

```
luiz_ra02211045@ip-172-31-92-126: ~  
File Edit View Search Terminal Help  
top - 13:10:49 up 29 min, 1 user, load average: 0.00, 0.00, 0.00  
Tasks: 154 total, 1 running, 153 sleeping, 0 stopped, 0 zombie  
%Cpu(s): 0.0 us, 0.3 sy, 0.0 ni, 99.7 id, 0.0 wa, 0.0 hi, 0.0 si, 0.  
MiB Mem : 973.7 total, 94.5 free, 350.8 used, 528.5 buff/cache  
MiB Swap: 0.0 total, 0.0 free, 0.0 used. 471.0 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+
2208	luiz_ra+	20	0	11012	3732	3244	R	0.3	0.4	0:00.12
1	root	20	0	168856	12804	8228	S	0.0	1.3	0:06.48
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00
3	root	0	-20	0	0	0	I	0.0	0.0	0:00.00
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00
5	root	20	0	0	0	0	T	0.0	0.0	0:00.16

```
luiz_ra02211045@ip-172-31-92-126:~$ sudo vi  
[1]+ Stopped sudo vi  
luiz_ra02211045@ip-172-31-92-126:~$
```

```
luiz_ra02211045@ip-172-31-92-126: ~  
File Edit View Search Terminal Help  
top - 13:17:47 up 35 min, 1 user, load average: 0.00, 0.00, 0.00  
Tasks: 161 total, 1 running, 158 sleeping, 2 stopped, 0 zombie  
%Cpu(s): 0.0 us, 0.3 sy, 0.0 ni, 99.7 id, 0.0 wa, 0.0 hi, 0.0 si, 0.  
MiB Mem : 973.7 total, 75.4 free, 360.7 used, 537.6 buff/cache  
MiB Swap: 0.0 total, 0.0 free, 0.0 used. 461.0 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+
5	root	20	0	0	0	0	I	0.3	0.0	0:00.21
1	root	20	0	168856	12804	8228	S	0.0	1.3	0:06.49
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00
3	root	0	-20	0	0	0	I	0.0	0.0	0:00.00
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00
6	root	0	-20	0	0	0	I	0.0	0.0	0:00.00

PID é o número do processo

User: a qual usuário está associado aquele PID, é o proprietário daquele processo

PR: prioridade real sob a perspectiva do kernel. PR pode variar entre -20 a +20, sendo que - 20 tem uma prioridade mais alta e +20 prioridades mais baixa. Quando o valor é igual a zero é neutro. Em linux temos 140 prioridades, que podem ser classificadas:

Alto - 20 -100

Padrão 0 120

Inferior +19 +139

NI - nice prioridade do comando

```
4 1 0 8243 8223 0 80 0 2013 0
luiz_ra02211045@ip-172-31-92-126:~$ jobs
[1] Stopped sudo nice -n -20 vi
[2]- Stopped sudo nice -n -20 vi
[3]+ Stopped sudo nice -n 50 vi
luiz_ra02211045@ip-172-31-92-126:~$
```

```
luiz_ra02211045@ip-172-31-92-126:~$ jobs -l
[1] 8230 Stopped sudo nice -n -20 vi
[2]- 8236 Stopped sudo nice -n -20 vi
[3]+ 8243 Stopped sudo nice -n 50 vi
luiz_ra02211045@ip-172-31-92-126:~$
```

```
[3]+ 8243 Stopped sudo nice -n 50 vi
luiz_ra02211045@ip-172-31-92-126:~$ jobs -s
[1] Stopped sudo nice -n -20 vi
[2]- Stopped sudo nice -n -20 vi
[3]+ Stopped sudo nice -n 50 vi
luiz_ra02211045@ip-172-31-92-126:~$
```

```
[3]+ Stopped sudo nice -n 50 vi
luiz_ra02211045@ip-172-31-92-126:~$ jobs -p
8230
8236
8243
luiz_ra02211045@ip-172-31-92-126:~$ |
```

```
8243
luiz_ra02211045@ip-172-31-92-126:~$ ps
  PID TTY          TIME CMD
  8223 pts/0    00:00:00 bash
  8274 pts/0    00:00:00 ps
luiz_ra02211045@ip-172-31-92-126:~$ |
```

```

      PID TTY          TIME CMD
      8223 pts/0    00:00:00 bash
      8274 pts/0    00:00:00 ps
luiz_ra02211045@ip-172-31-92-126:~$ ps -a
      PID TTY          TIME CMD
      1121 tty1      00:00:01 Xorg
      1173 tty1      00:00:00 dbus-run-sessio
      1174 tty1      00:00:00 dbus-daemon
      1176 tty1      00:00:00 gnome-session-b
      1183 tty1      00:00:00 at-spi-bus-laun
      1188 tty1      00:00:00 dbus-daemon
      1222 tty1      00:00:04 gnome-shell
      1347 tty1      00:00:00 ibus-daemon
      1352 tty1      00:00:00 ibus-dconf
      1355 tty1      00:00:00 ibus-x11
      1359 tty1      00:00:00 ibus-portal
      1368 tty1      00:00:00 at-spi2-registr
      1442 tty1      00:00:00 gjs
      1459 tty1      00:00:00 gsd-color
      1460 tty1      00:00:00 gsd-print-notif
      1466 tty1      00:00:00 gsd-ally-settin
      1472 tty1      00:00:00 gsd-power
      1475 tty1      00:00:00 gsd-media-keys
      1476 tty1      00:00:00 gsd-rfkill
      1480 tty1      00:00:00 gsd-keyboard
      1483 tty1      00:00:00 gsd-wacom
      1485 tty1      00:00:00 gsd-housekeepin

```

```

      8275 pts/0    00:00:00 ps
luiz_ra02211045@ip-172-31-92-126:~$ ps -u
USER          PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
luiz_ra+      8223  0.0  0.5  10008  5192 pts/0    S   23:19   0:00 bash
luiz_ra+      8276  0.0  0.3  10624  3364 pts/0    R+  23:31   0:00 ps -u
luiz_ra02211045@ip-172-31-92-126:~$ |

```

```

x: command not found
luiz_ra02211045@ip-172-31-92-126:~$ ps -x
      PID TTY          STAT      TIME COMMAND
      8223 pts/0      S           0:00 bash
      8298 pts/0      R+          0:00 ps -x
luiz_ra02211045@ip-172-31-92-126:~$

```

```

For more details see ps(1).
luiz_ra02211045@ip-172-31-92-126:~$ ps -l
F S  UID          PID     PPID  C  PRI  NI ADDR SZ WCHAN  TTY          TIME CMD
4 S  1001         8223       8222  0   80   0  -  2502 do_wai pts/0    00:00:00 bash
0 R  1001         8300       8223  0   80   0  -  2636 -      pts/0    00:00:00 ps
luiz_ra02211045@ip-172-31-92-126:~$ |

```

```

0 R 1001      8300      8223 0 80 0 - 2636 -      pts/0      00:00:00 ps
luiz_ra02211045@ip-172-31-92-126:~$ ps -e
  PID TTY          TIME CMD
    1 ?           00:00:09 systemd
    2 ?           00:00:00 kthreadd
    3 ?           00:00:00 rcu_gp
    4 ?           00:00:00 rcu_par_gp
    6 ?           00:00:00 kworker/0:0H-events_highpri
    9 ?           00:00:00 mm_percpu_wq
   10 ?           00:00:00 rcu_tasks_rude_
   11 ?           00:00:00 rcu_tasks_trace
   12 ?           00:00:00 ksoftirqd/0
   13 ?           00:00:00 rcu_sched
   14 ?           00:00:00 migration/0
   15 ?           00:00:00 idle_inject/0
   16 ?           00:00:00 cpuhp/0
   17 ?           00:00:00 kdevtmpfs
   18 ?           00:00:00 netns
   19 ?           00:00:00 inet_frag_wq
   20 ?           00:00:00 kauditd
   21 ?           00:00:00 khungtaskd
   22 ?           00:00:00 oom_reaper
   23 ?           00:00:00 writeback
   24 ?           00:00:00 kcompactd0

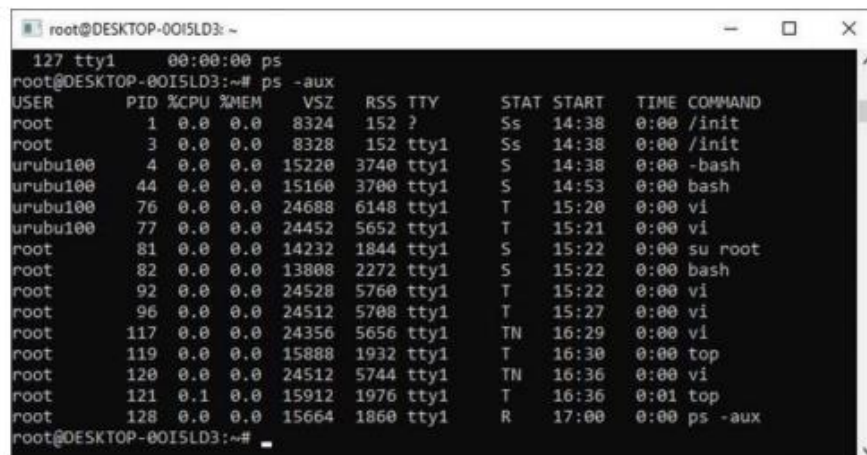
```

```

8301 pts/0      00:00:00 ps
luiz_ra02211045@ip-172-31-92-126:~$ ps -aux
USER          PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root            1  0.6  1.1 168960 11872 ?        Ss   23:08   0:09 /sbin/init
root            2  0.0  0.0      0     0 ?        S    23:08   0:00 [kthreadd]
root            3  0.0  0.0      0     0 ?        I<   23:08   0:00 [rcu_gp]
root            4  0.0  0.0      0     0 ?        I<   23:08   0:00 [rcu_par_gp]
root            6  0.0  0.0      0     0 ?        I<   23:08   0:00 [kworker/0:0H-events_highpri]
root            9  0.0  0.0      0     0 ?        I<   23:08   0:00 [mm_percpu_wq]
root           10  0.0  0.0      0     0 ?        S    23:08   0:00 [rcu_tasks_rude_]
root           11  0.0  0.0      0     0 ?        S    23:08   0:00 [rcu_tasks_trace]
root           12  0.0  0.0      0     0 ?        S    23:08   0:00 [ksoftirqd/0]
root           13  0.0  0.0      0     0 ?        I    23:08   0:00 [rcu_sched]
root           14  0.0  0.0      0     0 ?        S    23:08   0:00 [migration/0]
root           15  0.0  0.0      0     0 ?        S    23:08   0:00 [idle_inject/0]
root           16  0.0  0.0      0     0 ?        S    23:08   0:00 [cpuhp/0]
root           17  0.0  0.0      0     0 ?        S    23:08   0:00 [kdevtmpfs]
root           18  0.0  0.0      0     0 ?        I<   23:08   0:00 [netns]
root           19  0.0  0.0      0     0 ?        I<   23:08   0:00 [inet_frag_wq]
root           20  0.0  0.0      0     0 ?        S    23:08   0:00 [kauditd]
root           21  0.0  0.0      0     0 ?        S    23:08   0:00 [khungtaskd]

```

2) Na tela abaixo o que significa Ss e TN na coluna STAT, explique



```

root@DESKTOP-00ISLD3: ~
127 tty1      00:00:00 ps
root@DESKTOP-00ISLD3:~# ps -aux
USER          PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root            1  0.0  0.0   8324   152 ?        Ss   14:38   0:00 /init
root            3  0.0  0.0   8328   152 tty1      Ss   14:38   0:00 /init
urubu100       4  0.0  0.0  15220  3740 tty1      S    14:38   0:00 -bash
urubu100       44  0.0  0.0  15160  3700 tty1      S    14:53   0:00 bash
urubu100       76  0.0  0.0  24688  6148 tty1      T    15:20   0:00 vi
urubu100       77  0.0  0.0  24452  5652 tty1      T    15:21   0:00 vi
root           81  0.0  0.0  14232   1844 tty1      S    15:22   0:00 su root
root           82  0.0  0.0  13808  2272 tty1      S    15:22   0:00 bash
root           92  0.0  0.0  24528  5760 tty1      T    15:22   0:00 vi
root           96  0.0  0.0  24512  5708 tty1      T    15:27   0:00 vi
root          117  0.0  0.0  24356  5656 tty1      TN   16:29   0:00 vi
root          119  0.0  0.0  15888  1932 tty1      T    16:30   0:00 top
root          120  0.0  0.0  24512  5744 tty1      TN   16:36   0:00 vi
root          121  0.1  0.0  15912  1976 tty1      T    16:36   0:01 top
root          128  0.0  0.0  15664  1860 tty1      R    17:00   0:00 ps -aux
root@DESKTOP-00ISLD3:~#

```

- S interruptible sleep (waiting for an event to complete)
s is a session leader
- T stopped, either by a job control signal or because it is being traced.
N low-priority (nice to other users)

3) O que significa ADDR SZ e WCHAN na tela abaixo, explique

```

Selecionar root@DESKTOP-00ISLD3: ~
For more details see ps(1).
root@DESKTOP-00ISLD3:~# ps -l

```

F	S	UID	PID	PPID	C	PRI	NI	ADDR	SZ	WCHAN	TTY	TIME	CMD
0	S	0	3	1	0	80	0	-	2082	-	tty1	00:00:00	init
0	S	0	81	44	0	80	0	-	3558	-	tty1	00:00:00	su
0	S	0	82	81	0	80	0	-	3452	-	tty1	00:00:00	bash
0	T	0	92	82	0	80	0	-	6132	-	tty1	00:00:00	vi
0	T	0	96	82	0	80	0	-	6128	-	tty1	00:00:00	vi
0	T	0	117	82	0	100	20	-	6089	-	tty1	00:00:00	vi
0	T	0	119	82	0	80	0	-	3972	-	tty1	00:00:00	top
0	T	0	120	82	0	61	4294967277	-	6128	-	tty1	00:00:00	vi
0	T	0	121	82	0	80	0	-	3978	-	tty1	00:00:01	top
0	R	0	126	82	0	80	0	-	3844	-	tty1	00:00:00	ps

```

root@DESKTOP-00ISLD3:~#

```

ADDR Memory address of the process

SZ Virtual memory usage

WCHAN Memory address of the event the process is waiting for