1,2)

```
root@eltex-practice2-pg1-v17:~# su user1
user1@eltex-practice2-pg1-v17:/root$ ps | awk '$1 > 1 {count ++} END {print "processes: ", count}'
processes:  4
user1@eltex-practice2-pg1-v17:/root$
```

3)

```
Fields Management for window 1:Def, whose current sort field is %CPU
   Navigate with Up/Dn, Right selects for move then <Enter> or Left commits,
   'd' or <Space> toggles display, 's' sets sort.  Use 'q' or <Esc> to end!

* PID      = Process Id            TTY      = Controlling Tty       vMj      = Major Faults delta    PSfd     = Proportion File, KiB
* USER     = Effective User Name   TPGID    = Tty Process Grp Id    vMn      = Minor Faults delta    PSsh     = Proportion Shrd, KiB
* PR       = Priority              SID      = Session Id            USED     = Res+Swap Size (KiB)   USS      = Unique RSS, KiB
* NI       = Nice Value            nTH      = Number of Threads     nsIPC    = IPC namespace Inode   ioR      = I/O Bytes Read
  VIRT     = Virtual Image (KiB)   P        = Last Used Cpu (SMP)   nsMNT   = MNT namespace Inode   ioRop    = I/O Read Operations
  RES      = Resident Size (KiB)   TIME     = CPU Time              nsNET    = NET namespace Inode   ioW      = I/O Bytes Written
  SHR      = Shared Memory (KiB)   SWAP     = Swapped Size (KiB)    nsPID    = PID namespace Inode   ioWop    = I/O Write Operations
* S        = Process Status        CODE     = Code Size (KiB)       nsUSER   = USER namespace Inode  AGID     = Autogroup Identifier
* %CPU     = CPU Usage             DATA     = Data+Stack (KiB)      nsUTS    = UTS namespace Inode   AGNI     = Autogroup Nice Value
* %MEM     = Memory Usage (RES)    nMaj     = Major Page Faults     LXC      = LXC container name    STARTED  = Start Time from boot
* TIME+    = CPU Time, hundredths  nMin     = Minor Page Faults     RSan     = RES Anonymous (KiB)   ELAPSED  = Elapsed Running Time
* COMMAND  = Command Name/Line     nDRT     = Dirty Pages Count     RSfd     = RES File-based (KiB)  %CUU     = CPU Utilization
* RUSER    = Real User Name        WCHAN    = Sleeping in Function  RSlk     = RES Locked (KiB)      %CUC     = Utilization + child
  PPID     = Parent Process pid    Flags    = Task Flags <sched.h>  RSsh     = RES Shared (KiB)      nsCGROUP = CGRP namespace Inode
  UID      = Effective User Id     CGROUPS  = Control Groups        CGNAME   = Control Group name    nsTIME   = TIME namespace Inode
  RUID     = Real User Id          SUPGIDS  = Supp Groups IDs       NU       = Last Used NUMA node
  SUID     = Saved User Id         SUPGRPS  = Supp Groups Names     LOGID    = Login User Id
  SUSER    = Saved User Name       TGID     = Thread Group Id       EXE      = Executable Path
  GID      = Group Id              OOMa     = OOMEM Adjustment      RSS      = Res Mem (smaps), KiB
  GROUP    = Group Name            OOMs     = OOMEM Score current   PSS      = Proportion RSS,  KiB
  PGRP     = Process Group Id      ENVIRON  = Environment vars      PSan     = Proportion Anon, KiB
```

```
top - 08:03:32 up 4 days, 11 min,  2 users,  load average: 0.00, 0.00, 0.00
Tasks: 113 total,   1 running, 112 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.0 us,  0.0 sy,  0.0 ni,100.0 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   2981.6 total,   1251.0 free,    493.6 used,   1529.0 buff/cache
MiB Swap:   3185.0 total,   3184.7 free,      0.3 used.   2488.0 avail Mem

    PID USER      PR  NI S  %CPU  %MEM     TIME+ COMMAND                                                                 RUSER
  51775 user1     20   0 R   0.3   0.2   0:00.17 top                                                                     user1
      1 root      20   0 S   0.0   0.4   0:09.63 systemd                                                                 root
      2 root      20   0 S   0.0   0.0   0:00.05 kthreadd                                                                root
      3 root      20   0 S   0.0   0.0   0:00.00 pool_workqueue_release                                                  root
      4 root       0 -20 I   0.0   0.0   0:00.00 kworker/R-rcu_g                                                         root
      5 root       0 -20 I   0.0   0.0   0:00.00 kworker/R-rcu_p                                                         root
      6 root       0 -20 I   0.0   0.0   0:00.00 kworker/R-slub_                                                         root
      7 root       0 -20 I   0.0   0.0   0:00.00 kworker/R-netns                                                         root
     12 root       0 -20 I   0.0   0.0   0:00.00 kworker/R-mm_pe                                                         root
     13 root      20   0 I   0.0   0.0   0:00.00 rcu_tasks_kthread                                                       root
     14 root      20   0 I   0.0   0.0   0:00.00 rcu_tasks_rude_kthread                                                  root
     15 root      20   0 I   0.0   0.0   0:00.00 rcu_tasks_trace_kthread                                                 root
     16 root      20   0 S   0.0   0.0   0:00.15 ksoftirqd/0                                                             root
     17 root      20   0 I   0.0   0.0   0:02.79 rcu_preempt                                                             root
     18 root      rt   0 S   0.0   0.0   0:01.30 migration/0                                                             root
     19 root     -51   0 S   0.0   0.0   0:00.00 idle_inject/0                                                           root
     20 root      20   0 S   0.0   0.0   0:00.00 cpuhp/0                                                                 root
     21 root      20   0 S   0.0   0.0   0:00.00 cpuhp/1                                                                 root
```

4)

```
root@eltex-practice2-pg1-v17:~# su user1
user1@eltex-practice2-pg1-v17:/root$ passwd
```

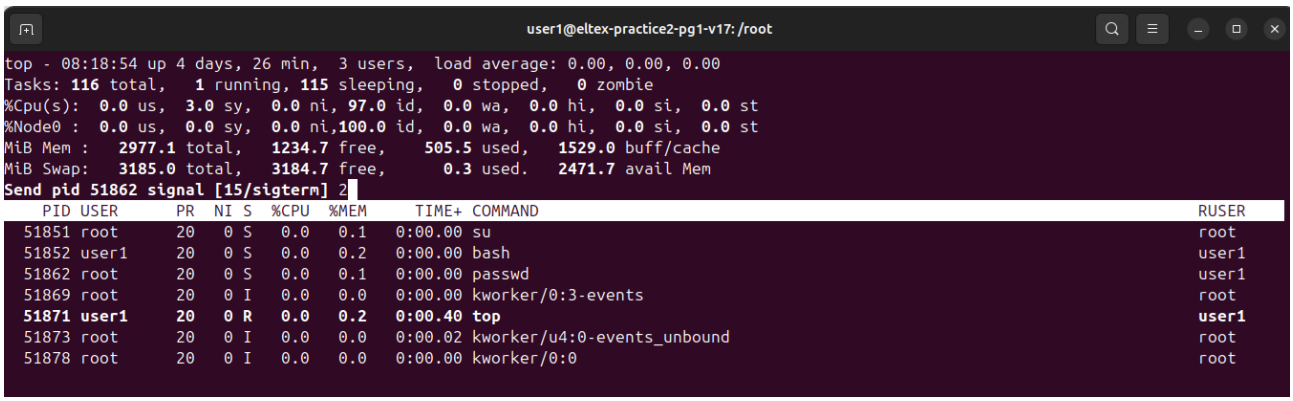
5)

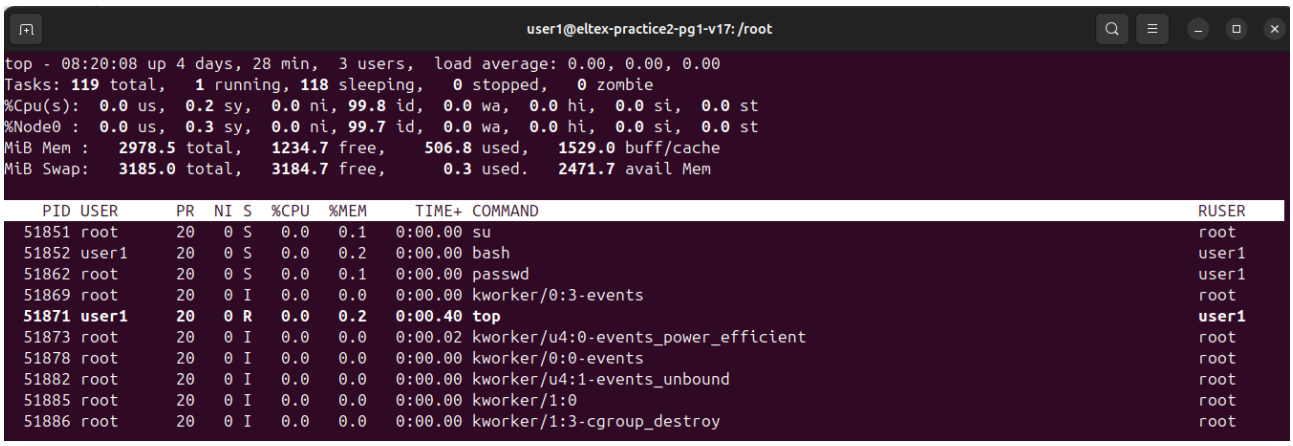
```
top - 08:08:52 up 4 days, 16 min,  3 users,  load average: 0.00, 0.00, 0.00
Tasks: 117 total,   1 running, 116 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.0 us,  0.0 sy,  0.0 ni,100.0 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   2992.3 total,   1234.7 free,    520.7 used,   1529.0 buff/cache
MiB Swap:   3185.0 total,   3184.7 free,      0.3 used.   2471.7 avail Mem

    PID USER      PR  NI S  %CPU  %MEM     TIME+ COMMAND                                                                 RUSER
  51781 user1     20   0 R   0.0   0.2   0:00.20 top                                                                     user1
  51852 user1     20   0 S   0.0   0.2   0:00.00 bash                                                                    user1
```

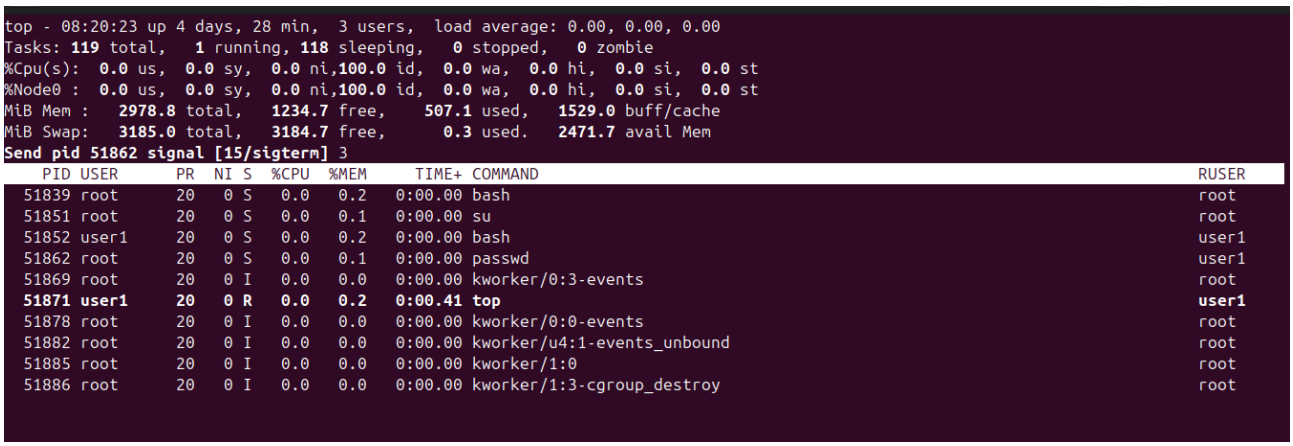
```
top - 08:10:54 up 4 days, 18 min,  3 users,  load average: 0.07, 0.03, 0.01
Tasks: 117 total,   1 running, 116 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.0 us,  0.2 sy,  0.0 ni, 99.8 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   2984.3 total,   1234.7 free,    512.7 used,   1529.0 buff/cache
MiB Swap:   3185.0 total,   3184.7 free,      0.3 used.   2471.7 avail Mem

    PID USER      PR  NI S  %CPU  %MEM     TIME+ COMMAND                                                                 RUSER
  51862 root      20   0 S   0.0   0.1   0:00.00 passwd                                                                  user1
  51866 root      20   0 I   0.0   0.0   0:00.00 kworker/0:0-cgroup_destroy                                              root
  51869 root      20   0 I   0.0   0.0   0:00.00 kworker/0:3-events                                                      root
```

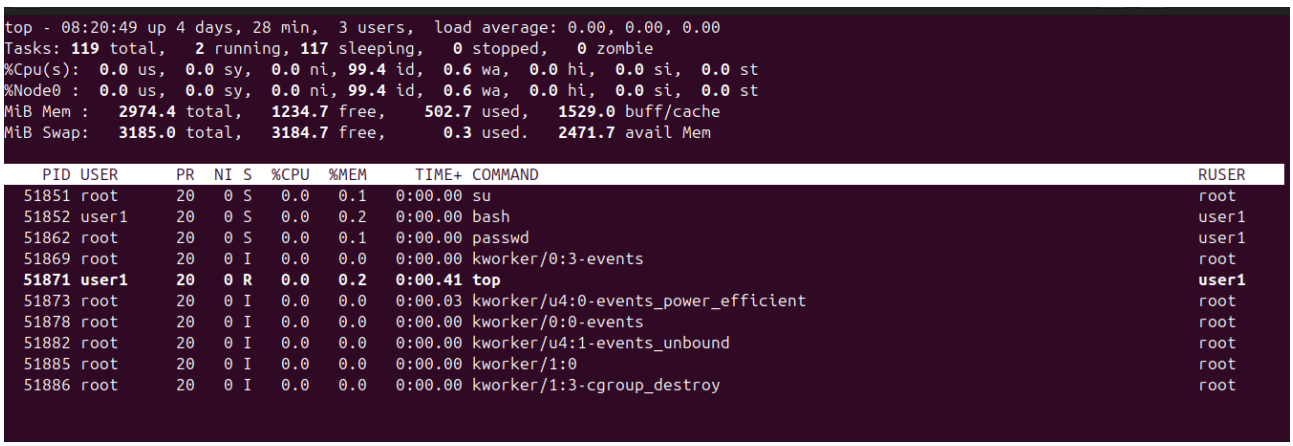
```
user1@eltex-practice2-pg1-v17: /root
top - 08:12:54 up 4 days, 20 min,  3 users,  load average: 0.01, 0.02, 0.00
Tasks: 118 total,   1 running, 117 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.0 us,  0.0 sy,  0.0 ni,100.0 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   2986.5 total,   1234.7 free,    514.9 used,   1529.0 buff/cache
MiB Swap:   3185.0 total,   3184.7 free,      0.3 used.   2471.7 avail Mem
PID to signal/kill [default pid = 51852] 51862
    PID USER      PR  NI S  %CPU  %MEM     TIME+ COMMAND                                                                 RUSER
  51852 user1     20   0 S   0.0   0.2   0:00.00 bash                                                                    user1
  51862 root      20   0 S   0.0   0.1   0:00.00 passwd                                                                  user1
  51866 root      20   0 I   0.0   0.0   0:00.00 kworker/0:0-cgroup_destroy                                              root
  51869 root      20   0 I   0.0   0.0   0:00.00 kworker/0:3-events                                                      root
  51871 user1     20   0 R   0.0   0.2   0:00.15 top                                                                     user1
  51873 root      20   0 I   0.0   0.0   0:00.00 kworker/u4:0-events_power_efficient                                     root
```

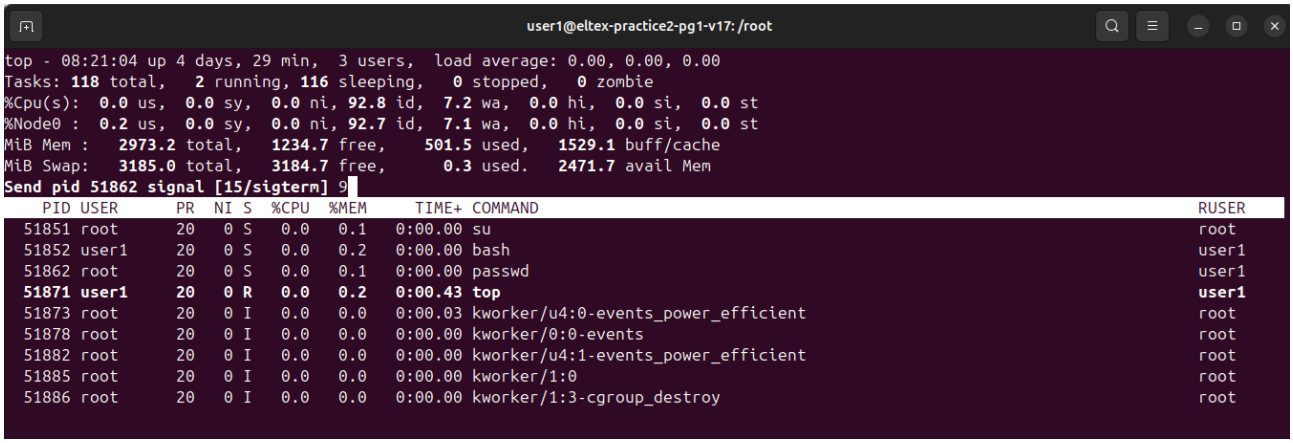
```
user1@eltex-practice2-pg1-v17: /root
top - 08:12:54 up 4 days, 20 min,  3 users,  load average: 0.01, 0.02, 0.00
Tasks: 118 total,   1 running, 117 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.0 us,  0.0 sy,  0.0 ni,100.0 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   2986.5 total,   1234.7 free,    514.9 used,   1529.0 buff/cache
MiB Swap:   3185.0 total,   3184.7 free,      0.3 used.   2471.7 avail Mem
Send pid 51862 signal [15/sigterm] 15
    PID USER      PR  NI S  %CPU  %MEM     TIME+ COMMAND                                                                 RUSER
  51852 user1     20   0 S   0.0   0.2   0:00.00 bash                                                                    user1
  51862 root      20   0 S   0.0   0.1   0:00.00 passwd                                                                  user1
  51866 root      20   0 I   0.0   0.0   0:00.00 kworker/0:0-cgroup_destroy                                              root
  51869 root      20   0 I   0.0   0.0   0:00.00 kworker/0:3-events                                                      root
  51871 user1     20   0 R   0.0   0.2   0:00.15 top                                                                     user1
  51873 root      20   0 I   0.0   0.0   0:00.00 kworker/u4:0-events_power_efficient                                     root
```

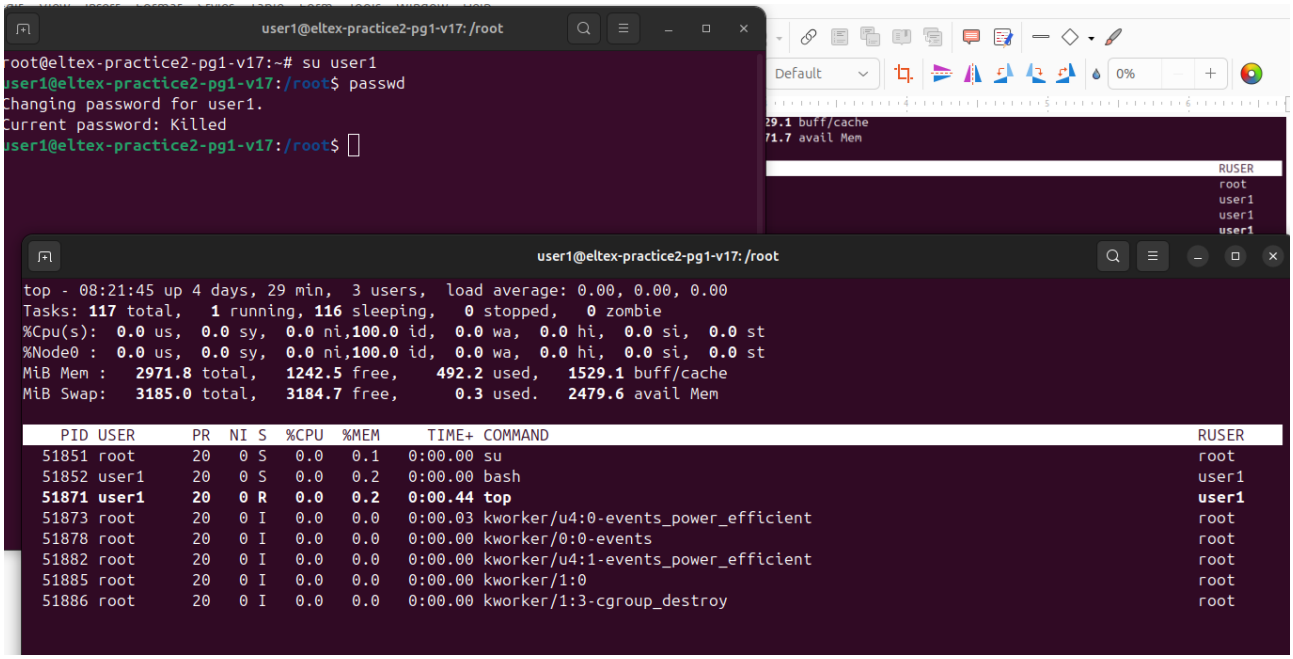

user1@eltex-practice2-pg1-v17: /root
top - 08:18:54 up 4 days, 26 min, 3 users, load average: 0.00, 0.00, 0.00
Tasks: 116 total, 1 running, 115 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 3.0 sy, 0.0 ni, 97.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Node0 : 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 2977.1 total, 1234.7 free, 505.5 used, 1529.0 buff/cache
MiB Swap: 3185.0 total, 3184.7 free, 0.3 used. 2471.7 avail Mem
Send pid 51862 signal [15/sigterm] 2
PID USER PR NI S %CPU %MEM TIME+ COMMAND RUSER
51851 root 20 0 S 0.0 0.1 0:00.00 su root
51852 user1 20 0 S 0.0 0.2 0:00.00 bash user1
51862 root 20 0 S 0.0 0.1 0:00.00 passwd user1
51869 root 20 0 I 0.0 0.0 0:00.00 kworker/0:3-events root
51871 user1 20 0 R 0.0 0.2 0:00.40 top user1
51873 root 20 0 I 0.0 0.0 0:00.02 kworker/u4:0-events_unbound root
51878 root 20 0 I 0.0 0.0 0:00.00 kworker/0:0 root


user1@eltex-practice2-pg1-v17: /root
top - 08:20:08 up 4 days, 28 min, 3 users, load average: 0.00, 0.00, 0.00
Tasks: 119 total, 1 running, 118 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.2 sy, 0.0 ni, 99.8 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Node0 : 0.0 us, 0.3 sy, 0.0 ni, 99.7 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 2978.5 total, 1234.7 free, 506.8 used, 1529.0 buff/cache
MiB Swap: 3185.0 total, 3184.7 free, 0.3 used. 2471.7 avail Mem
PID USER PR NI S %CPU %MEM TIME+ COMMAND RUSER
51851 root 20 0 S 0.0 0.1 0:00.00 su root
51852 user1 20 0 S 0.0 0.2 0:00.00 bash user1
51862 root 20 0 S 0.0 0.1 0:00.00 passwd user1
51869 root 20 0 I 0.0 0.0 0:00.00 kworker/0:3-events root
51871 user1 20 0 R 0.0 0.2 0:00.40 top user1
51873 root 20 0 I 0.0 0.0 0:00.02 kworker/u4:0-events_power_efficient root
51878 root 20 0 I 0.0 0.0 0:00.00 kworker/0:0-events root
51882 root 20 0 I 0.0 0.0 0:00.00 kworker/u4:1-events_unbound root
51885 root 20 0 I 0.0 0.0 0:00.00 kworker/1:0 root
51886 root 20 0 I 0.0 0.0 0:00.00 kworker/1:3-cgroup_destroy root

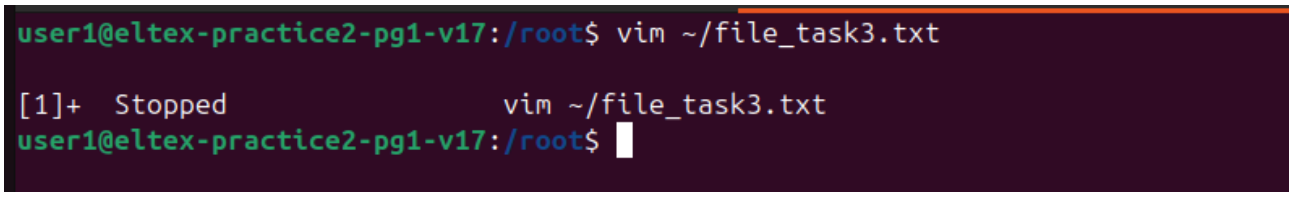

top - 08:20:23 up 4 days, 28 min, 3 users, load average: 0.00, 0.00, 0.00
Tasks: 119 total, 1 running, 118 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Node0 : 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 2978.8 total, 1234.7 free, 507.1 used, 1529.0 buff/cache
MiB Swap: 3185.0 total, 3184.7 free, 0.3 used. 2471.7 avail Mem
Send pid 51862 signal [15/sigterm] 3
PID USER PR NI S %CPU %MEM TIME+ COMMAND RUSER
51839 root 20 0 S 0.0 0.2 0:00.00 bash root
51851 root 20 0 S 0.0 0.1 0:00.00 su root
51852 user1 20 0 S 0.0 0.2 0:00.00 bash user1
51862 root 20 0 S 0.0 0.1 0:00.00 passwd user1
51869 root 20 0 I 0.0 0.0 0:00.00 kworker/0:3-events root
51871 user1 20 0 R 0.0 0.2 0:00.41 top user1
51878 root 20 0 I 0.0 0.0 0:00.00 kworker/0:0-events root
51882 root 20 0 I 0.0 0.0 0:00.00 kworker/u4:1-events_unbound root
51885 root 20 0 I 0.0 0.0 0:00.00 kworker/1:0 root
51886 root 20 0 I 0.0 0.0 0:00.00 kworker/1:3-cgroup_destroy root


top - 08:20:49 up 4 days, 28 min, 3 users, load average: 0.00, 0.00, 0.00
Tasks: 119 total, 2 running, 117 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni, 99.4 id, 0.6 wa, 0.0 hi, 0.0 si, 0.0 st
%Node0 : 0.0 us, 0.0 sy, 0.0 ni, 99.4 id, 0.6 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 2974.4 total, 1234.7 free, 502.7 used, 1529.0 buff/cache
MiB Swap: 3185.0 total, 3184.7 free, 0.3 used. 2471.7 avail Mem
PID USER PR NI S %CPU %MEM TIME+ COMMAND RUSER
51851 root 20 0 S 0.0 0.1 0:00.00 su root
51852 user1 20 0 S 0.0 0.2 0:00.00 bash user1
51862 root 20 0 S 0.0 0.1 0:00.00 passwd user1
51869 root 20 0 I 0.0 0.0 0:00.00 kworker/0:3-events root
51871 user1 20 0 R 0.0 0.2 0:00.41 top user1
51873 root 20 0 I 0.0 0.0 0:00.03 kworker/u4:0-events_power_efficient root
51878 root 20 0 I 0.0 0.0 0:00.00 kworker/0:0-events root
51882 root 20 0 I 0.0 0.0 0:00.00 kworker/u4:1-events_unbound root
51885 root 20 0 I 0.0 0.0 0:00.00 kworker/1:0 root
51886 root 20 0 I 0.0 0.0 0:00.00 kworker/1:3-cgroup_destroy root


user1@eltex-practice2-pg1-v17: /root
top - 08:21:04 up 4 days, 29 min, 3 users, load average: 0.00, 0.00, 0.00
Tasks: 118 total, 2 running, 116 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni, 92.8 id, 7.2 wa, 0.0 hi, 0.0 si, 0.0 st
%Node0 : 0.2 us, 0.0 sy, 0.0 ni, 92.7 id, 7.1 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 2973.2 total, 1234.7 free, 501.5 used, 1529.1 buff/cache
MiB Swap: 3185.0 total, 3184.7 free, 0.3 used. 2471.7 avail Mem
Send pid 51862 signal [15/sigterm] 9
PID USER PR NI S %CPU %MEM TIME+ COMMAND RUSER
51851 root 20 0 S 0.0 0.1 0:00.00 su root
51852 user1 20 0 S 0.0 0.2 0:00.00 bash user1
51862 root 20 0 S 0.0 0.1 0:00.00 passwd user1
51871 user1 20 0 R 0.0 0.2 0:00.43 top user1
51873 root 20 0 I 0.0 0.0 0:00.03 kworker/u4:0-events_power_efficient root
51878 root 20 0 I 0.0 0.0 0:00.00 kworker/0:0-events root
51882 root 20 0 I 0.0 0.0 0:00.00 kworker/u4:1-events_power_efficient root
51885 root 20 0 I 0.0 0.0 0:00.00 kworker/1:0 root
51886 root 20 0 I 0.0 0.0 0:00.00 kworker/1:3-cgroup_destroy root


user1@eltex-practice2-pg1-v17: /root
root@eltex-practice2-pg1-v17:~# su user1
user1@eltex-practice2-pg1-v17:/root$ passwd
Changing password for user1.
Current password: Killed
user1@eltex-practice2-pg1-v17:/root$
Default
0%
user1@eltex-practice2-pg1-v17: /root
top - 08:21:45 up 4 days, 29 min, 3 users, load average: 0.00, 0.00, 0.00
Tasks: 117 total, 1 running, 116 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
%Node0 : 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 2971.8 total, 1242.5 free, 492.2 used, 1529.1 buff/cache
MiB Swap: 3185.0 total, 3184.7 free, 0.3 used. 2479.6 avail Mem
PID USER PR NI S %CPU %MEM TIME+ COMMAND RUSER
51851 root 20 0 S 0.0 0.1 0:00.00 su root
51852 user1 20 0 S 0.0 0.2 0:00.00 bash user1
51871 user1 20 0 R 0.0 0.2 0:00.44 top user1
51873 root 20 0 I 0.0 0.0 0:00.03 kworker/u4:0-events_power_efficient root
51878 root 20 0 I 0.0 0.0 0:00.00 kworker/0:0-events root
51882 root 20 0 I 0.0 0.0 0:00.00 kworker/u4:1-events_power_efficient root
51885 root 20 0 I 0.0 0.0 0:00.00 kworker/1:0 root
51886 root 20 0 I 0.0 0.0 0:00.00 kworker/1:3-cgroup_destroy root

6)


user1@eltex-practice2-pg1-v17:/root$ vim ~/file_task3.txt
[1]+ Stopped vim ~/file_task3.txt
user1@eltex-practice2-pg1-v17:/root$

7)

```
user1@eltex-practice2-pg1-v17:/root$ sleep 600
^Z
[2]+  Stopped                 sleep 600
user1@eltex-practice2-pg1-v17:/root$ jobs
[1]-  Stopped                 vim ~/file_task3.txt
[2]+  Stopped                 sleep 600
user1@eltex-practice2-pg1-v17:/root$
```

8)

```
user1@eltex-practice2-pg1-v17:/root$ jobs
[2]+  Stopped                 vim ~/file_task3.txt
user1@eltex-practice2-pg1-v17:/root$ sleep 600
^Z
[3]+  Stopped                 sleep 600
user1@eltex-practice2-pg1-v17:/root$ jobs
[2]-  Stopped                 vim ~/file_task3.txt
[3]+  Stopped                 sleep 600
user1@eltex-practice2-pg1-v17:/root$ bg
[3]+ sleep 600 &
user1@eltex-practice2-pg1-v17:/root$ jobs
[2]+  Stopped                 vim ~/file_task3.txt
[3]-  Running                 sleep 600 &
user1@eltex-practice2-pg1-v17:/root$
```

9)

```
user1@eltex-practice2-pg1-v17:/root$ jobs -l
[2]+ 54374 Stopped                 vim ~/file_task3.txt
[3]- 54400 Running                 sleep 600 &
user1@eltex-practice2-pg1-v17:/root$ renice 10 54400
54400 (process ID) old priority 0, new priority 10
user1@eltex-practice2-pg1-v17:/root$
```

10)

```
top - 02:03:05 up 4 days, 18:11,  2 users,  load average: 0.00, 0.00, 0.00
Tasks:   1 total,   0 running,   1 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.0 us,  0.0 sy,  0.0 ni, 99.8 id,  0.0 wa,  0.0 hi,  0.0 si,  0.2 st
MiB Mem :   2261.3 total,    512.4 free,    503.9 used,   1537.0 buff/cache
MiB Swap:   3185.0 total,   3184.7 free,      0.3 used.   1757.4 avail Mem

    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
  54400 user1     30  10    5748   2048   2048 S   0.0   0.1   0:00.00 sleep
```

11)

```
user1@eltex-practice2-pg1-v17:/root$ jobs -l
[2]+ 54374 Stopped                 vim ~/file_task3.txt
[3]- 54400 Running                 sleep 600 &
user1@eltex-practice2-pg1-v17:/root$ fg %2
vim ~/file_task3.txt
user1@eltex-practice2-pg1-v17:/root$ jobs -l
[3]+ 54400 Running                 sleep 600 &
user1@eltex-practice2-pg1-v17:/root$
```

12)

```
user1@eltex-practice2-pg1-v17:/root$ jobs
[3]+  Running                 sleep 600 &
user1@eltex-practice2-pg1-v17:/root$ kill -15 %3
user1@eltex-practice2-pg1-v17:/root$ jobs
[3]+  Terminated              sleep 600
user1@eltex-practice2-pg1-v17:/root$
```

13)

```
user1@eltex-practice2-pg1-v17:/root$ trap 'echo "Меня голыми руками не возьмёшь!"' SIGINT SIGQ
UIT
user1@eltex-practice2-pg1-v17:/root$ tp
tplist-bpfcc  tput
user1@eltex-practice2-pg1-v17:/root$ trap -l
 1) SIGHUP       2) SIGINT       3) SIGQUIT      4) SIGILL       5) SIGTRAP
 6) SIGABRT      7) SIGBUS       8) SIGFPE       9) SIGKILL     10) SIGUSR1
11) SIGSEGV     12) SIGUSR2     13) SIGPIPE     14) SIGALRM     15) SIGTERM
16) SIGSTKFLT   17) SIGCHLD     18) SIGCONT     19) SIGSTOP     20) SIGTSTP
21) SIGTTIN     22) SIGTTOU     23) SIGURG      24) SIGXCPU     25) SIGXFSZ
26) SIGVTALRM   27) SIGPROF     28) SIGWINCH    29) SIGIO       30) SIGPWR
31) SIGSYS      34) SIGRTMIN    35) SIGRTMIN+1  36) SIGRTMIN+2  37) SIGRTMIN+3
38) SIGRTMIN+4  39) SIGRTMIN+5  40) SIGRTMIN+6  41) SIGRTMIN+7  42) SIGRTMIN+8
43) SIGRTMIN+9  44) SIGRTMIN+10 45) SIGRTMIN+11 46) SIGRTMIN+12 47) SIGRTMIN+13
48) SIGRTMIN+14 49) SIGRTMIN+15 50) SIGRTMAX-14 51) SIGRTMAX-13 52) SIGRTMAX-12
53) SIGRTMAX-11 54) SIGRTMAX-10 55) SIGRTMAX-9  56) SIGRTMAX-8  57) SIGRTMAX-7
58) SIGRTMAX-6  59) SIGRTMAX-5  60) SIGRTMAX-4  61) SIGRTMAX-3  62) SIGRTMAX-2
63) SIGRTMAX-1  64) SIGRTMAX
user1@eltex-practice2-pg1-v17:/root$ trap
trap -- 'echo "Меня голыми руками не возьмёшь!"' SIGINT
trap -- 'echo "Меня голыми руками не возьмёшь!"' SIGQUIT
Меня голыми руками не возьмёшь!root$ ^C

Меня голыми руками не возьмёшь!root$ ^C
```

```
Меня голыми руками не возьмёшь!root$ ^\

user1@eltex-practice2-pg1-v17:/root$
```

Раздел 2

1)

```
  GNU nano 7.2                                template_task.sh *
#!/bin/bash

# Получение имени скрипта
SCRIPT_NAME=$(basename "$0")

# ФАйл для вывода
REPORT_FILE="report_template_task.log"

PID=$$

# Запись информации о скрипте
echo "[$PID] $(date '+%Y-%m-%d %H:%M:%S') Скрипт запущен" >> "$REPORT_FILE"



# Проверка имени скрипта
if [ "$SCRIPT_NAME" = "template_task.sh" ]; then
    echo "я бригадир, сам не работаю"
    exit 1
fi

# ФАйл для вывода
REPORT_FILE="report_template_task.log"

# Генерирация случайного числа
RANDOM_SECONDS=$(( RANDOM % 1771 + 30 ))

sleep $RANDOM_SECONDS

# Вычисление минут работы
MINUTES=$(( (RANDOM_SECONDS + 59) / 60 ))

echo "[$PID] $(date '+%Y-%m-%d %H:%M:%S') Скрипт завершился, работал $MINUTES минут" >> "$REP>
```

Результат работы

```
root@eltex-practice2-pg1-v17:~# ./template_task.sh
я бригадир, сам не работаю
root@eltex-practice2-pg1-v17:~# cat report_template_task.log
[54633] 2025-10-20 03:47:03 Скрипт запущен
root@eltex-practice2-pg1-v17:~#
```

2)

```
CONFIG_FILE="observer.conf"
# Файл лога
LOG_FILE="observer.log"

# Функция для логирования
log_message() {
    echo "[$(date '+%Y-%m-%d %H:%M:%S')] $1" >> "$LOG_FILE"
}

# Читаем файл конфигурации построчно
while IFS= read -r script_path; do
    # Пропускаем пустые строки и комментарии
    if [[ -z "$script_path" || "$script_path" =~ ^[[:space:]]*# ]]; then
        continue
    fi=
    # Проверяем существование скрипта
    if [ ! -f "$script_path" ]; then
        log_message "ОШИБКА: Скрипт $script_path не найден"
        continue
    fi

    # Получаем имя скрипта без пути
    script_name=$(basename "$script_path")

    # Проверяем, запущен ли скрипт
    script_running=false

    # Ищем процесс в /proc
    for pid_dir in /proc/[0-9]*; do
        if [ -d "$pid_dir" ]; then
            # Проверяем файл cmdline
            if [ -r "$pid_dir/cmdline" ]; then
                cmdline=$(tr -d '\0' < "$pid_dir/cmdline")
                if [[ "$cmdline" == *"$script_name"* ]]; then
                    script_running=true
                    break
                fi
            fi
        fi
    done

    # Если скрипт не запущен, запускаем его
    if [ "$script_running" = false ]; then
        log_message "Запуск скрипта: $script_path"
        nohup "$script_path" > /dev/null 2>&1 &
        log_message "Скрипт $script_name запущен с PID $!"
    else
        log_message "Скрипт $script_name уже запущен"
    fi

    done < "$CONFIG_FILE"

log_message "Проверка завершена"
```

Создания файла конфигурации

```
root@eltex-practice2-pg1-v17:~# touch observer.conf
root@eltex-practice2-pg1-v17:~# ls
Module1Eltex        etc_backup     etc_backup.tar.bz2  etc_backup.tar.xz  etc_backup_gzip  observer.sh               spisok.txt
Module1Eltex_clone  etc_backup.7z  etc_backup.tar.gz   etc_backup_7zip    observer.conf    report_template_task.log  template_task.sh
root@eltex-practice2-pg1-v17:~# chmod +x observer.sh
root@eltex-practice2-pg1-v17:~#
```

3)

```
root@eltex-practice2-pg1-v17: ~/prac3script
 GNU nano 7.2                    /tmp/crontab.oQd7Qe/crontab *
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h  dom mon dow   command
* * * * * ~/prac3script/observer.sh
```

4)

```
root@eltex-practice2-pg1-v17: ~/prac3script
root@eltex-practice2-pg1-v17:~/prac3script# ln -s template_task.sh copy1.sh
root@eltex-practice2-pg1-v17:~/prac3script# ln -s template_task.sh copy2.sh
root@eltex-practice2-pg1-v17:~/prac3script# ln -s template_task.sh copy3.sh
root@eltex-practice2-pg1-v17:~/prac3script# ln -s template_task.sh copy4.sh
root@eltex-practice2-pg1-v17:~/prac3script# ls
copy1.sh  copy3.sh  observer.conf  template_task.sh
copy2.sh  copy4.sh  observer.sh
root@eltex-practice2-pg1-v17:~/prac3script# chmod +x copy1.sh
root@eltex-practice2-pg1-v17:~/prac3script# chmod +x copy2.sh
root@eltex-practice2-pg1-v17:~/prac3script# chmod +x copy3.sh
root@eltex-practice2-pg1-v17:~/prac3script# chmod +x copy4.sh
```

```
root@eltex-practice2-pg1-v17:~/prac3script# nano observer.conf
root@eltex-practice2-pg1-v17:~/prac3script# cat observer.conf
copy1.sh
copy2.sh
copy3.sh
copy4.sh
root@eltex-practice2-pg1-v17:~/prac3script#
```