ 2844.766389] audit: type=1400 audit(1665706814.787:35016): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:14 jonathan kernel: [ 2844.766531] audit: type=1400 audit(1665706814.787:35017): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:14 jonathan kernel: [ 2844.766657] audit: type=1400 audit(1665706814.787:35018): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:14 jonathan kernel: [ 2844.766673] audit: type=1400 audit(1665706814.787:35019): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:14 jonathan kernel: [ 2844.766855] audit: type=1400 audit(1665706814.787:35020): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:14 jonathan kernel: [ 2844.766885] audit: type=1400 audit(1665706814.787:35021): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
Oct 13 20:20:14 jonathan kernel: [ 2844.767059] audit: type=1400 audit(1665706814.787:35022): apparmor="DENIED" operation="ptrace" profile="snap.discord.discord" pid=19306 comm="Utils" requested_mask="read" denied_mask="read" peer="unconfined"
^C
```

```
jonathan@jonathan:~$ vi ArquivoTeste.txt
jonathan@jonathan:~$ cat ArquivoTeste.txt
Eu sou o arquivo de teste do vim
jonathan@jonathan:~$ nano ArquivoTeste.txt
jonathan@jonathan:~$ cat ArquivoTeste.txt
Eu sou o arquivo de teste do vim
Agora fui editado pelo nano
jonathan@jonathan:~$
```

```
jonathan@jonathan:~$ cp ArquivoTeste.txt ArquivoCopia.txt
jonathan@jonathan:~$ ls -lh Arquivo[C\|T]*.txt
-rw-rw-r-- 1 jonathan jonathan 62 out 13 20:28 ArquivoCopia.txt
-rw-rw-r-- 1 jonathan jonathan 62 out 13 20:25 ArquivoTeste.txt
jonathan@jonathan:~$ cp ArquivoTeste.txt /tmp/
jonathan@jonathan:~$ ls -lh ArquivoTeste.txt /tmp/ArquivoTeste.txt
-rw-rw-r-- 1 jonathan jonathan 62 out 13 20:25 ArquivoTeste.txt
-rw-rw-r-- 1 jonathan jonathan 62 out 13 20:29 /tmp/ArquivoTeste.txt
jonathan@jonathan:~$ mv ArquivoCopia.txt /tmp/
jonathan@jonathan:~$ ls -lh /tmp/ArquivoTeste.txt
-rw-rw-r-- 1 jonathan jonathan 62 out 13 20:29 /tmp/ArquivoTeste.txt
jonathan@jonathan:~$ mv ArquivoTeste.txt ArquivoRenomeado.txt
jonathan@jonathan:~$ ls -lh ArquivoRenomeado.txt
-rw-rw-r-- 1 jonathan jonathan 62 out 13 20:25 ArquivoRenomeado.txt
jonathan@jonathan:~$ mv ArquivoRenomeado.txt /tmp/ArquivoMovido.txt
jonathan@jonathan:~$ ls -lh /tmp/ArquivoMovido.txt
-rw-rw-r-- 1 jonathan jonathan 62 out 13 20:25 /tmp/ArquivoMovido.txt
jonathan@jonathan:~$
```

```
jonathan@jonathan:~$ #inicio do intem 1.10
jonathan@jonathan:~$ mkdir TesDir
jonathan@jonathan:~$ cd TesDir/
jonathan@jonathan:~/TesDir$ ls -al
total 8
drwxrwxr-x  2 jonathan jonathan 4096 out 13 20:34 .
drwxr-x--- 22 jonathan jonathan 4096 out 13 20:34 ..
jonathan@jonathan:~/TesDir$ cd ..
jonathan@jonathan:~$ rmdir TesDir/
jonathan@jonathan:~$ mkdir TesteDir2
jonathan@jonathan:~$ cd TesteDir2/
jonathan@jonathan:~/TesteDir2$ echo "Jebediah Kerman" > ArquivoTeste.txt
jonathan@jonathan:~/TesteDir2$ cat ArquivoTeste.txt
Jebediah Kerman
jonathan@jonathan:~/TesteDir2$ cd ..
jonathan@jonathan:~$ rmdir TesteDir2/
rmdir: falhou em remover 'TesteDir2/': Diretório não vazio
jonathan@jonathan:~$ rm -rf TesteDir2/
jonathan@jonathan:~$ ls
'Área de Trabalho'    Downloads              linkDrive.txt   Música         numeros.txt          projetos      questao34.sh    sort
 data                 Imagens                listabin.txt    numeros1.txt   palomakoba           Público       questao35.sh    Vídeos
 Documentos           Jonathan-Oliveira      modulo6         numeros2.txt   palomakobabackups    qualnome.txt  snap
jonathan@jonathan:~$ 
```

```
jonathan@jonathan:~$ #iniciando o item 2.1
jonathan@jonathan:~$ ls -lh /usr/bin/ > ArquivosDoBin.txt
jonathan@jonathan:~$ tail -5 ArquivosDoBin.txt
-rwxr-xr-x 1 root root     855K mar 24  2022 zstd
lrwxrwxrwx 1 root root        4 out  4 16:48 zstdcat -> zstd
-rwxr-xr-x 1 root root     3,8K mar 24  2022 zstdgrep
-rwxr-xr-x 1 root root       30 mar 24  2022 zstdless
lrwxrwxrwx 1 root root        4 out  4 16:48 zstdmt -> zstd
jonathan@jonathan:~$ echo -e "(\(\\ \n(-.-)\no_(\")(\")"
(\(\
(-.-)
o_(")(")
jonathan@jonathan:~$ echo "primeira linha do arquivo" > ArquivoTeste.txt
jonathan@jonathan:~$ cat ArquivoTeste.txt
primeira linha do arquivo
jonathan@jonathan:~$ echo "segunda linha do arquivo (só que não)" > ArquivoTeste.txt
jonathan@jonathan:~$ cat ArquivoTeste.txt
segunda linha do arquivo (só que não)
jonathan@jonathan:~$ echo "segunda linha do arquivo (de verdade)" >> ArquivoTeste.txt
jonathan@jonathan:~$ cat ArquivoTeste.txt
segunda linha do arquivo (só que não)
segunda linha do arquivo (de verdade)
jonathan@jonathan:~$ ls ArquivoInvalido.txt ArquivoTeste.txt > LsStdout.txt
ls: não foi possível acessar 'ArquivoInvalido.txt': Arquivo ou diretório inexistente
jonathan@jonathan:~$ ls ArquivoInvalido.txt ArquivoTeste.txt 2> LsStderr.txt
ArquivoTeste.txt
jonathan@jonathan:~$ cat LsStderr.txt
ls: não foi possível acessar 'ArquivoInvalido.txt': Arquivo ou diretório inexistente
jonathan@jonathan:~$ ls ArquivoInvalido.txt ArquivoTeste.txt > LsStdout.txt 2> LsStderr.txt
jonathan@jonathan:~$ ls ArquivoInvalido.txt ArquivoTeste.txt &> LsStdoutStdErr.txt
jonathan@jonathan:~$ ls ArquivoInvalido.txt ArquivoTeste.txt 2> /dev/null
ArquivoTeste.txt
jonathan@jonathan:~$ 
```

```
jonathan@jonathan:~$ #iniciando o item 2.2
jonathan@jonathan:~$ grep a
Olá eu sou a entrada de informações via teclado :)
Olá eu sou a entrada de informações via teclado :)
^C
jonathan@jonathan:~$
jonathan@jonathan:~$
jonathan@jonathan:~$ cat /proc/cpuinfo | grep "model name"
model name       : Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz
model name       : Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz
model name       : Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz
model name       : Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz
jonathan@jonathan:~$
jonathan@jonathan:~$ cat /proc/cpuinfo | grep "model name" | head -1
model name       : Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz
jonathan@jonathan:~$ cat /proc/cpuinfo | grep "model name" | head -1 | cut -d: -f2
 Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz
jonathan@jonathan:~$ cat /proc/cpuinfo | grep "model name" | head -1 | cut -d: -f2 | cut -c2-
Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz
jonathan@jonathan:~$ cat /proc/cpuinfo | grep "model name" | head -1 | cut -d" " -f3,4,5,6,7,8
Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz
jonathan@jonathan:~$
```

```
jonathan@jonathan:~$ cat /etc/passwd | grep h | wc -l
12
jonathan@jonathan:~$ cat /etc/passwd | cut -d: -f1 | grep h
avahi-autoipd
avahi
cups-pk-helper
whoopsie
speech-dispatcher
hplip
jonathan
jonathan@jonathan:~$
```

```
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #inicio do item 5.1
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps
    PID TTY          TIME CMD
   5424 pts/0    00:00:00 bash
   6265 pts/0    00:00:00 ps
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ cat &
[1] 6267
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps
    PID TTY          TIME CMD
   5424 pts/0    00:00:00 bash
   6267 pts/0    00:00:00 cat
   6268 pts/0    00:00:00 ps

[1]+  Parado                  cat
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps -f
UID          PID    PPID  C STIME TTY          TIME CMD
aluno       5424    5302  0 14:51 pts/0    00:00:00 bash
aluno       6267    5424  0 15:46 pts/0    00:00:00 cat
aluno       6269    5424  0 15:46 pts/0    00:00:00 ps -f
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps -ef
UID          PID    PPID  C STIME TTY          TIME CMD
root           1       0  0 14:17 ?        00:00:01 /sbin/init splash
root           2       0  0 14:17 ?        00:00:00 [kthreadd]
root           3       2  0 14:17 ?        00:00:00 [rcu_gp]
root           4       2  0 14:17 ?        00:00:00 [rcu_par_gp]
root           5       2  0 14:17 ?        00:00:00 [netns]
root           7       2  0 14:17 ?        00:00:00 [kworker/0:0H-events_highpri]
root           9       2  0 14:17 ?        00:00:00 [mm_percpu_wq]
root          10       2  0 14:17 ?        00:00:00 [rcu_tasks_rude_]
root          11       2  0 14:17 ?        00:00:00 [rcu_tasks_trace]
root          12       2  0 14:17 ?        00:00:00 [ksoftirqd/0]
root          13       2  0 14:17 ?        00:00:04 [rcu_sched]
root          14       2  0 14:17 ?        00:00:00 [migration/0]
root          15       2  0 14:17 ?        00:00:00 [idle_inject/0]
root          16       2  0 14:17 ?        00:00:00 [kworker/0:1-events]
root          17       2  0 14:17 ?        00:00:00 [cpuhp/0]
root          18       2  0 14:17 ?        00:00:00 [cpuhp/1]
root          19       2  0 14:17 ?        00:00:00 [idle_inject/1]
root          20       2  0 14:17 ?        00:00:00 [migration/1]
root          21       2  0 14:17 ?        00:00:00 [ksoftirqd/1]
root          23       2  0 14:17 ?        00:00:00 [kworker/1:0H-events_highpri]
root          24       2  0 14:17 ?        00:00:00 [cpuhp/2]
root          25       2  0 14:17 ?        00:00:00 [idle_inject/2]
root          26       2  0 14:17 ?        00:00:00 [migration/2]
root          27       2  0 14:17 ?        00:00:00 [ksoftirqd/2]
root          29       2  0 14:17 ?        00:00:00 [kworker/2:0H-events_highpri]
root          30       2  0 14:17 ?        00:00:00 [cpuhp/3]
root          31       2  0 14:17 ?        00:00:00 [idle_inject/3]
root          32       2  0 14:17 ?        00:00:00 [migration/3]
```

```
root      5240         2  0 14:45 ?        00:00:00 [kworker/u24:0-events_power_efficient]
aluno     5302      1834  0 14:51 ?        00:00:13 /usr/libexec/gnome-terminal-server
aluno     5424      5302  0 14:51 pts/0    00:00:00 bash
root      5504         2  0 15:03 ?        00:00:00 [kworker/u24:1-events_unbound]
root      5862         2  0 15:32 ?        00:00:00 [kworker/3:1-cgroup_destroy]
root      5912         2  0 15:36 ?        00:00:00 [kworker/1:1-mm_percpu_wq]
root      5946         2  0 15:37 ?        00:00:00 [kworker/u24:2-events_unbound]
aluno     5969      5302  0 15:40 pts/1    00:00:00 bash
aluno     6162      1856  0 15:43 ?        00:00:00 /usr/libexec/gvfsd-network --spawner :1.3 /org/gtk/gv
aluno     6177      1856  0 15:43 ?        00:00:00 /usr/libexec/gvfsd-dnssd --spawner :1.3 /org/gtk/gvfs
root      6251         2  0 15:43 ?        00:00:00 [kworker/8:2-events]
aluno     6267      5424  0 15:46 pts/0    00:00:00 cat
aluno     6275      5424  0 15:46 pts/0    00:00:00 ps -ef
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps -ef | wc -l
357
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ top

top - 15:47:37 up  1:30,  1 user,  load average: 0,25, 0,18, 0,10
Tarefas: 355 total,   1 em exec., 353 dormindo,   1 parado,   0 zumbi
%CPU(s):  2,3 us,  0,9 sis,  0,0 ni, 96,7 oc,  0,0 ag,  0,0 ih,  0,0 is  0,0 tr
MB mem : 15808,5 total, 11761,6 livre,   2067,1 usados,  1979,8 buff/cache
MB swap:  3906,0 total,  3906,0 livre,      0,0 usados,  13359,9 mem dispon.

   PID USUARIO   PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TEMPO+ COMANDO
  1936 root      20   0 6750164 138980  80808 S  20,0   0,9   1:20.75 Xorg
  6281 aluno     20   0   12304   4256   3392 R  13,3   0,0   0:00.02 top
  1428 root      20   0       0      0      0 S   6,7   0,0   0:10.60 nv_queue
  2336 aluno     20   0 1190900 193020  55992 S   6,7   1,2   0:04.36 snap-store
     1 root      20   0  167892  11584   8124 S   0,0   0,1   0:01.40 systemd
     2 root      20   0       0      0      0 S   0,0   0,0   0:00.00 kthreadd
     3 root       0 -20       0      0      0 I   0,0   0,0   0:00.00 rcu_gp
     4 root       0 -20       0      0      0 I   0,0   0,0   0:00.00 rcu_par_gp
     5 root       0 -20       0      0      0 I   0,0   0,0   0:00.00 netns
     7 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   0:00.01 ksoftirqd/0
    13 root      20   0       0      0      0 I   0,0   0,0   0:04.07 rcu_sched
    14 root      rt   0       0      0      0 S   0,0   0,0   0:00.02 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 I   0,0   0,0   0:00.33 kworker/0:1-events
    17 root      20   0       0      0      0 S   0,0   0,0   0:00.00 cpuhp/0
    18 root      20   0       0      0      0 S   0,0   0,0   0:00.00 cpuhp/1
    19 root     -51   0       0      0      0 S   0,0   0,0   0:00.00 idle_inject/1
    20 root      rt   0       0      0      0 S   0,0   0,0   0:00.12 migration/1
    21 root      20   0       0      0      0 S   0,0   0,0   0:00.01 ksoftirqd/1
    23 root       0 -20       0      0      0 I   0,0   0,0   0:00.00 kworker/1:0H-events_highpri
    24 root      20   0       0      0      0 S   0,0   0,0   0:00.00 cpuhp/2
    25 root     -51   0       0      0      0 S   0,0   0,0   0:00.00 idle_inject/2
    26 root      rt   0       0      0      0 S   0,0   0,0   0:00.12 migration/2
    27 root      20   0       0      0      0 S   0,0   0,0   0:00.01 ksoftirqd/2
    29 root       0 -20       0      0      0 I   0,0   0,0   0:00.00 kworker/2:0H-events_highpri
    30 root      20   0       0      0      0 S   0,0   0,0   0:00.00 cpuhp/3
```

```
   43 root      -51   0      0      0      0 S   0,0   0,0   0:00.00 idle_inject/5
   44 root       rt   0      0      0      0 S   0,0   0,0   0:00.12 migration/5
   45 root       20   0      0      0      0 S   0,0   0,0   0:00.03 ksoftirqd/5
   47 root        0 -20      0      0      0 I   0,0   0,0   0:00.00 kworker/5:0H-events_highpri
   48 root       20   0      0      0      0 S   0,0   0,0   0:00.00 cpuhp/6
   49 root      -51   0      0      0      0 S   0,0   0,0   0:00.00 idle_inject/6
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ top -o %MEM

top - 15:47:47 up  1:30,  1 user,  load average: 0,19, 0,17, 0,10
Tarefas: 355 total,    1 em exec.,  353 dormindo,    1 parado,    0 zumbi
%CPU(s):  1,4 us,   1,4 sis,  0,0 ni, 97,2 oc,  0,0 ag,  0,0 ih,  0,0 is  0,0 tr
MB mem :  15808,5 total,   11761,6 livre,    2067,1 usados,    1979,9 buff/cache
MB swap:   3906,0 total,    3906,0 livre,       0,0 usados,   13359,9 mem dispon.

    PID USUARIO    PR  NI     VIRT     RES    SHR S   %CPU  %MEM     TEMPO+ COMANDO
   4078 aluno      20   0  3686280  579544 270364 S   0,0   3,6    2:52.92 firefox
   2071 aluno      20   0  5238440  378572 130156 S   0,0   2,3    1:14.73 gnome-shell
   4312 aluno      20   0  7054092  256648 110444 S   0,0   1,6    0:24.52 Isolated Web Co
   2336 aluno      20   0  1190900  193020  55992 S   0,0   1,2    0:04.36 snap-store
   4602 aluno      20   0  2572252  180508 115640 S   0,0   1,1    0:45.83 Isolated Web Co
   1534 gdm        20   0  3988032  175884  95912 S   0,0   1,1    0:04.32 gnome-shell
   1936 root       20   0  6750164  138980  80808 S  20,0   0,9    1:20.95 Xorg
   4186 aluno      20   0  2436468  121152  90632 S   0,0   0,7    0:02.07 Privileged Cont
   1311 root       20   0  6726492  119140  75240 S   0,0   0,7    0:03.71 Xorg
   4227 aluno      20   0  2435844   99420  80004 S   0,0   0,6    0:00.64 WebExtensions
   4808 aluno      20   0  2400464   76708  65412 S   0,0   0,5    0:00.15 Web Content
   4801 aluno      20   0  2400464   76484  65204 S   0,0   0,5    0:00.16 Web Content
   4803 aluno      20   0  2400464   76160  64824 S   0,0   0,5    0:00.15 Web Content
   4379 aluno      20   0  1200048   73040  49936 S   0,0   0,5    0:07.65 nautilus
   2268 aluno      20   0   641792   57916  43420 S   0,0   0,4    0:00.29 evolution-alarm
   2243 aluno      20   0   501232   55808  44212 S   0,0   0,3    0:01.32 kdeconnectd
   4906 aluno      20   0   862044   54020  42024 S   0,0   0,3    0:00.18 gnome-calendar
   5302 aluno      20   0   816420   53396  40608 S   0,0   0,3    0:13.98 gnome-terminal-
   4425 aluno      20   0   316292   49764  39868 S   0,0   0,3    0:00.11 Utility Process
   4420 aluno      20   0   320488   46008  36492 S   0,0   0,3    0:00.08 RDD Process
   4141 aluno      20   0   202928   43848  36188 S   0,0   0,3    0:00.11 Socket Process
   1028 root       20   0  1835704   39176  19540 S   0,0   0,2    0:02.53 snapd
   2502 root       20   0   393452   37304  31288 S   0,0   0,2    0:00.75 fwupd
   1911 aluno      20   0   550428   34832  28528 S   0,0   0,2    0:00.03 goa-daemon
   1394 gdm        20   0   550416   34820  28552 S   0,0   0,2    0:00.05 goa-daemon
   2142 aluno      20   0   839864   31660  27464 S   0,0   0,2    0:00.07 evolution-calen
   2100 aluno      20   0   276248   31132  19916 S   0,0   0,2    0:00.92 ibus-extension-
   2158 aluno      20   0   674504   30224  26692 S   0,0   0,2    0:00.03 evolution-addre
   2207 aluno      20   0   687600   29812  22652 S   0,0   0,2    0:00.21 gsd-media-keys
   2200 aluno      20   0   430064   28576  22072 S   0,0   0,2    0:00.15 gsd-color
   2490 aluno      20   0   494164   28468  22224 S   0,0   0,2    0:00.20 xdg-desktop-por
   2233 aluno      20   0   345996   28204  21120 S   0,0   0,2    0:00.17 gsd-xsettings
   4565 aluno      20   0   419236   27992  21736 S   0,0   0,2    0:00.23 update-notifier
   2210 aluno      20   0   419248   27900  21208 S   0,0   0,2    0:00.17 gsd-power
   2174 aluno      20   0  2931108   27640  22048 S   0,0   0,2    0:00.04 gjs
   2132 aluno      20   0   940396   27100  23092 S   0,0   0,2    0:00.05 evolution-sourc
   1587 gdm        20   0  2930860   26836  21912 S   0,0   0,2    0:00.04 gjs
   2205 aluno      20   0   345080   26672  20308 S   0,0   0,2    0:00.17 gsd-keyboard
   2227 aluno      20   0   344492   26672  20076 S   0,0   0,2    0:00.15 gsd-wacom
   2102 aluno      20   0   196960   26528  20140 S   0,0   0,2    0:00.13 ibus-x11
   2245 aluno      20   0   586832   25908  22312 S   0,0   0,2    0:00.33 anydesk
   1796 root       20   0    87204   25668  22608 S   0,0   0,2    0:00.05 smbd
   1845 aluno      39  19   512532   25340  16744 S   0,0   0,2    0:00.11 tracker-miner-f
   1308 gdm        39  19   512320   25032  16576 S   0,0   0,2    0:00.08 tracker-miner-f
   1615 gdm        20   0   895412   23196  20180 S   0,0   0,1    0:00.05 gsd-media-keys
   1254 root       20   0   118140   22524  14376 S   0,0   0,1    0:00.04 unattended-upgr
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #fim do item 5.1
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
```

```
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps | grep cat | xargs | cut -d" " -f1
6267
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ kill 6267
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps | grep cat
   6267 pts/0    00:00:00 cat
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ kill -9 6267
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps | grep cat
[1]+  Morto                  cat
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ cat &
[1] 11496
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ cat &
[2] 11510

[1]+  Parado                 cat
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps | grep cat
  11496 pts/0    00:00:00 cat
  11510 pts/0    00:00:00 cat

[2]+  Parado                 cat
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ killall -9 cat
[1]-  Morto                  cat
[2]+  Morto                  cat
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps | grep cat
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #fim do item 5.2
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
```

```
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #inicio do item 5.3
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ free
              total        usada       livre     compart.   buff/cache  disponivel
Mem.:      16187912      2823384    11170924        61524      2193604    12990868
Swap:       3999740            0     3999740
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ free -h
              total        usada       livre     compart.   buff/cache  disponivel
Mem.:          15Gi        2,7Gi        10Gi         60Mi        2,1Gi        12Gi
Swap:         3,8Gi          0B        3,8Gi
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #fim do item 5.3
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
```

```
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #incio do item 5.4
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ps -ef | grep -v grep | grep "systemd-udevd\|systemd-resolved\|sys
temd-tiesyncd\|systemd-logind\|rsyslogd\|atd\|thermald\|acpid\|cupsd\|Xorg"
root         395       1  0 14:17 ?        00:00:00 /lib/systemd/systemd-udevd
systemd+     957       1  0 14:19 ?        00:00:00 /lib/systemd/systemd-resolved
root         990       1  0 14:19 ?        00:00:00 /usr/sbin/acpid
root         995       1  0 14:19 ?        00:00:00 /usr/sbin/cupsd -l
syslog      1019       1  0 14:19 ?        00:00:00 /usr/sbin/rsyslogd -n -iNONE
root        1036       1  0 14:19 ?        00:00:00 /lib/systemd/systemd-logind
root        1037       1  0 14:19 ?        00:00:00 /usr/sbin/thermald --systemd --dbus-enable --adaptive
root        1311    1309  0 14:19 tty1     00:00:03 /usr/lib/xorg/Xorg vt1 -displayfd 3 -auth /run/user/1
25/gdm/Xauthority -background none -noreset -keeptty -verbose 3
root        1936    1934  1 14:21 tty2     00:01:58 /usr/lib/xorg/Xorg vt2 -displayfd 3 -auth /run/user/1
001/gdm/Xauthority -background none -noreset -keeptty -verbose 3
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ # fim do item 5.4
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
```

```
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #inicio do item 5.5
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ cat /proc/cmdline
BOOT_IMAGE=/boot/vmlinuz-5.15.0-48-generic root=UUID=bf741425-5ad0-4865-ad66-906781c30d34 ro quiet splash
 vt.handoff=7
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ls -fd /sbin/init /etc/init /bin/init
ls: não foi possível acessar '/bin/init': Arquivo ou diretório inexistente
/sbin/init  /etc/init
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
```

```
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #inicio do item 5.6
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ls -lh /sbin/init
lrwxrwxrwx 1 root root 20 abr  2 19:41 /sbin/init -> /lib/systemd/systemd
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ls /lib/systemp/system/cron.service
ls: não foi possível acessar '/lib/systemp/system/cron.service': Arquivo ou diretório inexistente
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ls /lib/systemp/system/*.service
ls: não foi possível acessar '/lib/systemp/system/*.service': Arquivo ou diretório inexistente
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ls /lib/systemd/system/*.service
/lib/systemd/system/accounts-daemon.service
/lib/systemd/system/acpid.service
/lib/systemd/system/alsa-restore.service
/lib/systemd/system/alsa-state.service
/lib/systemd/system/alsa-utils.service
/lib/systemd/system/anacron.service
/lib/systemd/system/apparmor.service
/lib/systemd/system/apport-autoreport.service
/lib/systemd/system/apport-forward@.service
/lib/systemd/system/apt-daily.service
/lib/systemd/system/apt-daily-upgrade.service
/lib/systemd/system/autovt@.service
/lib/systemd/system/avahi-daemon.service
/lib/systemd/system/binfmt-support.service
/lib/systemd/system/bluetooth.service
/lib/systemd/system/bolt.service
/lib/systemd/system/brltty.service
/lib/systemd/system/brltty-udev.service
/lib/systemd/system/clean-mount-point@.service
/lib/systemd/system/colord.service
/lib/systemd/system/configure-printer@.service
/lib/systemd/system/console-getty.service
/lib/systemd/system/console-setup.service
/lib/systemd/system/container-getty@.service
/lib/systemd/system/cron.service
/lib/systemd/system/cryptdisks-early.service
/lib/systemd/system/cryptdisks.service
/lib/systemd/system/cups-browsed.service
/lib/systemd/system/cups.service
/lib/systemd/system/dbus-org.freedesktop.hostname1.service
/lib/systemd/system/dbus-org.freedesktop.locale1.service
/lib/systemd/system/dbus-org.freedesktop.login1.service
/lib/systemd/system/dbus-org.freedesktop.timedate1.service
/lib/systemd/system/dbus.service
/lib/systemd/system/debug-shell.service
/lib/systemd/system/dmesg.service
/lib/systemd/system/e2scrub_all.service
/lib/systemd/system/e2scrub_fail@.service
/lib/systemd/system/e2scrub_reap.service
/lib/systemd/system/e2scrub@.service
/lib/systemd/system/emergency.service
/lib/systemd/system/fprintd.service
/lib/systemd/system/friendly-recovery.service
/lib/systemd/system/fstrim.service
/lib/systemd/system/fwupd-offline-update.service
```

```
/lib/systemd/system/systemd-random-seed.service
/lib/systemd/system/systemd-reboot.service
/lib/systemd/system/systemd-remount-fs.service
/lib/systemd/system/systemd-resolved.service
/lib/systemd/system/systemd-rfkill.service
/lib/systemd/system/systemd-suspend.service
/lib/systemd/system/systemd-suspend-then-hibernate.service
/lib/systemd/system/systemd-sysctl.service
/lib/systemd/system/systemd-sysusers.service
/lib/systemd/system/systemd-timedated.service
/lib/systemd/system/systemd-timesyncd.service
/lib/systemd/system/systemd-time-wait-sync.service
/lib/systemd/system/systemd-tmpfiles-clean.service
/lib/systemd/system/systemd-tmpfiles-setup-dev.service
/lib/systemd/system/systemd-tmpfiles-setup.service
/lib/systemd/system/systemd-udevd.service
/lib/systemd/system/systemd-udev-settle.service
/lib/systemd/system/systemd-udev-trigger.service
/lib/systemd/system/systemd-update-utmp-runlevel.service
/lib/systemd/system/systemd-update-utmp.service
/lib/systemd/system/systemd-user-sessions.service
/lib/systemd/system/systemd-volatile-root.service
/lib/systemd/system/system-update-cleanup.service
/lib/systemd/system/thermald.service
/lib/systemd/system/ua-license-check.service
/lib/systemd/system/ua-reboot-cmds.service
/lib/systemd/system/ua-timer.service
/lib/systemd/system/udev.service
/lib/systemd/system/udisks2.service
/lib/systemd/system/ufw.service
/lib/systemd/system/unattended-upgrades.service
/lib/systemd/system/upower.service
/lib/systemd/system/usb_modeswitch@.service
/lib/systemd/system/usbmuxd.service
/lib/systemd/system/user-runtime-dir@.service
/lib/systemd/system/user@.service
/lib/systemd/system/uuidd.service
/lib/systemd/system/vboxautostart-service.service
/lib/systemd/system/vboxballoonctrl-service.service
/lib/systemd/system/vboxdrv.service
/lib/systemd/system/vboxweb-service.service
/lib/systemd/system/wacom-inputattach@.service
/lib/systemd/system/whoopsie.service
/lib/systemd/system/wpa_supplicant-nl80211@.service
/lib/systemd/system/wpa_supplicant.service
/lib/systemd/system/wpa_supplicant@.service
/lib/systemd/system/wpa_supplicant-wired@.service
/lib/systemd/system/x11-common.service
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ ls /lib/systemd/system/cron.service
/lib/systemd/system/cron.service
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #fim do item 5.6
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
```

```
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #inicio do item 6
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ tail -5 /etc/passwd/^C
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ tail -5 /etc/passwd
systemd-coredump:x:999:999:systemd Core Dumper:/:/usr/sbin/nologin
aluno::1001:1001:Aluno,,,:/home/aluno:/bin/bash
lightdm:x:128:135:Light Display Manager:/var/lib/lightdm:/bin/false
nvidia-persistenced:x:127:134:NVIDIA Persistence Daemon,,,:/nonexistent:/usr/sbin/nologin
sshd:x:129:65534::/run/sshd:/usr/sbin/nologin
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ #inicio do item 6
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ tail -5 /etc/passwd
systemd-coredump:x:999:999:systemd Core Dumper:/:/usr/sbin/nologin
aluno::1001:1001:Aluno,,,:/home/aluno:/bin/bash
lightdm:x:128:135:Light Display Manager:/var/lib/lightdm:/bin/false
nvidia-persistenced:x:127:134:NVIDIA Persistence Daemon,,,:/nonexistent:/usr/sbin/nologin
sshd:x:129:65534::/run/sshd:/usr/sbin/nologin
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ head -1 /etc/passwd
root:x:0:0:root:/root:/bin/bash
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ cat /etc/passwd | grep
Uso: grep [OPÇÃO]... PADRÕES [ARQUIVO]...
Experimente "grep --help" para mais informações.
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ cat /etc/passwd | grep "mail\|www-data\|syslog\|sshd"
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
syslog:x:104:110::/home/syslog:/usr/sbin/nologin
sshd:x:129:65534::/run/sshd:/usr/sbin/nologin
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ cat /etc/passwd | wc -l
51
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$ cat /etc/passwd | cut -f1 -d: | sort | tr "\n" " " ; echo
administrador aluno _apt avahi avahi-autoipd backup bin colord cups-pk-helper daemon dnsmasq games gdm ge
oclue gnats gnome-initial-setup hplip irc kernoops lightdm list lp mail man messagebus news nm-openvpn no
body nvidia-persistenced proxy pulse root rtkit saned speech-dispatcher sshd sssd sync sys syslog systemd
-coredump systemd-network systemd-resolve systemd-timesync tcpdump tss usbmux uucp uuidd whoopsie www-dat
a
aluno@LAB-DACC-08:~/Imagens/Lab2Linux$
```

```
administrador@LAB-DACC-09:~$ sudo adduser derick
[sudo] senha para administrador:
Adicionando o usuário `derick' ...
Adicionando novo grupo 'derick' (1003) ...
Adicionando novo usuário `derick' (1002) ao grupo `derick' ...
Criando diretório pessoal `/home/derick' ...
Copiando arquivos de '/etc/skel' ...
Nova senha:
Redigite a nova senha:
passwd: senha atualizada com sucesso
Modificando as informações de usuário para derick
Informe o novo valor ou pressione ENTER para aceitar o padrão
        Nome Completo []:
        Número da Sala []:
        Fone de Trabalho []:
        Fone Residencial []:
        Outro []:
A informação está correta? [S/n]
administrador@LAB-DACC-09:~$ S
S: comando não encontrado
administrador@LAB-DACC-09:~$ cat /etc/passwd | grep "derick"
derick:x:1002:1003:,,,:/home/derick:/bin/bash
administrador@LAB-DACC-09:~$ #fim do item 6.1
administrador@LAB-DACC-09:~$
```

```
administrador@LAB-DACC-09:~$ #iniciando o item 6.2
administrador@LAB-DACC-09:~$
administrador@LAB-DACC-09:~$ cat /etc/shadow
cat: /etc/shadow: Permissão negada
administrador@LAB-DACC-09:~$ sudo cat /etc/shadow
root:$6$fyU9Rw3N.LqItk0n$rjlAFkz9RkC7fA.S9E3oQAujB/W9Xgv9fOyPTV0rADqNc.oRjh7dtGjR20MikCpyrvS6t0/UGj14P60y
g2GOl0:19087:0:99999:7:::
daemon:*:19046:0:99999:7:::
bin:*:19046:0:99999:7:::
sys:*:19046:0:99999:7:::
sync:*:19046:0:99999:7:::
games:*:19046:0:99999:7:::
man:*:19046:0:99999:7:::
lp:*:19046:0:99999:7:::
mail:*:19046:0:99999:7:::
news:*:19046:0:99999:7:::
uucp:*:19046:0:99999:7:::
proxy:*:19046:0:99999:7:::
www-data:*:19046:0:99999:7:::
backup:*:19046:0:99999:7:::
list:*:19046:0:99999:7:::
irc:*:19046:0:99999:7:::
gnats:*:19046:0:99999:7:::
nobody:*:19046:0:99999:7:::
systemd-network:*:19046:0:99999:7:::
systemd-resolve:*:19046:0:99999:7:::
systemd-timesync:*:19046:0:99999:7:::
messagebus:*:19046:0:99999:7:::
syslog:*:19046:0:99999:7:::
_apt:*:19046:0:99999:7:::
tss:*:19046:0:99999:7:::
uuidd:*:19046:0:99999:7:::
tcpdump:*:19046:0:99999:7:::
avahi-autoipd:*:19046:0:99999:7:::
usbmux:*:19046:0:99999:7:::
rtkit:*:19046:0:99999:7:::
dnsmasq:*:19046:0:99999:7:::
cups-pk-helper:*:19046:0:99999:7:::
speech-dispatcher:!:19046:0:99999:7:::
avahi:*:19046:0:99999:7:::
kernoops:*:19046:0:99999:7:::
saned:*:19046:0:99999:7:::
nm-openvpn:*:19046:0:99999:7:::
hplip:*:19046:0:99999:7:::
whoopsie:*:19046:0:99999:7:::
colord:*:19046:0:99999:7:::
geoclue:*:19046:0:99999:7:::
pulse:*:19046:0:99999:7:::
gnome-initial-setup:*:19046:0:99999:7:::
gdm:*:19046:0:99999:7:::
sssd:*:19046:0:99999:7:::
administrador:$6$jvGADAzfv03nfz6U$q8FjNcZsTtvHlINvwFDn.O9jTPnMc7S84uqVv.N0lqelz4QEYBp0e.JLMDGnM7J5//v0zCK
p06B2wP0aalFkx.:19089:0:99999:7:::
systemd-coredump:!!!:19084::::::
aluno:$6$2ZSPbLFDCh9c8HFZSdaIZqcC8pKC9xeg39FGgo1YP5DnICFmP7ZXVvsV/20mClKk/L0T51aNQugkWwZg8brRm1vMzNKHWinc
```

```
kernoops:*:19046:0:99999:7:::
saned:*:19046:0:99999:7:::
nm-openvpn:*:19046:0:99999:7:::
hplip:*:19046:0:99999:7:::
whoopsie:*:19046:0:99999:7:::
colord:*:19046:0:99999:7:::
geoclue:*:19046:0:99999:7:::
pulse:*:19046:0:99999:7:::
gnome-initial-setup:*:19046:0:99999:7:::
gdm:*:19046:0:99999:7:::
sssd:*:19046:0:99999:7:::
administrador:$6$jvGADAzfv03nfz6U$q8FjNcZsTtvHlINvwFDn.O9jTPnMc7S84uqVv.N0lqelz4QEYBp0e.JLMDGnM7J5//v0zCK
p06B2wP0aalFkx.:19089:0:99999:7:::
systemd-coredump:!!:19084::::::
aluno:$6$2ZSPbLEDCh9c8HFZ$daIZgcC8pKC9xeq39EGqo1YP5DnICFmP7ZXVysV/20mClKk/L0I51aNQugkWwZg8brRm1vMzNKHWinc
T8f7Hz0:19085:0:99999:7:::
lightdm:*:19085:0:99999:7:::
nvidia-persistenced:*:19086:0:99999:7:::
sshd:*:19086:0:99999:7:::
derick:$6$Sn8Td5dOdKJMoic4$RDnKPBZ4RWj4KpzU4jPn3NwVXQc3yt9ZpF0GS0ofhIWVloEPXiiPlHJDOrPzTa6ETZm2/XsCi2Xqp1
UNGqwsf/:19263:0:99999:7:::
administrador@LAB-DACC-09:~$ sudo cat /etc/shadow | grep "derick"
administrador@LAB-DACC-09:~$ export HISTFILE=dev/null
administrador@LAB-DACC-09:~$ echo -n "ncc1701" | mkpasswd --stdin --method=sha-512 --salt=".x7wn1nz7Y713A
tz"

Comando 'mkpasswd' não encontrado, mas poder ser instalado com:

sudo apt install whois

administrador@LAB-DACC-09:~$
administrador@LAB-DACC-09:~$ sudo apt install whois
Lendo listas de pacotes... Pronto
Construindo árvore de dependências
Lendo informação de estado... Pronto
Os NOVOS pacotes a seguir serão instalados:
  whois
0 pacotes atualizados, 1 pacotes novos instalados, 0 a serem removidos e 216 não atualizados.
É preciso baixar 44,7 kB de arquivos.
Depois desta operação, 279 kB adicionais de espaço em disco serão usados.
Obter:1 http://br.archive.ubuntu.com/ubuntu focal/main amd64 whois amd64 5.5.6 [44,7 kB]
Baixados 44,7 kB em 0s (236 kB/s)
A seleccionar pacote anteriormente não seleccionado whois.
(Lendo banco de dados ... 339887 ficheiros e directórios actualmente instalados.)
A preparar para desempacotar .../archives/whois_5.5.6_amd64.deb ...
A descompactar whois (5.5.6) ...
Configurando whois (5.5.6) ...
A processar 'triggers' para man-db (2.9.1-1) ...
administrador@LAB-DACC-09:~$ echo -n "ncc1701" | mkpasswd --stdin --method=sha-512 --salt=".x7wn1nz7Y713A
tz"
$6$.x7wn1nz7Y713Atz$4eor9BMmiPRJQziHhc5nFQzgmgRRTzha/hvrp4vABIzdZasGffM02.uWWGU0nFp4OhoBQ8KVvt3c0Za3qiFxs
0
administrador@LAB-DACC-09:~$ #fim do item 6.2
administrador@LAB-DACC-09:~$
administrador@LAB-DACC-09:~$
```

```
administrador@LAB-DACC-09:~$
administrador@LAB-DACC-09:~$ #iniciando o item 6.3
administrador@LAB-DACC-09:~$
administrador@LAB-DACC-09:~$ cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:syslog,administrador
tty:x:5:syslog
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
kmem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:
cdrom:x:24:administrador
floppy:x:25:
tape:x:26:
sudo:x:27:administrador
audio:x:29:pulse
dip:x:30:administrador
www-data:x:33:
backup:x:34:
operator:x:37:
list:x:38:
irc:x:39:
src:x:40:
gnats:x:41:
shadow:x:42:
utmp:x:43:
video:x:44:
sasl:x:45:
plugdev:x:46:administrador
staff:x:50:
games:x:60:
users:x:100:
nogroup:x:65534:
systemd-journal:x:101:
systemd-network:x:102:
systemd-resolve:x:103:
systemd-timesync:x:104:
crontab:x:105:
messagebus:x:106:
input:x:107:
kvm:x:108:
render:x:109:
syslog:x:110:
tss:x:111:
```

```
vboxusers:x:137:
derick:x:1003:
administrador@LAB-DACC-09:~$ head -3 /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
administrador@LAB-DACC-09:~$ cat /etc/group | grep derick
derick:x:1003:
administrador@LAB-DACC-09:~$ cat /etc/group | grep adm
adm:x:4:syslog,administrador
cdrom:x:24:administrador
sudo:x:27:administrador
dip:x:30:administrador
plugdev:x:46:administrador
lpadmin:x:120:administrador
lxd:x:132:administrador
administrador:x:1000:
sambashare:x:133:administrador
mount-ntfs:x:1002:aluno,administrador
administrador@LAB-DACC-09:~$ sudo addgroup DrailtonPizza
addgroup: Insira um nome de usuário que combine com a expressão regular configurada
via variável de configuração NAME_REGEX[_SYSTEM].  Use a opção`--force-badname'
para relaxar essa verificação ou reconfigurar a variável NAME_REGEX.
administrador@LAB-DACC-09:~$ sudo addgroup drailtonpizza
Adicionando grupo `drailtonpizza' (GID 1004) ...
Concluído.
administrador@LAB-DACC-09:~$ cat /etc/group | grep drailtonpizza
drailtonpizza:x:1004:
administrador@LAB-DACC-09:~$ sudo usermod -a -G drailtonpizza derick
administrador@LAB-DACC-09:~$ cat /etc/group | grep drailtonpizza
drailtonpizza:x:1004:derick
administrador@LAB-DACC-09:~$ groups derick
derick : derick drailtonpizza
administrador@LAB-DACC-09:~$ #fim do item 6.3
```

```
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #inicio do item 6.4
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ id
uid=1000(administrador) gid=1000(administrador) grupos=1000(administrador),4(adm),24(cdrom),27(sudo),30(d
ip),46(plugdev),120(lpadmin),132(lxd),133(sambashare),1002(mount-ntfs)
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ls -l
total 0
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo '#!/bin/bash'
#!/bin/bash
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo '#!/bin/bash' > HelloBash.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo "Hello Bash ..." ' >> HelloBash.sh
> cat HelloBash.sh
> ^C
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ cat HelloBash.sh
#!/bin/bash
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo "Hello Bash ..." ' >> HelloBash.sh
> ^C
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo 'echo  "Hello Bash ..."'  >> HelloBash.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ cat HelloBash.sh
#!/bin/bash
echo  "Hello Bash ..."
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ls -l HelloBash.sh
-rw-rw-r-- 1 administrador administrador 35 set 30 15:19 HelloBash.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ./HelloBash.sh
bash: ./HelloBash.sh: Permissão negada
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ chmod u+x HelloBash.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ls -l HelloBash.sh
-rwxrw-r-- 1 administrador administrador 35 set 30 15:19 HelloBash.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ./HelloBash.sh
Hello Bash ...
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ chmod 700 HelloBash.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ls -l HelloBash.sh
-rwx------ 1 administrador administrador 35 set 30 15:19 HelloBash.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ chmod 755 HelloBash.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ls -l HelloBash.sh
-rwxr-xr-x 1 administrador administrador 35 set 30 15:19 HelloBash.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #fim do item 6.4
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
```

```
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #inicio do item 6.5
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ sudo chgrp derick HelloBash.sh
[sudo] senha para administrador:
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
```

```
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #inicio do item 6.6
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ sudo cat /etc/sudoers
#
# This file MUST be edited with the 'visudo' command as root.
#
# Please consider adding local content in /etc/sudoers.d/ instead of
# directly modifying this file.
#
# See the man page for details on how to write a sudoers file.
#
Defaults        env_reset
Defaults        mail_badpass
Defaults        secure_path="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/snap/bin"

# Host alias specification

# User alias specification

# Cmnd alias specification

# User privilege specification
root    ALL=(ALL:ALL) ALL

# Members of the admin group may gain root privileges
%admin ALL=(ALL) ALL

# Allow members of group sudo to execute any command
%sudo   ALL=(ALL:ALL) ALL

# See sudoers(5) for more information on "#include" directives:

#includedir /etc/sudoers.d
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #fim do item 6.6
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
```

```
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #inicio do item 7.1
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ cat /etc/passwd | cut -f 7 -d: | sort | uniq -c
      3 /bin/bash
      7 /bin/false
      1 /bin/sync
     40 /usr/sbin/nologin
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ /bin/false
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo $?
1
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ /bin/true
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo $?
0
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ /usr/sbin/nologin
This account is currently not available.
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo $?
1
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ cat /var/log/auth.log | grep nologin | tail -1
Sep 30 16:03:11 LAB-DACC-08 nologin: Attempted login by administrador (UID: 1000) on /dev/pts/0
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
```

```
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #inicio do item 7.2
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ add
add-apt-repository  addgroup         addr2line          adduser
addgnupghome        addpart          add-shell
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ cat /etc/adduser.conf
6.4.png      6.5.png      6.6.png      7.1.png      7.png        HelloBash.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #fim do item 7.2
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
```

```
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #inicio do item 7.3
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ head -1 /etc/init.d/cron
#!/bin/sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ nano HelloWorld.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ chmod 700 HelloWorld.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ./HelloWorld.sh
Hello World!
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ nano HelloWorld.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ./HelloWorld.sh
Hello, Barney Calhoun!
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ nano EstruturaCondicional.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ chmod 700 EstruturaCondicional.sh
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ./EstruturaCondicional.sh
Digite um número: 4
o número 4 é maior que zero!
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ./EstruturaCondicional.sh
Digite um número: 5
o número 5 é maior que zero!
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo "5" | ./EstruturaCondicional.sh
Digite um número: o número 5 é maior que zero!
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo "0" | ./EstruturaCondicional.sh
Digite um número: ./EstruturaCondicional.sh: linha 5: [0: comando não encontrado
O número 0 é menor que zero!
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo "-8" | ./EstruturaCondicional.sh
Digite um número: ./EstruturaCondicional.sh: linha 5: [-8: comando não encontrado
O número -8 é menor que zero!
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ While [ 1 ] ; do
bash: erro de sintaxe próximo ao token inesperado `do'
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ echo "Loop infinito…"
"Loop infinito…"
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ sleep 1
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ while [ 1 ] ; do
> echo "Loop infinito…"
> sleep 1
> done
"Loop infinito…"
"Loop infinito…"
"Loop infinito…"
"Loop infinito…"
"Loop infinito…"
"Loop infinito…"
^C
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ grep -r "^#\!/bin/sh" /etc 2> /dec/null
bash: /dec/null: Arquivo ou diretório inexistente
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ grep -r "^#\!/bin/sh" /etc 2> /dev/null
/etc/console-setup/cached_setup_terminal.sh:#!/bin/sh
/etc/console-setup/cached_setup_keyboard.sh:#!/bin/sh
/etc/console-setup/cached_setup_font.sh:#!/bin/sh
/etc/kernel/postrm.d/initramfs-tools:#!/bin/sh -e
```

```
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #inicio do item 7.4
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ nano ~/.bashrc
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ source ~/.bashrc
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ nano ~/.bashrc
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ source ~/.bashrc
Bash iniciado!
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ sudo apt install fortune cowsay
[sudo] senha para administrador:
Lendo listas de pacotes... Pronto
Construindo árvore de dependências
Lendo informação de estado... Pronto
Note, a seleccionar 'fortune-mod' em vez de 'fortune'
Os pacotes adicionais seguintes serão instalados:
  fortunes-min librecode0
Pacotes sugeridos:
  filters cowsay-off fortunes
Os NOVOS pacotes a seguir serão instalados:
  cowsay fortune-mod fortunes-min librecode0
0 pacotes atualizados, 4 pacotes novos instalados, 0 a serem removidos e 91 não atualizados.
É preciso baixar 634 kB de arquivos.
Depois desta operação, 2.228 kB adicionais de espaço em disco serão usados.
Você quer continuar? [S/n] S
Obter:1 http://br.archive.ubuntu.com/ubuntu focal/universe amd64 cowsay all 3.03+dfsg2-7 [18,5 kB]
Obter:2 http://br.archive.ubuntu.com/ubuntu focal/main amd64 librecode0 amd64 3.6-24 [523 kB]
Obter:3 http://br.archive.ubuntu.com/ubuntu focal/universe amd64 fortune-mod amd64 1:1.99.1-7build1 [37,3 kB]
Obter:4 http://br.archive.ubuntu.com/ubuntu focal/universe amd64 fortunes-min all 1:1.99.1-7build1 [55,1 kB]
Baixados 634 kB em 1s (922 kB/s)
A seleccionar pacote anteriormente não seleccionado cowsay.
(Lendo banco de dados ... 344645 ficheiros e directórios actualmente instalados.)
A preparar para desempacotar .../cowsay_3.03+dfsg2-7_all.deb ...
A descompactar cowsay (3.03+dfsg2-7) ...
A seleccionar pacote anteriormente não seleccionado librecode0:amd64.
A preparar para desempacotar .../librecode0_3.6-24_amd64.deb ...
A descompactar librecode0:amd64 (3.6-24) ...
A seleccionar pacote anteriormente não seleccionado fortune-mod.
A preparar para desempacotar .../fortune-mod_1%3a1.99.1-7build1_amd64.deb ...
A descompactar fortune-mod (1:1.99.1-7build1) ...
A seleccionar pacote anteriormente não seleccionado fortunes-min.
A preparar para desempacotar .../fortunes-min_1%3a1.99.1-7build1_all.deb ...
A descompactar fortunes-min (1:1.99.1-7build1) ...
Configurando librecode0:amd64 (3.6-24) ...
Configurando fortunes-min (1:1.99.1-7build1) ...
Configurando fortune-mod (1:1.99.1-7build1) ...
Configurando cowsay (3.03+dfsg2-7) ...
A processar 'triggers' para man-db (2.9.1-1) ...
A processar 'triggers' para libc-bin (2.31-0ubuntu9.7) ...
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ nano ~/.bashrc
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ source ~/.bashrc
 _____
/ Q:      What do you call the money you pay to the government when \
|         you ride into the country on the back of an elephant?     |
\ A:      A howdah duty.                                            /
 -----------------------------------------------------------------
        \   ^__^
         \  (oo)_____
            (__)\       )\/\
                ||----w |
                ||     ||
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #fim do item 7.4
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ 
```

```
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #inicio do item 7
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ ls -lh /bin/sh
lrwxrwxrwx 1 root root 4 abr  2 19:41 /bin/sh -> dash
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$ #fim do item 7
administrador@LAB-DACC-08:~/Imagens/Lab4Linux$
```