

# **Tópicos em S.O.**



**Thiago Rodrigues de Souza Pessanha**

# Atividade

Procure 5 (cinco) ou mais comandos do shell e mostre pelo menos 2 (dois) exemplos de cada.

Regras:

\*\* Não vale repetir comandos que já foram mostrados no material disponibilizado em aulas.

\*\* Só são permitidos os comandos dos diretórios /bin e /sbin

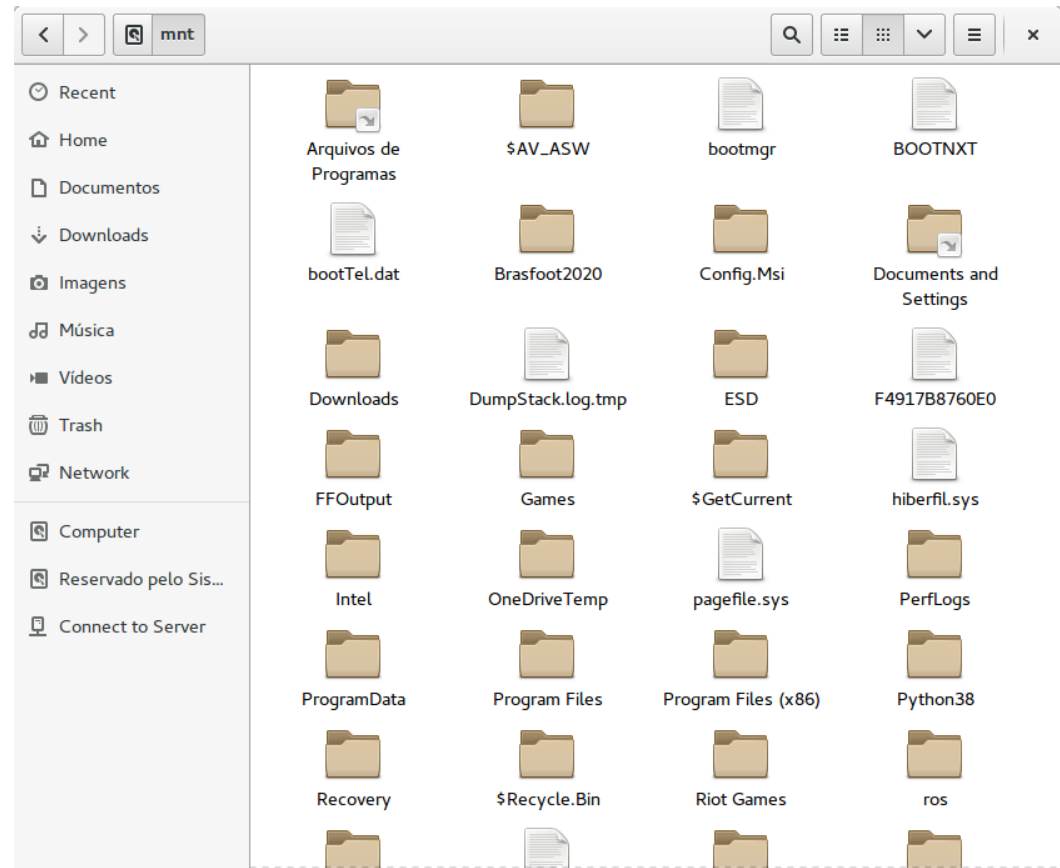
# mount

- Comando da /bin
  - Usado para incluir o sistema de arquivos de um dispositivo qualquer no sistema de arquivos do Linux.
- mount -l
- Lista todos os sistemas de arquivos já montados

```
root@thiago-PC:/home/thiago# mount -l
sysfs on /sys type sysfs (rw,nosuid,nodev,noexec,relatime)
proc on /proc type proc (rw,nosuid,nodev,noexec,relatime)
udev on /dev type devtmpfs (rw,nosuid,relatime,size=3997784k,nr_inodes=999446,mode=755)
devpts on /dev/pts type devpts (rw,nosuid,noexec,relatime,gid=5,mode=620,ptmxmode=000)
tmpfs on /run type tmpfs (rw,nosuid,noexec,relatime,size=803976k,mode=755)
/dev/sda3 on / type ext4 (rw,relatime,errors=remount-ro,data=ordered)
```

→ mount -o ro /dev/sda2 /mnt

- Montagem de partição do disco (no caso aquela onde está o meu Windows) no diretório mnt, usando a opção de ser somente para leitura



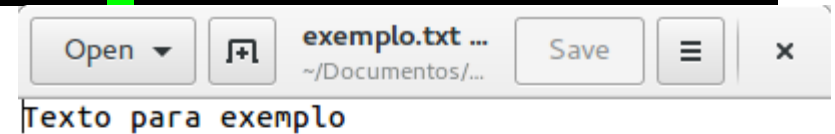
# gunzip

- Comando da /bin
- Trabalha com arquivos comprimidos que possuam as extensões .gz, .z, \_z, -gz, -z , .Z, .taz or.tgz

→ `gunzip -c exemplo.txt.gz`

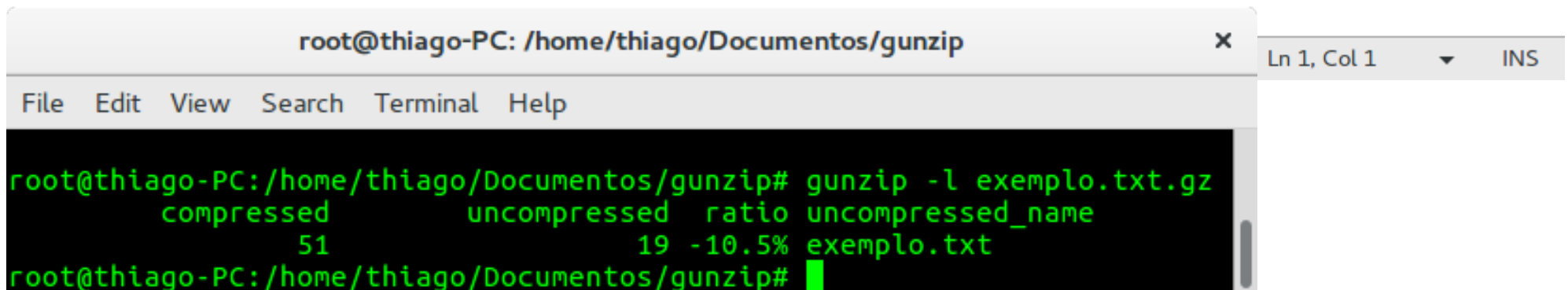
- Mostra o conteúdo dentro de um arquivo de texto que está comprimido

```
root@thiago-PC:/home/thiago/Documentos/gunzip# gunzip -c exemplo.txt.gz
Texto para exemplo
```



→ `gunzip -l exemplo.txt.gz`

- Mostra informações sobre o arquivo comprimido



# netstat

- Comando da /bin

- Trabalha com todas as conexões de rede do sistema.

→ netstat -a

```
root@thiago-PC:/home/thiago# netstat -a
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 localhost:mysql         *:*                     LISTEN
tcp        0      0 localhost:gds-db        *:*                     LISTEN
tcp        0      0 thiago-PC:domain        *:*                     LISTEN
tcp        0      0 localhost:ipp           *:*                     LISTEN
tcp        0      0 localhost:postgresql    *:*                     LISTEN
tcp        0      0 localhost:36601         *:*                     LISTEN
tcp        0      0 localhost:5433          *:*                     LISTEN
tcp        0      0 localhost:5434          *:*                     LISTEN
tcp        0      0 thiago-PC:41874         ec2-54-187-54-64.:https ESTABLISHED
tcp        0      0 thiago-PC:60570         ec2-35-166-72-65.:https ESTABLISHED
tcp        0      0 thiago-PC:54538         151.101.178.167:https  ESTABLISHED
tcp        0      0 thiago-PC:37820         ec2-54-212-14-254:https ESTABLISHED
tcp        0      0 thiago-PC:44582         ec2-34-217-242-11:https ESTABLISHED
tcp6       0      0 [::]:http               [::]:*                  LISTEN
tcp6       0      0 ip6-localhost:ipp       [::]:*                  LISTEN
tcp6       0      0 thiago-PC:45492         2800:3f0:4004:803:https TIME_WAIT
tcp6       0      0 thiago-PC:45488         2800:3f0:4004:803:https TIME_WAIT
tcp6       0      0 thiago-PC:33142         2800:3f0:4003:c02:https ESTABLISHED
tcp6       0      0 thiago-PC:58274         2800:3f0:4004:802:https ESTABLISHED
tcp6       0      0 thiago-PC:48296         sockets.betterttv:https ESTABLISHED
tcp6       0      0 thiago-PC:45494         2800:3f0:4004:803:https TIME_WAIT
```

- Lista todas as conexões atuais

→ netstat -s

- Mostra estatísticas da rede de forma organizada

```
root@thiago-PC:/home/thiago# netstat -s
Ip:
  33122 total packets received
  3 with invalid addresses
  0 forwarded
  0 incoming packets discarded
  32655 incoming packets delivered
  23020 requests sent out
  40 outgoing packets dropped
  1 dropped because of missing route
Icmp:
  80 ICMP messages received
  0 input ICMP message failed.
  ICMP input histogram:
    destination unreachable: 80
  80 ICMP messages sent
  0 ICMP messages failed
  ICMP output histogram:
    destination unreachable: 80
IcmpMsg:
  InType3: 80
  OutType3: 80
Tcp:
  546 active connections openings
```

# fdisk

- Comando da /sbin

Gerenciamento de partições de disco.

→ fdisk -l

- Lista todas as partições

```
Disk /dev/loop7: 179,6 MiB, 188289024 bytes, 367752 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/sda: 931,5 GiB, 1000204886016 bytes, 1953525168 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes
Disklabel type: dos
Disk identifier: 0x18ec6a56

Device      Boot      Start         End      Sectors   Size Id Type
/dev/sda1   *           2048       1026047       1024000    500M  7 HPFS/NTFS/exFAT
/dev/sda2             1026048  1646321663  1645295616  784,6G  7 HPFS/NTFS/exFAT
/dev/sda3             1646321664  1743978495    97656832    46,6G 83 Linux
/dev/sda4             1743980542  1953523711  209543170    99,9G  5 Extended
/dev/sda5             1937524736  1953523711    15998976     7,6G 82 Linux swap / Solaris
/dev/sda6             1743980544  1937524735    193544192    92,3G 83 Linux
```

→ fdisk /dev/sda2

- Trabalha na partição selecionada usando o modo de comando

```
root@thiago-PC:/home/thiago# fdisk /dev/sda2

Welcome to fdisk (util-linux 2.27.1).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.
```

```
Command (m for help):
```

Help:

## DOS (MBR)

- a toggle a bootable flag
- b edit nested BSD disklabel
- c toggle the dos compatibility flag

## Generic

- d delete a partition
- F list free unpartitioned space
- l list known partition types
- n add a new partition
- p print the partition table
- t change a partition type
- v verify the partition table
- i print information about a partition

# shutdown

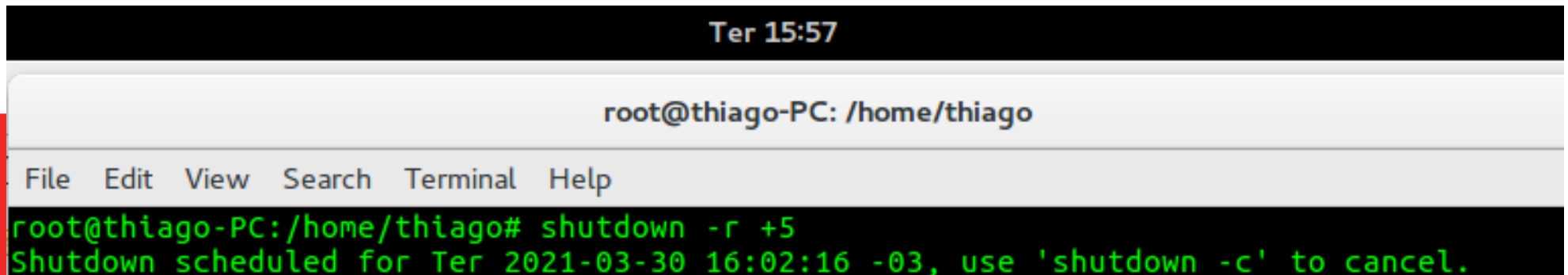
- Comando da /sbin  
Desligar e reiniciar o sistema.

→ shutdown now

- Desliga o sistema imediatamente

→ shutdown -r +5

- O sistema reiniciará dentro de 5 minutos

A screenshot of a terminal window. The title bar at the top is black with the text "Ter 15:57" in yellow. Below the title bar is a light gray bar with the text "root@thiago-PC: /home/thiago" in black. Underneath is a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help" in black. The main terminal area has a black background with green text. It shows the command "root@thiago-PC:/home/thiago# shutdown -r +5" and the response "Shutdown scheduled for Ter 2021-03-30 16:02:16 -03, use 'shutdown -c' to cancel."

```
Ter 15:57
root@thiago-PC: /home/thiago
File Edit View Search Terminal Help
root@thiago-PC:/home/thiago# shutdown -r +5
Shutdown scheduled for Ter 2021-03-30 16:02:16 -03, use 'shutdown -c' to cancel.
```