

1.feladat:

a) top

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mint@mint: ~
File Edit View Search Terminal Help
top - 10:39:04 up 2 min, 1 user, load average: 0.41, 0.48, 0.20
Tasks: 151 total, 1 running, 150 sleeping, 0 stopped, 0 zombie
%Cpu(s): 3.6 us, 1.0 sy, 0.0 ni, 95.4 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 981.3 total, 175.4 free, 523.6 used, 282.4 buff/cache
MiB Swap: 0.0 total, 0.0 free, 0.0 used, 260.1 avail Mem

  PID USER      PR  NI  VIRT  RES  SHR S %CPU  %MEM    TIME+  COMMAND
  984 root        20   0 284008 62796 30060 S   1.0   6.2   0:01.03 Xorg
 1616 mint        20   0 3275772 150840 75992 S   1.0  15.0   0:06.56 cinnamon
 1655 mint        20   0 712228 56080 34352 S   1.0   5.6   0:00.71 nemo-de+
 1884 mint        20   0 539996 39736 30596 S   0.3   4.0   0:00.37 gnome-t+
 1903 mint        20   0 13604 4056 3292 R   0.3   0.4   0:00.19 top
    1 root        20   0 101932 10068 7124 S   0.0   1.0   0:00.95 systemd
    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+
    5 root        20   0      0      0      0 I   0.0   0.0   0:00.00 kworker+
    6 root        0 -20      0      0      0 I   0.0   0.0   0:00.00 kworker+
    7 root        20   0      0      0      0 I   0.0   0.0   0:00.08 kworker+
    8 root        20   0      0      0      0 I   0.0   0.0   0:00.00 kworker+
    9 root        0 -20      0      0      0 I   0.0   0.0   0:00.00 mm_perc+
   10 root        20   0      0      0      0 S   0.0   0.0   0:00.22 ksoftir+
   11 root        20   0      0      0      0 I   0.0   0.0   0:00.22 rcu_sch+
   12 root        rt   0      0      0      0 S   0.0   0.0   0:00.00 migrati+

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b) vmstat

```

mint@mint: ~
File Edit View Search Terminal Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

mint@mint:~$ vmstat -a
procs -----memory----- --swap-- -----io----- -system-- -----cpu-----
 r b swpd free  inact active  si  so  bi  bo  in  cs us sy id wa st
 0  0      0 171432 125996 587208    0  0 4958    0 274 2162 19 10 72  0  0
mint@mint:~$ vmstat -m
vmstat: your kernel does not support slabinfo or your permissions are insufficient
mint@mint:~$

```

c) w

```

mint@mint:~$ w xzy
 10:46:25 up 2 min,  1 user,  load average: 0.24, 0.32, 0.14
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU WHAT
mint      tty7          2021-03-26 10:43 (:0)
mint@mint:~$ whoami
mint
mint@mint:~$

```

d) uname

```

mint@mint:~$ uname
Linux
mint@mint:~$

```

e) ps

```

mint@mint:~$ ps
  PID TTY          TIME CMD
 1958 pts/0    00:00:00 bash
 1966 pts/0    00:00:00 ps
mint@mint:~$ ps -A
ps-A: command not found
mint@mint:~$ ps -a
  PID TTY          TIME CMD
 1969 pts/0    00:00:00 ps
mint@mint:~$ ps -al
 F S  UID        PID      PPID  C  PRI  NI ADDR SZ WCHAN  TTY          TIME CMD
 0 R   999        1970      1958  0   80   0  -  3284 -          pts/0    00:00:00 ps
mint@mint:~$ ps -alf
 F S  UID        PID      PPID  C  PRI  NI ADDR SZ WCHAN  STIME TTY          TIME C
MD
 0 R   mint          1972      1958  0   80   0  -  3304 -          10:48 pts/0    00:00:00 p
s -alf
mint@mint:~$ ps -alfh
 4 999    1958      1950  20   0 12344 4736 do_wai Ss   pts/0    0:00 bash
 4 999    1973      1958  20   0 13136 3196 -      R+   pts/0    0:00 \_ ps
 4 0      987       965  20   0 284124 62820 -      Ssl+ tty7    0:02 /usr/li
mint@mint:~$

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mint@mint:~$ ps ax
  PID TTY          STAT       TIME COMMAND
   1 ?           Ss          0:00 /sbin/init splash
   2 ?           S            0:00 [kthreadd]
   3 ?           I<           0:00 [rcu_gp]
   4 ?           I<           0:00 [rcu_par_gp]
   5 ?           I            0:00 [kworker/0:0-events]
   6 ?           I<           0:00 [kworker/0:0H-kblockd]
   7 ?           I            0:00 [kworker/0:1-cgroup_destroy]
   8 ?           I            0:00 [kworker/u2:0-events_unbound]
   9 ?           I<           0:00 [mm_percpu_wq]
  10 ?          S            0:00 [ksoftirqd/0]
  11 ?           I            0:00 [rcu_sched]
  12 ?          S            0:00 [migration/0]
  13 ?          S            0:00 [idle_inject/0]
  14 ?          S            0:00 [cpuhp/0]
  15 ?          S            0:00 [kdevtmpfs]
  16 ?          I<           0:00 [netns]
  17 ?          S            0:00 [rcu_tasks_kthre]
  18 ?          S            0:00 [kauditd]
  19 ?          S            0:00 [khungtaskd]
  20 ?          S            0:00 [oom_reaper]
  21 ?          I<           0:00 [writeback]
  22 ?          S            0:00 [kcompactd0]

```

- f) free
g) iostat

```
mint@mint:~$ sudo apt iostat
apt
Usage: apt command [options]
       apt help command [options]

Commands:
  add-repository - Add entries to apt sources.list
  autoclean     - Erase old downloaded archive files
  autoremove    - Remove automatically all unused packages
  build         - Build binary or source packages from sources
  build-dep     - Configure build-dependencies for source packages
  changelog     - View a package's changelog
  check        - Verify that there are no broken dependencies
  clean        - Erase downloaded archive files
  contains     - List packages containing a file
  content      - List files contained in a package
  deb          - Install a .deb package
  depends      - Show raw dependency information for a package
  dist-upgrade - Upgrade the system by removing/installing/upgrading package
s
  download     - Download the .deb file for a package
  edit-sources - Edit /etc/apt/sources.list with your preferred text editor
  dselect-upgrade - Follow dselect selections
  full-upgrade - Same as 'dist-upgrade'
```

- h) sar

```
mint@mint:~$ sudo apt sar
apt
Usage: apt command [options]
       apt help command [options]

Commands:
  add-repository - Add entries to apt sources.list
  autoclean     - Erase old downloaded archive files
  autoremove    - Remove automatically all unused packages
  build         - Build binary or source packages from sources
  build-dep     - Configure build-dependencies for source packages
  changelog     - View a package's changelog
  check        - Verify that there are no broken dependencies
  clean        - Erase downloaded archive files
  contains     - List packages containing a file
  content      - List files contained in a package
  deb          - Install a .deb package
  depends      - Show raw dependency information for a package
  dist-upgrade - Upgrade the system by removing/installing/upgrading package
s
  download     - Download the .deb file for a package
  edit-sources - Edit /etc/apt/sources.list with your preferred text editor
```

i) mpstat

```
mint@mint:~$ sudo apt mpstat
apt
Usage: apt command [options]
       apt help command [options]

Commands:
  add-repository    - Add entries to apt sources.list
  autoclean         - Erase old downloaded archive files
  autoremove        - Remove automatically all unused packages
  build             - Build binary or source packages from sources
  build-dep         - Configure build-dependencies for source packages
  changelog         - View a package's changelog
  check            - Verify that there are no broken dependencies
  clean            - Erase downloaded archive files
  contains          - List packages containing a file
  content           - List files contained in a package
  deb              - Install a .deb package
  depends           - Show raw dependency information for a package
  dist-upgrade      - Upgrade the system by removing/installing/upgrading package
s
  download          - Download the .deb file for a package
  edit-sources      - Edit /etc/apt/sources.list with your preferred text editor
```

j) pmap

```
mint@mint:~$ pmap

Usage:
  pmap [options] PID [PID ...]

Options:
  -x, --extended          show details
  -X                      show even more details
                        WARNING: format changes according to /proc/PID/smaps
  -XX                    show everything the kernel provides
  -c, --read-rc           read the default rc
  -C, --read-rc-from=<file> read the rc from file
  -n, --create-rc         create new default rc
  -N, --create-rc-to=<file> create new rc to file
                        NOTE: pid arguments are not allowed with -n, -N
  -d, --device           show the device format
  -q, --quiet            do not display header and footer
  -p, --show-path        show path in the mapping
  -A, --range=<low>[,<high>] limit results to the given range

  -h, --help            display this help and exit
  -V, --version         output version information and exit
```