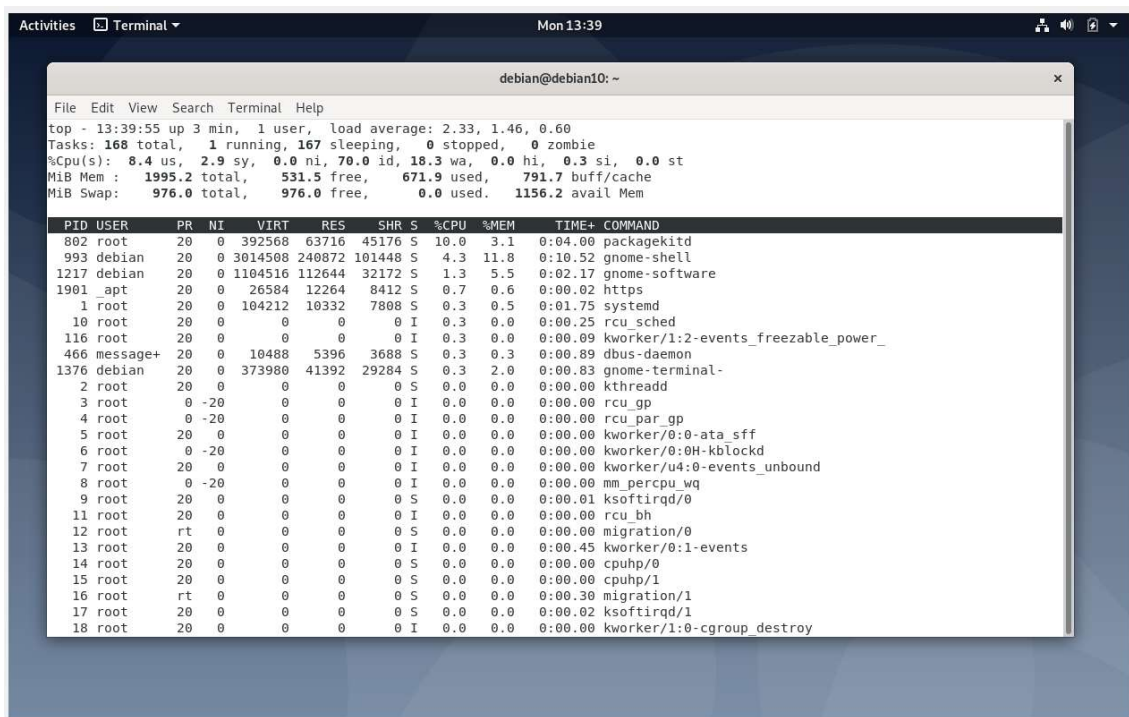


Linux OS-hez hasznos monitorozó parancsok használata

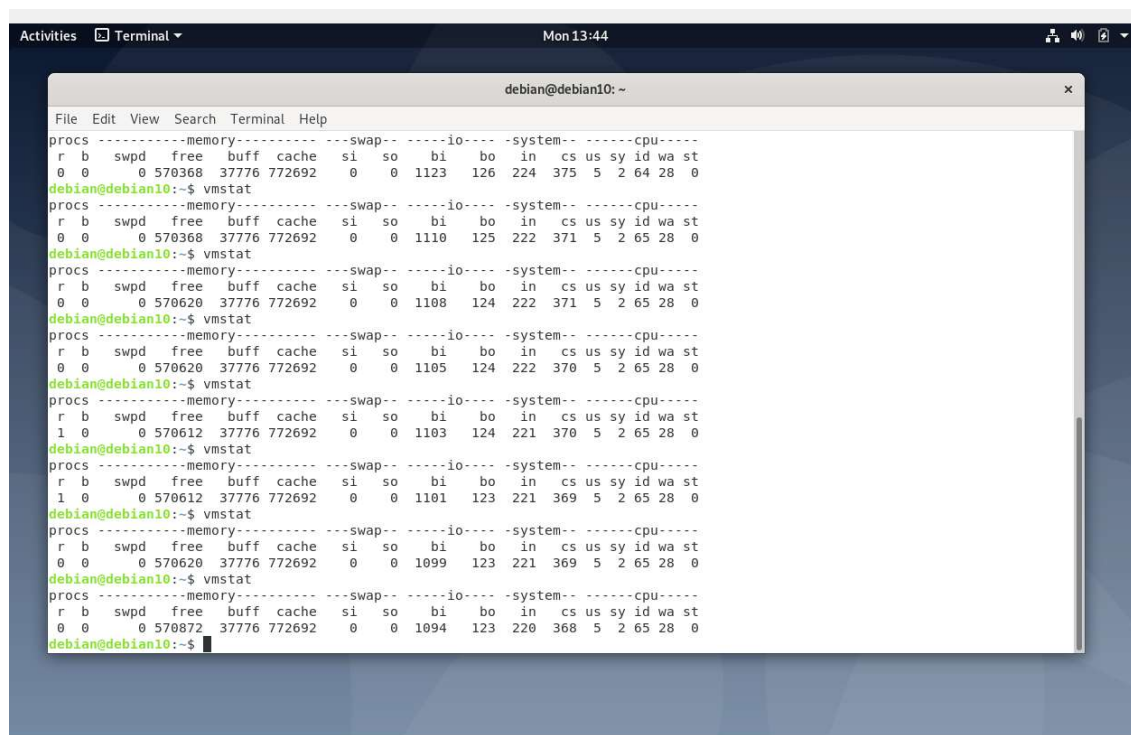
a) top A futó rendszer aktuális állapotát mutatja



```
File Edit View Search Terminal Help
top - 13:39:55 up 3 min, 1 user, load average: 2.33, 1.46, 0.60
Tasks: 168 total, 1 running, 167 sleeping, 0 stopped, 0 zombie
%Cpu(s): 8.4 us, 2.9 sy, 0.0 ni, 70.0 id, 18.3 wa, 0.0 hi, 0.3 si, 0.0 st
MiB Mem : 1995.2 total, 531.5 free, 671.9 used, 791.7 buff/cache
MiB Swap: 976.0 total, 976.0 free, 0.0 used, 1156.2 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU  %MEM     TIME+ COMMAND
 802 root        20   0 392568 63716 45176 S 10.0   3.1   0:04.00 packagekitd
 993 debian     20   0 3014508 240872 101448 S  4.3  11.8   0:10.52 gnome-shell
1217 debian     20   0 1104516 112644 32172 S  1.3   5.5   0:02.17 gnome-software
1901 apt        20   0 26584 12264 8412 S  0.7   0.6   0:00.02 https
  1 root        20   0 104212 10332 7808 S  0.3   0.5   0:01.75 systemd
 10 root        20   0 0 0 0 I  0.3   0.0   0:00.25 rcu_sched
116 root        20   0 0 0 0 I  0.3   0.0   0:00.09 kworker/1:2-events_freezable_power_
466 message+  20   0 10488 5396 3688 S  0.3   0.3   0:00.89 dbus-daemon
1376 debian     20   0 373980 41392 29284 S  0.3   2.0   0:00.83 gnome-terminal-
  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        20   0 0 0 0 I  0.0   0.0   0:00.00 kworker/0:0-ata_sff
  6 root        0 -20 0 0 0 I  0.0   0.0   0:00.00 kworker/0:0H-kblockd
  7 root        20   0 0 0 0 I  0.0   0.0   0:00.00 kworker/u4:0-events_unbound
  8 root        0 -20 0 0 0 I  0.0   0.0   0:00.00 mm_percpu_wq
  9 root        20   0 0 0 0 S  0.0   0.0   0:00.01 ksoftirqd/0
11 root        20   0 0 0 0 I  0.0   0.0   0:00.00 rcu_bh
12 root        rt   0 0 0 0 S  0.0   0.0   0:00.00 migration/0
13 root        20   0 0 0 0 I  0.0   0.0   0:00.45 kworker/0:1-events
14 root        20   0 0 0 0 S  0.0   0.0   0:00.00 cpuhp/0
15 root        20   0 0 0 0 S  0.0   0.0   0:00.00 cpuhp/1
16 root        rt   0 0 0 0 S  0.0   0.0   0:00.30 migration/1
17 root        20   0 0 0 0 S  0.0   0.0   0:00.02 ksoftirqd/1
18 root        20   0 0 0 0 I  0.0   0.0   0:00.00 kworker/1:0-cgroup_destroy
```

b) vmstat - [a, m] A rendszer információi láthatóak



```
File Edit View Search Terminal Help
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570368 37776 772692 0 0 1123 126 224 375 5 2 64 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570368 37776 772692 0 0 1110 125 222 371 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570620 37776 772692 0 0 1108 124 222 371 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570620 37776 772692 0 0 1105 124 222 370 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
1 0 0 570612 37776 772692 0 0 1103 124 221 370 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
1 0 0 570612 37776 772692 0 0 1101 123 221 369 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570620 37776 772692 0 0 1099 123 221 369 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570872 37776 772692 0 0 1094 123 220 368 5 2 65 28 0
debian@debian10:~$
```

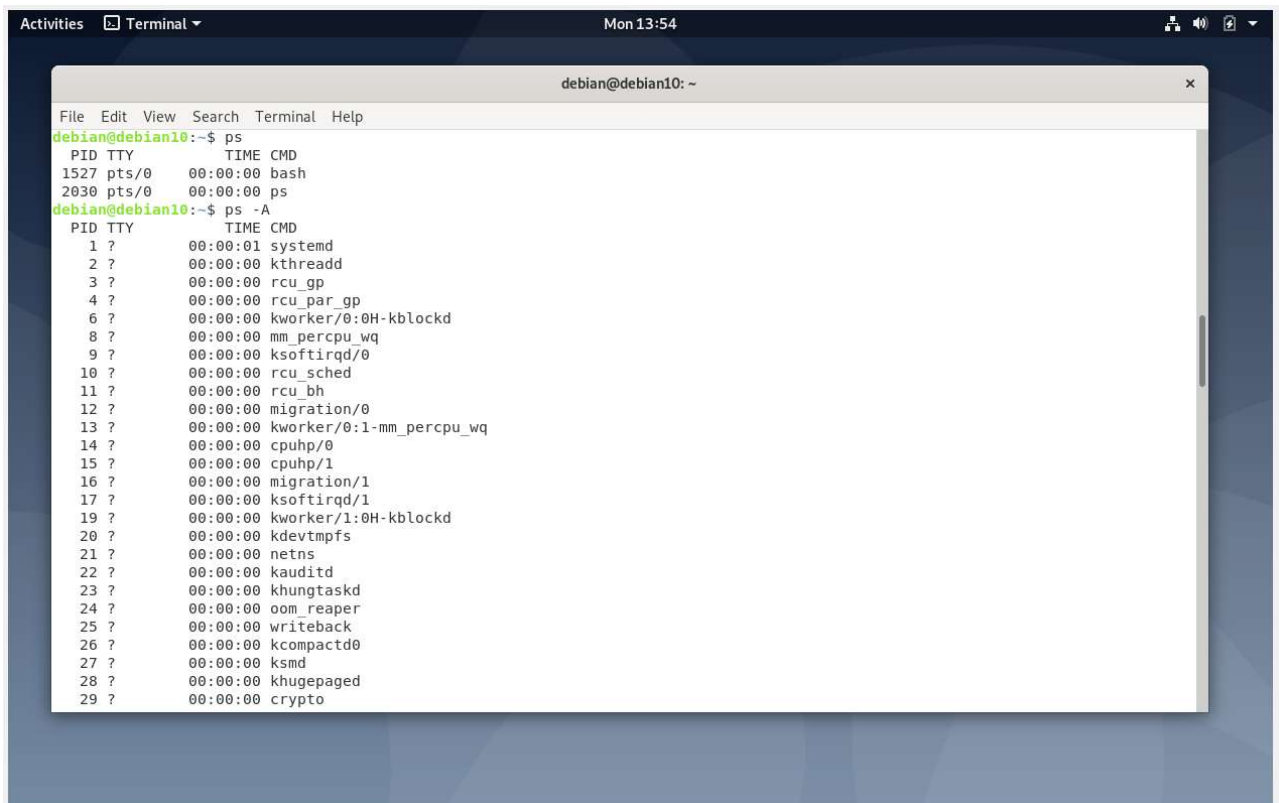
c) w 1 felhasználó használja jelenleg és megmutatja mit csinál, 9 perce

```
Activities Terminal Mon 13:46
debian@debian10: ~
File Edit View Search Terminal Help
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570368 37776 772692 0 0 1110 125 222 371 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570620 37776 772692 0 0 1108 124 222 371 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570620 37776 772692 0 0 1105 124 222 370 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
1 0 0 570612 37776 772692 0 0 1103 124 221 370 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
1 0 0 570612 37776 772692 0 0 1101 123 221 369 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570620 37776 772692 0 0 1099 123 221 369 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570872 37776 772692 0 0 1094 123 220 368 5 2 65 28 0
debian@debian10:~$ w
13:46:10 up 9 min, 1 user, load average: 0.00, 0.41, 0.40
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
debian tty2 tty2 13:38 9:20 21.91s 0.10s /usr/lib/tracker/tracker-miner-apps
debian@debian10:~$
```

d) uname Linux

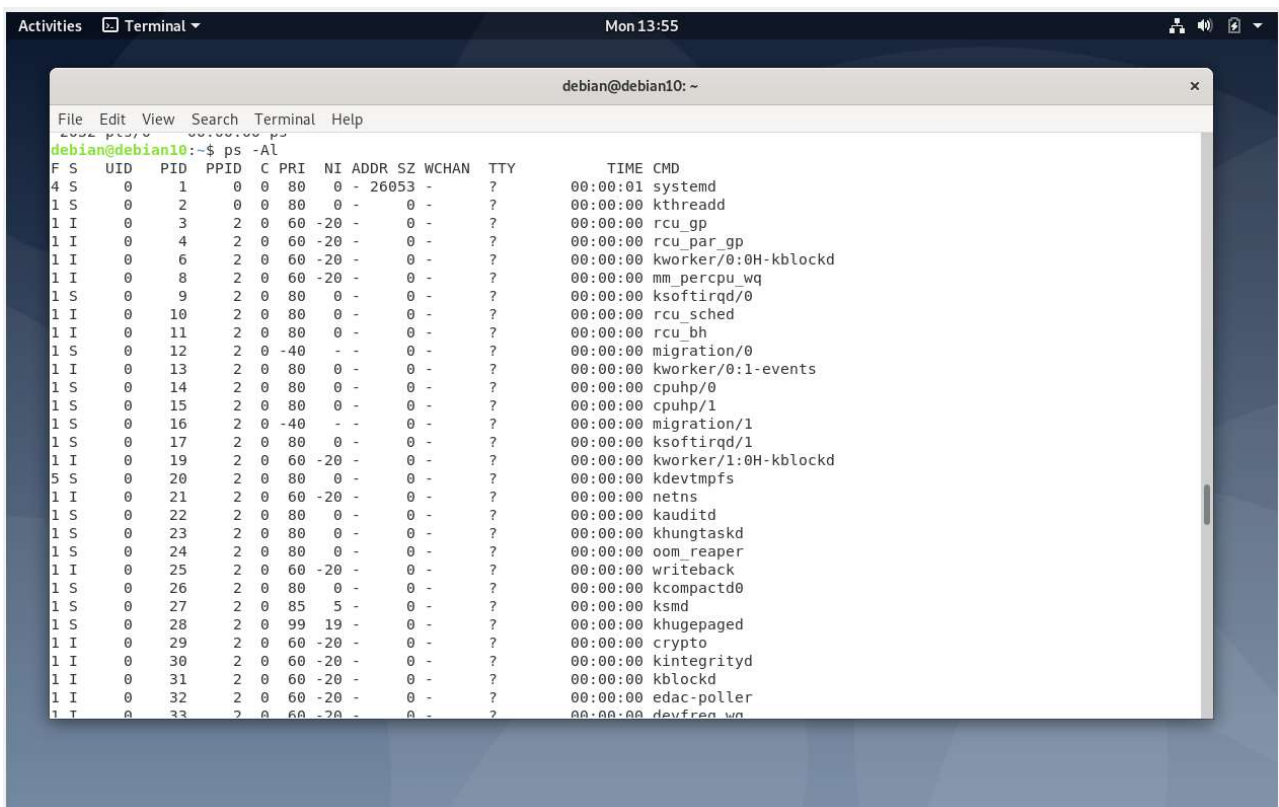
```
Activities Terminal Mon 13:49
debian@debian10: ~
File Edit View Search Terminal Help
0 0 0 570368 37776 772692 0 0 1110 125 222 371 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570620 37776 772692 0 0 1108 124 222 371 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570620 37776 772692 0 0 1105 124 222 370 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
1 0 0 570612 37776 772692 0 0 1103 124 221 370 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
1 0 0 570612 37776 772692 0 0 1101 123 221 369 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570620 37776 772692 0 0 1099 123 221 369 5 2 65 28 0
debian@debian10:~$ vmstat
procs -----memory-----swap-----io-----system-----cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 570872 37776 772692 0 0 1094 123 220 368 5 2 65 28 0
debian@debian10:~$ w
13:46:10 up 9 min, 1 user, load average: 0.00, 0.41, 0.40
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
debian tty2 tty2 13:38 9:20 21.91s 0.10s /usr/lib/tracker/tracker-miner-apps
debian@debian10:~$ uname
Linux
debian@debian10:~$
```

e) **ps** A processzeokról elkészült jelentések:



A terminal window titled "debian@debian10: ~" showing the output of the `ps` command. The window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal output is as follows:

```
debian@debian10:~$ ps
  PID TTY          TIME CMD
 1527 pts/0    00:00:00 bash
 2030 pts/0    00:00:00 ps
debian@debian10:~$ ps -A
  PID TTY          TIME CMD
   1 ?        00:00:01 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-kblockd
   8 ?        00:00:00 mm_percpu_wq
   9 ?        00:00:00 ksoftirqd/0
  10 ?        00:00:00 rcu_sched
  11 ?        00:00:00 rcu_bh
  12 ?        00:00:00 migration/0
  13 ?        00:00:00 kworker/0:1-mm_percpu_wq
  14 ?        00:00:00 cpuhp/0
  15 ?        00:00:00 cpuhp/1
  16 ?        00:00:00 migration/1
  17 ?        00:00:00 ksoftirqd/1
  19 ?        00:00:00 kworker/1:0H-kblockd
  20 ?        00:00:00 kdevtmpfs
  21 ?        00:00:00 netns
  22 ?        00:00:00 kauditd
  23 ?        00:00:00 khungtaskd
  24 ?        00:00:00 oom_reaper
  25 ?        00:00:00 writeback
  26 ?        00:00:00 kcompactd0
  27 ?        00:00:00 ksm
  28 ?        00:00:00 khugepaged
  29 ?        00:00:00 crypto
```



A terminal window titled "debian@debian10: ~" showing the output of the `ps -A` command. The window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal output is as follows:

```
debian@debian10:~$ ps -A
 F S      UID          PID    PPID    C  PRI  NI ADDR SZ WCHAN  TTY          TIME CMD
 4 S      0            1        0    0   80   0  - 26053  -    ?        00:00:01 systemd
 1 S      0            2        0    0   80   0  -    0  -    ?        00:00:00 kthreadd
 1 I      0            3        2    0   60  -20  -    0  -    ?        00:00:00 rcu_gp
 1 I      0            4        2    0   60  -20  -    0  -    ?        00:00:00 rcu_par_gp
 1 I      0            6        2    0   60  -20  -    0  -    ?        00:00:00 kworker/0:0H-kblockd
 1 I      0            8        2    0   60  -20  -    0  -    ?        00:00:00 mm_percpu_wq
 1 S      0            9        2    0   80   0  -    0  -    ?        00:00:00 ksoftirqd/0
 1 I      0           10        2    0   80   0  -    0  -    ?        00:00:00 rcu_sched
 1 I      0           11        2    0   80   0  -    0  -    ?        00:00:00 rcu_bh
 1 S      0           12        2   -40  -    0  -    0  -    ?        00:00:00 migration/0
 1 I      0           13        2    0   80   0  -    0  -    ?        00:00:00 kworker/0:1-events
 1 S      0           14        2    0   80   0  -    0  -    ?        00:00:00 cpuhp/0
 1 S      0           15        2    0   80   0  -    0  -    ?        00:00:00 cpuhp/1
 1 S      0           16        2   -40  -    0  -    0  -    ?        00:00:00 migration/1
 1 S      0           17        2    0   80   0  -    0  -    ?        00:00:00 ksoftirqd/1
 1 I      0           19        2    0   60  -20  -    0  -    ?        00:00:00 kworker/1:0H-kblockd
 5 S      0           20        2    0   80   0  -    0  -    ?        00:00:00 kdevtmpfs
 1 I      0           21        2    0   60  -20  -    0  -    ?        00:00:00 netns
 1 S      0           22        2    0   80   0  -    0  -    ?        00:00:00 kauditd
 1 S      0           23        2    0   80   0  -    0  -    ?        00:00:00 khungtaskd
 1 S      0           24        2    0   80   0  -    0  -    ?        00:00:00 oom_reaper
 1 I      0           25        2    0   60  -20  -    0  -    ?        00:00:00 writeback
 1 S      0           26        2    0   80   0  -    0  -    ?        00:00:00 kcompactd0
 1 S      0           27        2    0   85   5  -    0  -    ?        00:00:00 ksm
 1 S      0           28        2    99  19  -    0  -    ?        00:00:00 khugepaged
 1 I      0           29        2    0   60  -20  -    0  -    ?        00:00:00 crypto
 1 I      0           30        2    0   60  -20  -    0  -    ?        00:00:00 kintegrityd
 1 I      0           31        2    0   60  -20  -    0  -    ?        00:00:00 kblockd
 1 I      0           32        2    0   60  -20  -    0  -    ?        00:00:00 edac-poller
 1 I      0           33        2    0   60  -20  -    0  -    ?        00:00:00 devfreq_wq
```

```
Activities Terminal Mon 13:57
debian@debian10: ~
File Edit View Search Terminal Help
debian@debian10:~$ ps -ALF
F S UID PID PPID C PRI NI ADDR SZ WCHAN RSS PSR STIME TTY TIME CMD
4 S root 1 0 0 80 0 - 26053 - 10332 1 13:36 ? 00:00:01 /sbin/init
1 S root 2 0 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [kthreadd]
1 I root 3 2 0 60 -20 - 0 - 0 0 13:36 ? 00:00:00 [rcu_gp]
1 I root 4 2 0 60 -20 - 0 - 0 0 13:36 ? 00:00:00 [rcu_par_gp]
1 I root 6 2 0 60 -20 - 0 - 0 0 13:36 ? 00:00:00 [kworker/0:0H-kblockd]
1 I root 8 2 0 60 -20 - 0 - 0 0 13:36 ? 00:00:00 [mm_percpu_wq]
1 S root 9 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [ksoftirqd/0]
1 I root 10 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [rcu_sched]
1 I root 11 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [rcu_bh]
1 S root 12 2 0 -40 - - 0 - 0 0 13:36 ? 00:00:00 [migration/0]
1 I root 13 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [kworker/0:1-events]
1 S root 14 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [cpuhp/0]
1 S root 15 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [cpuhp/1]
1 S root 16 2 0 -40 - - 0 - 0 1 13:36 ? 00:00:00 [migration/1]
1 S root 17 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [ksoftirqd/1]
1 I root 19 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [kworker/1:0H-kblockd]
5 S root 20 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [kdevtmpfs]
1 I root 21 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [netns]
1 S root 22 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [kauditd]
1 S root 23 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [khungtaskd]
1 S root 24 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [oom_reaper]
1 I root 25 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [writeback]
1 S root 26 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [kcompactd0]
1 S root 27 2 0 85 5 - 0 - 0 1 13:36 ? 00:00:00 [ksmd]
1 S root 28 2 0 99 19 - 0 - 0 0 13:36 ? 00:00:00 [khugepaged]
1 I root 29 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [crypto]
1 I root 30 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [kintegrityd]
1 I root 31 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [kblockd]
1 I root 32 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [edac-poller]
1 I root 33 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [devfreq_wq]
```

```
Activities Terminal Mon 13:58
debian@debian10: ~
File Edit View Search Terminal Help
debian@debian10:~$ ps -ALFH
F S UID PID PPID C PRI NI ADDR SZ WCHAN RSS PSR STIME TTY TIME CMD
1 S root 2 0 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [kthreadd]
1 I root 3 2 0 60 -20 - 0 - 0 0 13:36 ? 00:00:00 [rcu_gp]
1 I root 4 2 0 60 -20 - 0 - 0 0 13:36 ? 00:00:00 [rcu_par_gp]
1 I root 6 2 0 60 -20 - 0 - 0 0 13:36 ? 00:00:00 [kworker/0:0H-kblockd]
1 I root 8 2 0 60 -20 - 0 - 0 0 13:36 ? 00:00:00 [mm_percpu_wq]
1 S root 9 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [ksoftirqd/0]
1 I root 10 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [rcu_sched]
1 I root 11 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [rcu_bh]
1 S root 12 2 0 -40 - - 0 - 0 0 13:36 ? 00:00:00 [migration/0]
1 I root 13 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [kworker/0:1-events_power_efficient]
1 S root 14 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [cpuhp/0]
1 S root 15 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [cpuhp/1]
1 S root 16 2 0 -40 - - 0 - 0 1 13:36 ? 00:00:00 [migration/1]
1 S root 17 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [ksoftirqd/1]
1 I root 19 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [kworker/1:0H-kblockd]
5 S root 20 2 0 80 0 - 0 - 0 0 13:36 ? 00:00:00 [kdevtmpfs]
1 I root 21 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [netns]
1 S root 22 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [kauditd]
1 S root 23 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [khungtaskd]
1 S root 24 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [oom_reaper]
1 I root 25 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [writeback]
1 S root 26 2 0 80 0 - 0 - 0 1 13:36 ? 00:00:00 [kcompactd0]
1 S root 27 2 0 85 5 - 0 - 0 1 13:36 ? 00:00:00 [ksmd]
1 S root 28 2 0 99 19 - 0 - 0 0 13:36 ? 00:00:00 [khugepaged]
1 I root 29 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [crypto]
1 I root 30 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [kintegrityd]
1 I root 31 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [kblockd]
1 I root 32 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [edac-poller]
1 I root 33 2 0 60 -20 - 0 - 0 1 13:36 ? 00:00:00 [devfreq_wq]
1 S root 34 2 0 -40 - - 0 - 0 1 13:36 ? 00:00:00 [watchdogd]
```



```
Activities Terminal Mon 13:59
debian@debian10: ~
File Edit View Search Terminal Help
4 S root 1270 1269 0 80 0 - 21465 - 904 0 13:38 ? 00:00:00 [VBoxDRMClient]
4 S root 1548 1 0 80 0 - 96631 - 24352 1 13:39 ? 00:00:00 /usr/lib/fwupd/fwupd
debian@debian10:~$ ps ax
PID TTY STAT TIME COMMAND
1 ? Ss 0:01 /sbin/init
2 ? S 0:00 [kthreadd]
3 ? I< 0:00 [rcu_gp]
4 ? I< 0:00 [rcu_par_gp]
6 ? I< 0:00 [kworker/0:0H-kblockd]
8 ? I< 0:00 [mm_percpu_wq]
9 ? S 0:00 [ksoftirqd/0]
10 ? I 0:00 [rcu_sched]
11 ? I 0:00 [rcu_bh]
12 ? S 0:00 [migration/0]
13 ? I 0:00 [kworker/0:1-mm_percpu_wq]
14 ? S 0:00 [cpuhp/0]
15 ? S 0:00 [cpuhp/1]
16 ? S 0:00 [migration/1]
17 ? S 0:00 [ksoftirqd/1]
19 ? I< 0:00 [kworker/1:0H-kblockd]
20 ? S 0:00 [kdevtmpfs]
21 ? I< 0:00 [netns]
22 ? S 0:00 [kauditd]
23 ? S 0:00 [khungtaskd]
24 ? S 0:00 [oom_reaper]
25 ? I< 0:00 [writeback]
26 ? S 0:00 [kcompactd0]
27 ? SN 0:00 [ksmd]
28 ? SN 0:00 [khugepaged]
29 ? I< 0:00 [crypto]
30 ? I< 0:00 [kintegrityd]
31 ? I< 0:00 [kblockd]
```

```
Activities Terminal Mon 14:00
debian@debian10: ~
File Edit View Search Terminal Help
debian 1134 0.0 2.6 1411908 53688 tty2 Sl+ 13:38 0:00 /usr/lib/gnome-settings-daemon/gsd-media-keys
debian 1135 0.0 0.3 237972 6408 tty2 Sl+ 13:38 0:00 /usr/lib/gnome-settings-daemon/gsd-mouse
debian 1149 0.0 0.6 357996 13560 tty2 Sl+ 13:38 0:00 /usr/lib/gnome-settings-daemon/gsd-printer
debian 1177 0.0 1.7 949060 35476 ? Ssl 13:38 0:00 /usr/lib/evolution/evolution-calendar-factory
debian 1206 0.0 1.0 512624 22036 tty2 SNL+ 13:38 0:00 /usr/lib/tracker/tracker-miner-fs
debian 1207 0.0 3.0 742600 62420 tty2 Sl+ 13:38 0:00 /usr/lib/evolution/evolution-data-server/evolution-alarm-noti
debian 1213 0.0 0.2 235108 5728 tty2 Sl+ 13:38 0:00 /usr/lib/gnome-disk-utility/gsd-disk-utility-notify
debian 1215 0.0 1.0 509492 22092 tty2 SNL+ 13:38 0:00 /usr/lib/tracker/tracker-miner-apps
debian 1217 0.2 5.7 1106572 116660 tty2 Sl+ 13:38 0:02 /usr/bin/gnome-software --gapplication-service
debian 1232 0.0 1.3 543444 27268 ? Ssl 13:38 0:00 /usr/lib/tracker/tracker-store
debian 1248 0.0 0.0 25912 360 ? S 13:38 0:00 /usr/bin/VBoxClient --clipboard
debian 1249 0.0 0.2 160352 4196 ? Sl 13:38 0:00 /usr/bin/VBoxClient --clipboard
debian 1260 0.0 0.0 25912 360 ? S 13:38 0:00 /usr/bin/VBoxClient --seamless
debian 1262 0.0 0.1 158164 2760 ? Sl 13:38 0:00 /usr/bin/VBoxClient --seamless
debian 1265 0.0 0.0 25912 356 ? S 13:38 0:00 /usr/bin/VBoxClient --draganddrop
debian 1267 0.1 0.1 224220 2640 ? Sl 13:38 0:02 /usr/bin/VBoxClient --draganddrop
debian 1269 0.0 0.0 25912 376 ? S 13:38 0:00 /usr/bin/VBoxClient --vmsvga
root 1270 0.0 0.0 85860 904 ? S 13:38 0:00 [VBoxDRMClient]
debian 1312 0.0 1.4 682560 30468 ? Ssl 13:38 0:00 /usr/lib/evolution/evolution-addressbook-factory
debian 1360 0.0 1.8 477192 38428 ? SLL 13:39 0:00 /usr/bin/seahorse --gapplication-service
debian 1376 0.4 2.0 374116 41548 ? Rsl 13:39 0:06 /usr/lib/gnome-terminal/gnome-terminal-server
debian 1391 0.0 0.3 314080 7488 ? Sl 13:39 0:00 /usr/lib/gvfs/gvfsd-trash --spawner :1.11 /org/gtk/gvfs/exec_
debian 1527 0.0 0.2 7652 4452 pts/0 Ss 13:39 0:00 bash
root 1548 0.0 1.1 386524 24352 ? Ssl 13:39 0:00 /usr/lib/fwupd/fwupd
debian 1550 0.0 0.2 164816 5840 ? Ssl 13:39 0:00 /usr/lib/gvfs/gvfsd-metadata
debian 1555 0.0 0.3 313844 7088 ? Sl 13:39 0:00 /usr/lib/gvfs/gvfsd-burn --spawner :1.11 /org/gtk/gvfs/exec_s
root 2025 0.0 0.0 0 0 ? I 13:45 0:00 [kworker/0:0-cgroup_destroy]
root 2057 0.0 0.0 0 0 ? R 13:54 0:00 [kworker/u4:0-events_unbound]
root 2058 0.0 0.0 0 0 ? I 13:54 0:00 [kworker/1:0-events]
root 2088 0.0 0.0 0 0 ? I 14:00 0:00 [kworker/1:1-ata_sff]
debian 2089 0.0 0.1 10632 3000 pts/0 R+ 14:00 0:00 ps aux
debian@debian10:~$
```

```
Activities Terminal Mon 14:02
debian@debian10: ~
File Edit View Search Terminal Help
root 2025 0.0 0.0 0 0 ? I 13:45 0:00 [kworker/0:0-cgroup_destroy]
root 2057 0.0 0.0 0 0 ? R 13:54 0:00 [kworker/u4:0-events_unbound]
root 2058 0.0 0.0 0 0 ? I 13:54 0:00 [kworker/1:0-events]
root 2088 0.0 0.0 0 0 ? I 14:00 0:00 [kworker/1:1-ata_sff]
debian 2089 0.0 0.1 10632 3000 pts/0 R+ 14:00 0:00 ps axu
debian@debian10:~$ ps -ejH
PID PGID SID TTY TIME CMD
2 0 0 ? 00:00:00 kthreadd
3 0 0 ? 00:00:00 rcu_gp
4 0 0 ? 00:00:00 rcu_par_gp
6 0 0 ? 00:00:00 kworker/0:0H-kblockd
8 0 0 ? 00:00:00 mm_percpu_wq
9 0 0 ? 00:00:00 ksoftirqd/0
10 0 0 ? 00:00:00 rcu_sched
11 0 0 ? 00:00:00 rcu_bh
12 0 0 ? 00:00:00 migration/0
13 0 0 ? 00:00:00 kworker/0:1-mm_percpu_wq
14 0 0 ? 00:00:00 cpuhp/0
15 0 0 ? 00:00:00 cpuhp/1
16 0 0 ? 00:00:00 migration/1
17 0 0 ? 00:00:00 ksoftirqd/1
19 0 0 ? 00:00:00 kworker/1:0H-kblockd
20 0 0 ? 00:00:00 kdevtmpfs
21 0 0 ? 00:00:00 netns
22 0 0 ? 00:00:00 kauditd
23 0 0 ? 00:00:00 khungtaskd
24 0 0 ? 00:00:00 oom_reaper
25 0 0 ? 00:00:00 writeback
26 0 0 ? 00:00:00 kcompactd0
27 0 0 ? 00:00:00 ksmd
28 0 0 ? 00:00:00 khugepaged
29 0 0 ? 00:00:00 crypto
```

```
Activities Terminal Mon 14:04
debian@debian10: ~
File Edit View Search Terminal Help
1270 1268 1268 ? 00:00:00 VBoxDRMClient
1548 1548 1548 ? 00:00:00 fwupd
debian@debian10:~$ ps axjf
PPID PID PGID SID TTY TPGID STAT UID TIME COMMAND
0 2 0 0 ? -1 S 0 0:00 [kthreadd]
2 3 0 0 ? -1 I< 0 0:00 \ [rcu_gp]
2 4 0 0 ? -1 I< 0 0:00 \ [rcu_par_gp]
2 6 0 0 ? -1 I< 0 0:00 \ [kworker/0:0H-kblockd]
2 8 0 0 ? -1 I< 0 0:00 \ [mm_percpu_wq]
2 9 0 0 ? -1 S 0 0:00 \ [ksoftirqd/0]
2 10 0 0 ? -1 I 0 0:00 \ [rcu_sched]
2 11 0 0 ? -1 I 0 0:00 \ [rcu_bh]
2 12 0 0 ? -1 S 0 0:00 \ [migration/0]
2 13 0 0 ? -1 I 0 0:00 \ [kworker/0:1-mm_percpu_wq]
2 14 0 0 ? -1 S 0 0:00 \ [cpuhp/0]
2 15 0 0 ? -1 S 0 0:00 \ [cpuhp/1]
2 16 0 0 ? -1 S 0 0:00 \ [migration/1]
2 17 0 0 ? -1 S 0 0:00 \ [ksoftirqd/1]
2 19 0 0 ? -1 I< 0 0:00 \ [kworker/1:0H-kblockd]
2 20 0 0 ? -1 S 0 0:00 \ [kdevtmpfs]
2 21 0 0 ? -1 I< 0 0:00 \ [netns]
2 22 0 0 ? -1 S 0 0:00 \ [kauditd]
2 23 0 0 ? -1 S 0 0:00 \ [khungtaskd]
2 24 0 0 ? -1 S 0 0:00 \ [oom_reaper]
2 25 0 0 ? -1 I< 0 0:00 \ [writeback]
2 26 0 0 ? -1 S 0 0:00 \ [kcompactd0]
2 27 0 0 ? -1 SN 0 0:00 \ [ksmd]
2 28 0 0 ? -1 SN 0 0:00 \ [khugepaged]
2 29 0 0 ? -1 I< 0 0:00 \ [crypto]
2 30 0 0 ? -1 I< 0 0:00 \ [kintegrityd]
2 31 0 0 ? -1 I< 0 0:00 \ [kblockd]
2 32 0 0 ? -1 I< 0 0:00 \ [edac-poller]
2 33 0 0 ? -1 I< 0 0:00 \ [devfreq_wq]
2 34 0 0 ? -1 S 0 0:00 \ [watchdogd]
2 36 0 0 ? -1 S 0 0:00 \ [kswapd0]
2 54 0 0 ? -1 I< 0 0:00 \ [kthrotld]
2 55 0 0 ? -1 I< 0 0:00 \ [ip6_addrconf]
2 65 0 0 ? -1 I< 0 0:00 \ [kstrn]
```

