

Linux OS-hez hasznos monitorozó parancsok

Top : Az a parancs megmutatja a háttérben futó feladatokat hogy, mely felhasználó használja és azoknak futásának idejét, hogy mennyi ideje vannak meg nyitva.

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
top - 09:20:44 up 6 min, 1 user, load average: 0,38, 1,39, 0,86
Tasks: 167 total, 3 running, 164 sleeping, 0 stopped, 0 zombie
%Cpu(s): 4,5 us, 1,3 sy, 0,0 ni, 93,7 id, 0,5 wa, 0,0 hi, 0,0 si, 0,0 st
MiB Mem : 3836,3 total, 1877,6 free, 1168,4 used, 790,3 buff/cache
MiB Swap: 2048,0 total, 2048,0 free, 0,0 used. 2364,4 avail Mem

  PID USER      PR  NI  VIRT  RES  SHR S %CPU  %MEM    TIME+  COMMAND
 1585 tivko    20   0 218680 480840 97304 S   4,0  12,2   0:33.50 teams
   790 root       20   0  771768 57236 31884 R   2,7   1,5   0:03.85 Xorg
 1917 tivko    20   0 319520 37108 29856 S   1,7   0,9   0:00.25 xfce4-screensho
 1481 tivko    20   0 979560 96516 74360 S   1,0   2,5   0:03.09 teams
   386 root      -51   0     0     0     0 S   0,3   0,0   0:00.94 irq/30-iwlwifi
  1145 tivko    20   0 592068 60880 41288 R   0,3   1,5   0:01.11 xfwm4
  1165 tivko    20   0 327308 52428 30128 S   0,3   1,3   0:01.04 xfdesktop
  1809 tivko    20   0 410252 42768 33132 S   0,3   1,1   0:00.55 xfce4-terminal
  1911 tivko    20   0  14728  4292  3532 R   0,3   0,1   0:00.24 top
     1 root      20   0  102104 11548  8328 S   0,0   0,3   0:01.13 systemd
     2 root      20   0     0     0     0 S   0,0   0,0   0:00.00 kthreadd
     3 root       0 -20     0     0     0 S   0,0   0,0   0:00.00 rcu_gp
     4 root       0 -20     0     0     0 I   0,0   0,0   0:00.00 rcu_par_gp
     6 root       0 -20     0     0     0 I   0,0   0,0   0:00.02 kworker/0:0H-kblockd
     7 root      20   0     0     0     0 I   0,0   0,0   0:00.00 kworker/u16:0-iwlwifi
     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   0:00.04 ksoftirqd/0
    10 root      20   0     0     0     0 I   0,0   0,0   0:00.17 rcu_sched
    11 root      rt    0     0     0     0 S   0,0   0,0   0:00.00 migration/0
    12 root     -51   0     0     0     0 S   0,0   0,0   0:00.00 idle_inject/0
    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     -51   0     0     0     0 S   0,0   0,0   0:00.00 idle_inject/1
    17 root      rt    0     0     0     0 S   0,0   0,0   0:00.12 migration/1
```

vmstat -: alapértelmezés szerint kilobájtban jeleníti meg a memória statisztikáját, de az **-SM** argumentummal megabájt memória méretű jelentéseket is megjeleníthet.

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
tivko@tiviLaptop:~$ 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 1894772 42352 783712  0  0  697  143  398 2596 11  3 71 16
0
tivko@tiviLaptop:~$
```

w- :

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
tivko@tiviLaptop:~$ 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 1894772 42352 783712  0  0  697  143  398 2596 11  3 71 16
0
tivko@tiviLaptop:~$ w
09:22:35 up 8 min,  1 user,  load average: 0,17, 0,98, 0,77
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU WHAT
tivko     tty7      :0            09:15    7:46   7.35s   0.36s xfce4-session
tivko@tiviLaptop:~$
```

uname: Kíírja az operációs rendszer nevét.

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
tivko@tiviLaptop:~$ 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 1894772 42352 783712    0    0   697   143  398 2596 11  3 71 16
0
tivko@tiviLaptop:~$ w
 09:22:35 up 8 min,  1 user,  load average: 0,17, 0,98, 0,77
USER      TTY      FROM              LOGIN@   IDLE   JCPU   PCPU WHAT
tivko     tty7      :0                09:15    7:46   7.35s  0.36s xfce4-session
tivko@tiviLaptop:~$ whoiam
whoiam: command not found
tivko@tiviLaptop:~$ whoami
tivko
tivko@tiviLaptop:~$ uname
Linux
tivko@tiviLaptop:~$
```

ps -a: A program kilistázza az aktuálisan futó programokat.

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
tivko@tiviLaptop:~$ 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 migration/0
 12 ?            00:00:00 idle_inject/0
 14 ?            00:00:00 cpuhp/0
 15 ?            00:00:00 cpuhp/1
 16 ?            00:00:00 idle_inject/1
 17 ?            00:00:00 migration/1
 18 ?            00:00:00 ksoftirqd/1
 20 ?            00:00:00 kworker/1:0H-kblockd
 21 ?            00:00:00 kdevtmpfs
 22 ?            00:00:00 netns
 23 ?            00:00:00 rcu_tasks_kthre
 24 ?            00:00:00 kauditd
 25 ?            00:00:00 kworker/1:1-events
 26 ?            00:00:00 khungtaskd
 27 ?            00:00:00 oom_reaper
 28 ?            00:00:00 writeback
 29 ?            00:00:00 kcompactd0
 30 ?            00:00:00 ksmd
 31 ?            00:00:00 khugepaged
 77 ?            00:00:00 kintegrityd
 78 ?            00:00:00 kblockd
 79 ?            00:00:00 blkcg_punt_bio
 80 ?            00:00:00 tpm_dev_wq
 81 ?            00:00:00 ata_sff
 82 ?            00:00:00 md
 83 ?            00:00:00 edac-poller
 84 ?            00:00:00 devfreq_wq
 85 ?            00:00:00 watchdogd
 86 ?            00:00:00 kworker/u16:1-events_unbound
```

ps -Al:

Terminal - tivko@tiviLaptop: ~												
File Edit View Terminal Tabs Help												
tivko@tiviLaptop:~\$ ps -Al												
F S	UID	PID	PPID	C	PRI	NI	ADDR	SZ	WCHAN	TTY	TIME	CMD
4 S	0	1	0	0	80	0	- 25526	-		?	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 S	0	11	2	0	-40	-	-	0	-	?	00:00:00	migration/0
5 S	0	12	2	0	9	-	-	0	-	?	00:00:00	idle_inject/0
1 S	0	14	2	0	80	0	-	0	-	?	00:00:00	cpuhp/0
5 S	0	15	2	0	80	0	-	0	-	?	00:00:00	cpuhp/1
5 S	0	16	2	0	9	-	-	0	-	?	00:00:00	idle_inject/1
1 S	0	17	2	0	-40	-	-	0	-	?	00:00:00	migration/1
1 S	0	18	2	0	80	0	-	0	-	?	00:00:00	ksoftirqd/1
1 I	0	20	2	0	60	-20	-	0	-	?	00:00:00	kworker/1:0H-kblockd
5 S	0	21	2	0	80	0	-	0	-	?	00:00:00	kdevtmpfs
1 I	0	22	2	0	60	-20	-	0	-	?	00:00:00	netns
1 S	0	23	2	0	80	0	-	0	-	?	00:00:00	rcu_tasks_kthre
1 S	0	24	2	0	80	0	-	0	-	?	00:00:00	kauditd
1 I	0	25	2	0	80	0	-	0	-	?	00:00:00	kworker/1:1-events
1 S	0	26	2	0	80	0	-	0	-	?	00:00:00	khungtaskd
1 S	0	27	2	0	80	0	-	0	-	?	00:00:00	oom_reaper
1 I	0	28	2	0	60	-20	-	0	-	?	00:00:00	writeback
1 S	0	29	2	0	80	0	-	0	-	?	00:00:00	kcompactd0
1 S	0	30	2	0	85	5	-	0	-	?	00:00:00	ksmd
1 S	0	31	2	0	99	19	-	0	-	?	00:00:00	khugepaged
1 I	0	77	2	0	60	-20	-	0	-	?	00:00:00	kintegrityd
1 I	0	78	2	0	60	-20	-	0	-	?	00:00:00	kblockd
1 I	0	79	2	0	60	-20	-	0	-	?	00:00:00	blkcg_punt_bio
1 I	0	80	2	0	60	-20	-	0	-	?	00:00:00	tpm_dev_wq
1 I	0	81	2	0	60	-20	-	0	-	?	00:00:00	ata_sff
1 I	0	82	2	0	60	-20	-	0	-	?	00:00:00	md
1 I	0	83	2	0	60	-20	-	0	-	?	00:00:00	edac-poller
1 I	0	84	2	0	60	-20	-	0	-	?	00:00:00	devfreq_wq
1 S	0	85	2	0	-40	-	-	0	-	?	00:00:00	watchdogd
1 T	0	86	?	0	80	0	-	0	-	?	00:00:00	kworker/u16:1-iwlwifi

ps _alf:

```
Terminal - tivko@tiviLaptop: ~  
File Edit View Terminal Tabs Help  
0 S 1000 1324 1321 0 80 0 - 2805 poll_s ? 00:00:00 rfkill  
0 S 1000 1325 996 0 80 0 - 80110 poll_s ? 00:00:00 gvfs-udisks2-vo  
0 S 1000 1334 996 0 80 0 - 60246 poll_s ? 00:00:00 gvfs-gphoto2-vo  
0 S 1000 1341 996 0 80 0 - 59685 poll_s ? 00:00:00 gvfs-goa-volume  
0 S 1000 1348 996 0 80 0 - 59643 poll_s ? 00:00:00 gvfs-mtp-volume  
0 S 1000 1354 996 0 80 0 - 98359 poll_s ? 00:00:00 evolution-sourc  
0 S 1000 1355 996 0 80 0 - 79899 poll_s ? 00:00:00 gvfs-afc-volume  
4 S 1000 1405 1205 0 80 0 - 49164 do_wai ? 00:00:00 teams  
5 S 1000 1412 1405 0 80 0 - 49164 poll_s ? 00:00:00 teams  
0 S 1000 1418 996 0 80 0 - 210453 poll_s ? 00:00:00 evolution-calen  
0 S 1000 1439 996 0 80 0 - 169079 poll_s ? 00:00:00 evolution-addre  
0 S 1000 1481 1205 1 80 0 - 244890 poll_s ? 00:00:05 teams  
0 S 1000 1493 1205 0 80 0 - 197403 futex_ ? 00:00:01 teams  
0 S 1000 1507 1205 0 80 0 - 314992 futex_ ? 00:00:00 teams  
0 S 1000 1564 1205 0 80 0 - 226608 futex_ ? 00:00:00 teams  
0 S 1000 1585 1205 7 80 0 - 538482 futex_ ? 00:00:37 teams  
1 S 1000 1647 1412 0 80 0 - 298353 futex_ ? 00:00:04 teams  
0 S 1000 1657 1205 3 80 0 - 481851 futex_ ? 00:00:19 teams  
4 S 0 1830 1 0 80 0 - 144247 - ? 00:00:01 flatpak-system-  
1 I 0 1921 2 0 80 0 - 0 - ? 00:00:00 kworker/u16:0-events_un  
0 S 1000 1922 1024 0 80 0 - 80099 poll_s ? 00:00:00 gvfsd-trash  
0 S 1000 1946 1024 0 80 0 - 98650 poll_s ? 00:00:00 gvfsd-network  
0 S 1000 1959 1024 0 80 0 - 79464 poll_s ? 00:00:00 gvfsd-dnssd  
1 I 0 1968 2 0 80 0 - 0 - ? 00:00:00 kworker/0:0-events  
1 I 0 1969 2 0 80 0 - 0 - ? 00:00:00 kworker/1:0-cgroup_dest  
1 I 0 1975 2 0 80 0 - 0 - ? 00:00:00 kworker/0:1-events  
1 I 0 1984 2 0 80 0 - 0 - ? 00:00:00 kworker/1:3-events  
0 R 1000 1989 1154 0 80 0 - 102501 - ? 00:00:01 xfce4-terminal  
0 S 1000 1994 1989 0 80 0 - 3372 do_wai pts/0 00:00:00 bash  
0 S 1000 2010 996 0 80 0 - 41253 poll_s ? 00:00:00 gvfsd-metadata  
0 S 1000 2016 996 0 99 19 - 102236 poll_s ? 00:00:00 tumblerd  
1 I 0 2076 2 0 80 0 - 0 - ? 00:00:00 kworker/1:4-events  
1 I 0 2077 2 0 80 0 - 0 - ? 00:00:00 kworker/1:5-cgroup_dest  
4 S 0 2149 1 0 80 0 - 4113 - ? 00:00:00 systemd-hostnam  
4 R 1000 2167 1994 0 80 0 - 3572 - pts/0 00:00:00 ps  
tivko@tiviLaptop:~$ ps -alf  
F S UID PID PPID C PRI NI ADDR SZ WCHAN STIME TTY TIME CMD  
4 R tivko 2235 1994 0 80 0 - 3592 - 09:25 pts/0 00:00:00 ps -alf  
tivko@tiviLaptop:~$
```

ps – AIFH:

```

Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
0 S 1000 1354 996 0 80 0 - 98359 poll_s ? 00:00:00 evolution-sourc
0 S 1000 1355 996 0 80 0 - 79899 poll_s ? 00:00:00 gvfs-afc-volume
4 S 1000 1405 1205 0 80 0 - 49164 do_wai ? 00:00:00 teams
5 S 1000 1412 1405 0 80 0 - 49164 poll_s ? 00:00:00 teams
0 S 1000 1418 996 0 80 0 - 210453 poll_s ? 00:00:00 evolution-calen
0 S 1000 1439 996 0 80 0 - 169079 poll_s ? 00:00:00 evolution-addre
0 S 1000 1481 1205 1 80 0 - 244890 poll_s ? 00:00:05 teams
0 S 1000 1493 1205 0 80 0 - 197403 futex_ ? 00:00:01 teams
0 S 1000 1507 1205 0 80 0 - 314992 futex_ ? 00:00:00 teams
0 S 1000 1564 1205 0 80 0 - 226608 futex_ ? 00:00:00 teams
0 S 1000 1585 1205 7 80 0 - 538482 futex_ ? 00:00:37 teams
1 S 1000 1647 1412 0 80 0 - 298353 futex_ ? 00:00:04 teams
0 S 1000 1657 1205 3 80 0 - 481851 futex_ ? 00:00:19 teams
4 S 0 1830 1 0 80 0 - 144247 - ? 00:00:01 flatpak-system-
1 I 0 1921 2 0 80 0 - 0 - ? 00:00:00 kworker/u16:0-events_un
0 S 1000 1922 1024 0 80 0 - 80099 poll_s ? 00:00:00 gvfsd-trash
0 S 1000 1946 1024 0 80 0 - 98650 poll_s ? 00:00:00 gvfsd-network
0 S 1000 1959 1024 0 80 0 - 79464 poll_s ? 00:00:00 gvfsd-dnssd
1 I 0 1968 2 0 80 0 - 0 - ? 00:00:00 kworker/0:0-events
1 I 0 1969 2 0 80 0 - 0 - ? 00:00:00 kworker/1:0-cgroup_dest
1 I 0 1975 2 0 80 0 - 0 - ? 00:00:00 kworker/0:1-events
1 I 0 1984 2 0 80 0 - 0 - ? 00:00:00 kworker/1:3-events
0 R 1000 1989 1154 0 80 0 - 102501 - ? 00:00:01 xfce4-terminal
0 S 1000 1994 1989 0 80 0 - 3372 do_wai pts/0 00:00:00 bash
0 S 1000 2010 996 0 80 0 - 41253 poll_s ? 00:00:00 gvfsd-metadata
0 S 1000 2016 996 0 99 19 - 102236 poll_s ? 00:00:00 tumblerd
1 I 0 2076 2 0 80 0 - 0 - ? 00:00:00 kworker/1:4-events
1 I 0 2077 2 0 80 0 - 0 - ? 00:00:00 kworker/1:5-cgroup_dest
4 S 0 2149 1 0 80 0 - 4113 - ? 00:00:00 systemd-hostnam
4 R 1000 2167 1994 0 80 0 - 3572 - pts/0 00:00:00 ps
tivko@tiviLaptop:~$ ps -alf
F S UID PID PPID C PRI NI ADDR SZ WCHAN STIME TTY TIME CMD
4 R tivko 2235 1994 0 80 0 - 3592 - 09:25 pts/0 00:00:00 ps -alf
tivko@tiviLaptop:~$ ps-alfh
ps-alfh: command not found
tivko@tiviLaptop:~$ ps -alfH
F S UID PID PPID C PRI NI ADDR SZ WCHAN RSS PSR STIME TTY TIME CMD
4 R tivko 2800 1994 0 80 0 - 3592 - 3748 1 09:26 pts/0 00:00:00 ps -
tivko@tiviLaptop:~$

```

ps -ejH:

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
tivko@tiviLaptop:~$
tivko@tiviLaptop:~$ 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	S	0	0:00	_ [migration/0]
2	12	0	0	?	-1	S	0	0:00	_ [idle_inject/0]
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	_ [idle_inject/1]
2	17	0	0	?	-1	S	0	0:00	_ [migration/1]
2	18	0	0	?	-1	S	0	0:00	_ [ksoftirqd/1]
2	20	0	0	?	-1	I<	0	0:00	_ [kworker/1:0H-kblockd]
2	21	0	0	?	-1	S	0	0:00	_ [kdevtmpfs]
2	22	0	0	?	-1	I<	0	0:00	_ [netns]
2	23	0	0	?	-1	S	0	0:00	_ [rcu_tasks_kthre]
2	24	0	0	?	-1	S	0	0:00	_ [kauditd]
2	26	0	0	?	-1	S	0	0:00	_ [khungtaskd]
2	27	0	0	?	-1	S	0	0:00	_ [oom_reaper]
2	28	0	0	?	-1	I<	0	0:00	_ [writeback]
2	29	0	0	?	-1	S	0	0:00	_ [kcompactd0]
2	30	0	0	?	-1	SN	0	0:00	_ [ksmd]
2	31	0	0	?	-1	SN	0	0:00	_ [khugepaged]
2	77	0	0	?	-1	I<	0	0:00	_ [kintegrityd]
2	78	0	0	?	-1	I<	0	0:00	_ [kblockd]
2	79	0	0	?	-1	I<	0	0:00	_ [blkcg_punt_bio]
2	80	0	0	?	-1	I<	0	0:00	_ [tpm_dev_wq]
2	81	0	0	?	-1	I<	0	0:00	_ [ata_sff]
2	82	0	0	?	-1	I<	0	0:00	_ [md]
2	83	0	0	?	-1	I<	0	0:00	_ [edac-poller]
2	84	0	0	?	-1	I<	0	0:00	_ [devfreq_wq]
2	85	0	0	?	-1	S	0	0:00	_ [watchdogd]
2	86	0	0	?	-1	I	0	0:00	_ [kworker/u16:1-events_
2	88	0	0	?	-1	S	0	0:00	_ [kswapd0]

ps -axhjf:

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
tivko@tiviLaptop:~$ 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 migration/0
   12      0       0 ?      00:00:00 idle_inject/0
   14      0       0 ?      00:00:00 cpuhp/0
   15      0       0 ?      00:00:00 cpuhp/1
   16      0       0 ?      00:00:00 idle_inject/1
   17      0       0 ?      00:00:00 migration/1
   18      0       0 ?      00:00:00 ksoftirqd/1
   20      0       0 ?      00:00:00 kworker/1:0H-kblockd
   21      0       0 ?      00:00:00 kdevtmpfs
   22      0       0 ?      00:00:00 netns
   23      0       0 ?      00:00:00 rcu_tasks_kthre
   24      0       0 ?      00:00:00 kauditd
   26      0       0 ?      00:00:00 khungtaskd
   27      0       0 ?      00:00:00 oom_reaper
   28      0       0 ?      00:00:00 writeback
   29      0       0 ?      00:00:00 kcompactd0
   30      0       0 ?      00:00:00 ksm
   31      0       0 ?      00:00:00 khugepaged
   77      0       0 ?      00:00:00 kintegrityd
   78      0       0 ?      00:00:00 kblockd
   79      0       0 ?      00:00:00 blkcg_punt_bio
   80      0       0 ?      00:00:00 tpm_dev_wq
   81      0       0 ?      00:00:00 ata_sff
   82      0       0 ?      00:00:00 md
   83      0       0 ?      00:00:00 edac-poller
   84      0       0 ?      00:00:00 devfreq_wq
   85      0       0 ?      00:00:00 watchdogd
   86      0       0 ?      00:00:00 kworker/u16:1-events_unbound
   88      0       0 ?      00:00:00 kswapd0
   89      0       0 ?      00:00:00 ecrvntfs-kthrea
```

pstree:

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
tivko@tiviLaptop:~$ ps aux
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root         1  0.1  0.2 102104 11548 ?        Ss   09:14   0:01 /sbin/init splash
root         2  0.0  0.0      0     0 ?        S    09:14   0:00 [kthreadd]
root         3  0.0  0.0      0     0 ?        I<   09:14   0:00 [rcu_gp]
root         4  0.0  0.0      0     0 ?        I<   09:14   0:00 [rcu_par_gp]
root         6  0.0  0.0      0     0 ?        I<   09:14   0:00 [kworker/0:0H-kblockd]
root         8  0.0  0.0      0     0 ?        I<   09:14   0:00 [mm_percpu_wq]
root         9  0.0  0.0      0     0 ?        S    09:14   0:00 [ksoftirqd/0]
root        10  0.0  0.0      0     0 ?        I    09:14   0:00 [rcu_sched]
root        11  0.0  0.0      0     0 ?        S    09:14   0:00 [migration/0]
root        12  0.0  0.0      0     0 ?        S    09:14   0:00 [idle_inject/0]
root        14  0.0  0.0      0     0 ?        S    09:14   0:00 [cpuhp/0]
root        15  0.0  0.0      0     0 ?        S    09:14   0:00 [cpuhp/1]
root        16  0.0  0.0      0     0 ?        S    09:14   0:00 [idle_inject/1]
root        17  0.0  0.0      0     0 ?        S    09:14   0:00 [migration/1]
root        18  0.0  0.0      0     0 ?        S    09:14   0:00 [ksoftirqd/1]
root        20  0.0  0.0      0     0 ?        I<   09:14   0:00 [kworker/1:0H-kblockd]
root        21  0.0  0.0      0     0 ?        S    09:14   0:00 [kdevtmpfs]
root        22  0.0  0.0      0     0 ?        I<   09:14   0:00 [netns]
root        23  0.0  0.0      0     0 ?        S    09:14   0:00 [rcu_tasks_kthre]
root        24  0.0  0.0      0     0 ?        S    09:14   0:00 [kauditd]
root        25  0.0  0.0      0     0 ?        I    09:14   0:00 [kworker/1:1-events]
root        26  0.0  0.0      0     0 ?        S    09:14   0:00 [khungtaskd]
root        27  0.0  0.0      0     0 ?        S    09:14   0:00 [oom_reaper]
root        28  0.0  0.0      0     0 ?        I<   09:14   0:00 [writeback]
root        29  0.0  0.0      0     0 ?        S    09:14   0:00 [kcompactd0]
root        30  0.0  0.0      0     0 ?        SN   09:14   0:00 [ksmd]
root        31  0.0  0.0      0     0 ?        SN   09:14   0:00 [khugepaged]
root        77  0.0  0.0      0     0 ?        I<   09:14   0:00 [kintegrityd]
root        78  0.0  0.0      0     0 ?        I<   09:14   0:00 [kblockd]
root        79  0.0  0.0      0     0 ?        I<   09:14   0:00 [blkcg_punt_bio]
root        80  0.0  0.0      0     0 ?        I<   09:14   0:00 [tpm_dev_wq]
root        81  0.0  0.0      0     0 ?        I<   09:14   0:00 [ata_sff]
root        82  0.0  0.0      0     0 ?        I<   09:14   0:00 [md]
root        83  0.0  0.0      0     0 ?        I<   09:14   0:00 [edac-poller]
root        84  0.0  0.0      0     0 ?        I<   09:14   0:00 [devfreq_wq]
root        85  0.0  0.0      0     0 ?        S    09:14   0:00 [watchdogd]
root        86  0.0  0.0      0     0 ?        T    09:14   0:00 [kworker/u16:1-events_unho
```

ps -axu:

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help

tivko@tiviLaptop:~$ pstree
systemd├─ModemManager─2*[{ModemManager}]
      ├─NetworkManager─2*[{NetworkManager}]
      ├─accounts-daemon─2*[{accounts-daemon}]
      ├─acpid
      ├─agetty
      ├─avahi-daemon─avahi-daemon
      ├─blueberry-tray├─safechild─rfkill
                    └─4*[{blueberry-tray}]
      ├─bluetoothd
      ├─colord─2*[{colord}]
      ├─cron
      ├─cups-browsed─2*[{cups-browsed}]
      ├─cupsd
      ├─dbus-daemon
      ├─irqbalance─{irqbalance}
      ├─2*[{kerneloops}]
      └─lightdm├─Xorg─9*[{Xorg}]
                └─lightdm├─xfce4-session├─Thunar─2*[{Thunar}]
                              └─agent─2*[{agent}]
                              └─applet.py
                              └─blueberry-obex─3*[{blueberry-obex-}]
                              └─evolution-alarm─5*[{evolution-alarm}]
                              └─light-locker─3*[{light-locker}]
                              └─nm-applet─3*[{nm-applet}]
                              └─polkit-gnome-au─2*[{polkit-gnome-au}]
                              └─ssh-agent
                              └─xfce4-panel├─panel-1-whisker─2*[{panel-1-wh+
                                            └─panel-10-xapp-s─2*[{panel-10-x+
                                            └─panel-11-power─2*[{panel-11-p+
                                            └─panel-12-pulsea─2*[{panel-12-p+
                                            └─panel-8-systray─2*[{panel-8-sy+
                                            └─panel-9-notific─2*[{panel-9-no+
                                            └─xfce4-terminal├─bash─pstree
                                                           └─2*[{xfce4-termi+
                                                           └─2*[{xfce4-panel}]
                              └─xfdesktop─2*[{xfdesktop}]
                              └─xfwm4─6*[{xfwm4}]
```

ps -ax:

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
4 R tivko 2800 1994 0 80 0 - 3592 - 3748 1 09:26 pts/0 00:00:00 ps -
tivko@tiviLaptop:~$ ps -ax
  PID TTY          STAT TIME COMMAND
    1 ?           Ss    0:01 /sbin/init splash
    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 ?           S      0:00 [migration/0]
   12 ?           S      0:00 [idle_inject/0]
   14 ?           S      0:00 [cpuhp/0]
   15 ?           S      0:00 [cpuhp/1]
   16 ?           S      0:00 [idle_inject/1]
   17 ?           S      0:00 [migration/1]
   18 ?           S      0:00 [ksoftirqd/1]
   20 ?          I<     0:00 [kworker/1:0H-kblockd]
   21 ?           S      0:00 [kdevtmpfs]
   22 ?          I<     0:00 [netns]
   23 ?           S      0:00 [rcu_tasks_kthre]
   24 ?           S      0:00 [kauditd]
   25 ?          I      0:00 [kworker/1:1-events]
   26 ?           S      0:00 [khungtaskd]
   27 ?           S      0:00 [oom_reaper]
   28 ?          I<     0:00 [writeback]
   29 ?           S      0:00 [kcompactd0]
   30 ?          SN      0:00 [ksmd]
   31 ?          SN      0:00 [khugepaged]
   77 ?          I<     0:00 [kintegrityd]
   78 ?          I<     0:00 [kblockd]
   79 ?          I<     0:00 [blkcg_punt_bio]
   80 ?          I<     0:00 [tpm_dev_wq]
   81 ?          I<     0:00 [ata_sff]
   82 ?          I<     0:00 [md]
   83 ?          I<     0:00 [edac-poller]
   84 ?          I<     0:00 [devfreq_wq]
   85 ?           S      0:00 [watchdogd]
```

ps -aux:

```
Terminal - tivko@tiviLaptop: ~
File Edit View Terminal Tabs Help
|xfce4-volumed—2*[{xfce4-volumed}]
|xfsettingsd—2*[{xfsettingsd}]
tivko@tiviLaptop:~$ ps -p 1286 -o comm=
tivko@tiviLaptop:~$ ps -p 1286 -o comm= 27
oom_reaper
tivko@tiviLaptop:~$ ps -aux | sort -nr -k 3 | head -5
tivko      1585  4.6 12.9 2204952 507044 ?        Sl   09:16   0:42 /usr/share/teams/teams --t
ype=renderer --autoplay-policy=no-user-gesture-required --disable-background-timer-throttling
--field-trial-handle=2558393863486236459,12458503642129588531,131072 --enable-features=WebCo
mponentsV0Enabled --disable-features=PictureInPicture,SpareRendererForSitePerProcess --lang=e
n-US --app-path=/usr/share/teams/resources/app.asar --webview-tag --no-sandbox --no-zygote --
native-window-open --preload=/usr/share/teams/resources/app.asar/lib/renderer/preload.js --ba
ckground-color=#fff --enable-websql --electron-shared-settings=eyJjci5jb2lwYW55IjoiTWljcm9zb2
Z0Iiwia3IuZHVtcHMlOiIvdG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1w
L2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5
MGEwMjktMDc3OS00ZDE3Iiwia3IuZHVtcHMlOiIvdG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVud
Dk4YzFmNGZlNTlhMTgzZjRiNDliZmU2YmEmaWlkPWY4ZGQyOTY5NTVhZTI0MTMzZGYyYmJkODkxN2MyNGM3YmJi
UwOWY2OTdlZGFmY2FkMDgwM2Q5ZWE2YmQmdWlkPSIsImNyLnZlcnNpb24iOiIiXlJmMDAuMzA4NTcifQ== --num-rast
er-threads=1 --renderer-client-id=13 --no-v8-untrusted-code-mitigations --shared-files=v8_sna
pshot_data:100 --msteams-process-type=mainWindow
tivko      1657  2.2  3.3 1927404 130688 ?        Sl   09:16   0:20 /usr/share/teams/teams --t
ype=renderer --autoplay-policy=no-user-gesture-required --disable-background-timer-throttling
--field-trial-handle=2558393863486236459,12458503642129588531,131072 --enable-features=WebCo
mponentsV0Enabled --disable-features=PictureInPicture,SpareRendererForSitePerProcess --lang=e
n-US --app-path=/usr/share/teams/resources/app.asar --no-sandbox --no-zygote --preload=/usr/s
hare/teams/resources/app.asar/lib/pluginhost/preload.js --background-color=#fff --enable-webs
ql --electron-shared-settings=eyJjci5jb2lwYW55IjoiTWljcm9zb2Z0Iiwia3IuZHVtcHMlOiIvdG1wL2NvbS5
taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1w
L2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5
2E5ODcyNzFlIiwia3IuZHVtcHMlOiIvdG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5taWVudG1wL2NvbS5
EmaWlkPWY4ZGQyOTY5NTVhZTI0MTMzZGYyYmJkODkxN2MyNGM3YmJiUwOWY2OTdlZGFmY2FkMDgwM2Q5ZWE2YmQ
mdWlkPSIsImNyLnZlcnNpb24iOiIiXlJmMDAuMzA4NTcifQ== --num-raster-threads=1 --renderer-client-id
=19 --no-v8-untrusted-code-mitigations --shared-files=v8_snapshot_data:100 --msteams-process-
type=pluginHost
root       790   2.0  1.5 778120 62732 tty7      Rsl+ 09:15   0:20 /usr/lib/xorg/Xorg -core :
0 -seat seat0 -auth /var/run/lightdm/root/:0 -nolisten tcp vt7 -novtswitch
tivko      1205  1.1  5.3 1692348 209120 ?        Sl   09:15   0:11 /usr/share/teams/teams %U
tivko      1989  0.9  1.0 410196 43208 ?         Sl   09:21   0:05 xfce4-terminal
tivko@tiviLaptop:~$
```