```
mint@mint:~$ 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  76984  67088 316448    0    0  8941     0  447 2337 28 23 49  0  0
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
 1  0      0  76992 194556 609728    0    0  8672     0  439 2271 28 22 49  0  0
mint@mint:~$ vmstat -m
vmstat: your kernel does not support slabinfo or your permissions are insufficient
mint@mint:~$ w
 16:08:33 up 9 min,  1 user,  load average: 0.01, 0.55, 0.52
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
mint     tty7     :0               15:59    8:55   8.14s  0.68s cinnamon-session --session cinnamon
mint@mint:~$ whoami
mint
mint@mint:~$ uname
Linux
mint@mint:~$ ps
   PID TTY          TIME CMD
  3062 pts/0    00:00:00 bash
  3316 pts/0    00:00:00 ps
mint@mint:~$ free
              total        used        free      shared  buff/cache   available
Mem:        1004876      543648       75492       82836      385736      233900
Swap:             0           0           0
```

```
mint@mint:~$ sar
Cannot open /var/log/sysstat/sa22: No such file or directory
Please check if data collecting is enabled
mint@mint:~$ mpstat
Linux 5.4.0-58-generic (mint)    02/22/21        _x86_64_         (1 CPU)

16:13:03    CPU    %usr   %nice    %sys %iowait    %irq   %soft  %steal  %guest  %gnice   %idle
16:13:03    all   13.09    0.01    8.36    0.18    0.00    0.14    0.00    0.00    0.00   78.22
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

For more details see pmap(1).
mint@mint:~$
```

```
mint@mint: ~                                                    –  ⌄  ✕

File  Edit  View  Search  Terminal  Help

top - 16:03:22 up 3 min,  1 user,  load average: 1.29, 1.52, 0.72
Tasks: 152 total,   1 running, 151 sleeping,   0 stopped,   0 zombie
%Cpu(s):  2.7 us,  0.7 sy,  0.0 ni, 96.6 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :    981.3 total,     83.1 free,    533.2 used,    365.0 buff/cache
MiB Swap:      0.0 total,      0.0 free,      0.0 used.    226.2 avail Mem

  PID USER       PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
  983 root       20   0  289952  56088  19024 S   2.0   5.6   0:07.36 Xorg
 3055 mint       20   0  466320  19028   9808 S   1.7   1.9   0:01.56 gnome-terminal-
 1618 mint       20   0 3276016 134992  60236 S   1.3  13.4   0:31.86 cinnamon
 3079 mint       20   0   13604   1288    584 R   0.3   0.1   0:00.41 top
    1 root       20   0  101812   6760   3864 S   0.0   0.7   0:01.37 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_gp
    5 root       20   0       0      0      0 I   0.0   0.0   0:00.00 kworker/0:0-cgroup_destroy
    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   0:01.41 kworker/0:1-cgroup_destroy
    8 root       20   0       0      0      0 I   0.0   0.0   0:00.00 kworker/u2:0-events_unbound
    9 root        0 -20       0      0      0 I   0.0   0.0   0:00.00 mm_percpu_wq
   10 root       20   0       0      0      0 S   0.0   0.0   0:01.15 ksoftirqd/0
   11 root       20   0       0      0      0 I   0.0   0.0   0:01.47 rcu_sched
   12 root       rt   0       0      0      0 S   0.0   0.0   0:00.00 migration/0
   13 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 kdevtmpfs
   16 root        0 -20       0      0      0 I   0.0   0.0   0:00.00 netns
   17 root       20   0       0      0      0 S   0.0   0.0   0:00.00 rcu_tasks_kthre
   18 root       20   0       0      0      0 S   0.0   0.0   0:00.00 kauditd
   19 root       20   0       0      0      0 S   0.0   0.0   0:00.00 khungtaskd
   20 root       20   0       0      0      0 S   0.0   0.0   0:00.00 oom_reaper
   21 root        0 -20       0      0      0 I   0.0   0.0   0:00.00 writeback
   22 root       20   0       0      0      0 S   0.0   0.0   0:00.00 kcompactd0
   23 root       25   5       0      0      0 S   0.0   0.0   0:00.00 ksmd
   24 root       39  19       0      0      0 S   0.0   0.0   0:00.00 khugepaged
   70 root        0 -20       0      0      0 I   0.0   0.0   0:00.00 kintegrityd
   71 root        0 -20       0      0      0 I   0.0   0.0   0:00.00 kblockd
   72 root        0 -20       0      0      0 I   0.0   0.0   0:00.00 blkcg_punt_bio
   73 root        0 -20       0      0      0 I   0.0   0.0   0:00.00 tpm_dev_wq
```

Az ablakok különféle hardverek kihasználtságait mutatják:
Processzor, gyorsítótár(csak információ), alaplap(információ), memória, processzor használat/memória használat.

Stress testing: terhelést szimulál a hardvereken, így tudunk stabilitási képet kapni a számítógépről. Overclocking mellett nagyon hasznos dolog.