

1. Identify the current USB devices.

```
ubuntu@ubuntu:~$ lsusb
Bus 001 Device 002: ID 80ee:0021 VirtualBox USB Tablet
Bus 001 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
ubuntu@ubuntu:~$
```

2. Count how many CPUs (cores) on your device

```
ubuntu@ubuntu:~$ cat /proc/cpuinfo | grep processor | wc -l
1
ubuntu@ubuntu:~$
```

3. Take a snapshot of current disk statistics 5 times with 2 seconds interval using iostat

```
ubuntu@ubuntu:~$ sudo apt install sysstat
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  isag
The following NEW packages will be installed:
  sysstat
0 upgraded, 1 newly installed, 0 to remove and 427 not upgraded.
Need to get 487 kB of archives.
After this operation, 1507 kB of additional disk space will be used.
Get:1 http://security.ubuntu.com/ubuntu jammy-security/main amd64 sysstat amd64
  12.5.2-2ubuntu0.1 [487 kB]
Fetched 487 kB in 3s (149 kB/s)
Preconfiguring packages ...
Selecting previously unselected package sysstat.
(Reading database ... 206909 files and directories currently installed.)
Preparing to unpack .../sysstat_12.5.2-2ubuntu0.1_amd64.deb ...
Unpacking sysstat (12.5.2-2ubuntu0.1) ...
Setting up sysstat (12.5.2-2ubuntu0.1) ...

Creating config file /etc/default/sysstat with new version
update-alternatives: using /usr/bin/sar.sysstat to provide /usr/bin/sar (sar) i
n auto mode
Created symlink /etc/systemd/system/sysstat.service.wants/sysstat-collect.timer
→ /lib/systemd/system/sysstat-collect.timer.
Created symlink /etc/systemd/system/sysstat.service.wants/sysstat-summary.timer
→ /lib/systemd/system/sysstat-summary.timer.
```

```
ubuntu@ubuntu:~$ iostat -d 2 5
Linux 5.15.0-43-generic (ubuntu)          04/01/23          _x86_64_          (1 CPU)

Device            tps    kB_read/s    kB_wrtn/s    kB_dscd/s    kB_read    kB_
wrtn    kB_dscd
loop0             48.53      867.40       0.00         0.00     1174601
0             0
loop1             0.01       0.02       0.00         0.00        21
0             0
loop2             0.36       5.42       0.00         0.00      7342
0             0
loop3             0.05       0.82       0.00         0.00      1116
0             0
loop4             1.13      14.85       0.00         0.00     20105
0             0
loop5             0.15       1.17       0.00         0.00      1589
0             0
loop6             0.04       0.29       0.00         0.00       397
0             0
loop7             0.05       0.68       0.00         0.00       926
0             0
loop8             0.02       0.14       0.00         0.00       192
0             0
loop9             0.02       0.02       0.00         0.00        32
0             0
sda              0.66      15.86       0.00         0.00     21482
0             0
sr0             23.77     2749.79       0.00         0.00    3723680
0             0
```

4. Measure the network activities using nicstat

```
ubuntu@ubuntu:~$ sudo apt install nicstat
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  nicstat
0 upgraded, 1 newly installed, 0 to remove and 427 not upgraded.
Need to get 18.2 kB of archives.
After this operation, 54.3 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 nicstat amd64 1.95-1bui
ld3 [18.2 kB]
Fetched 18.2 kB in 1s (21.2 kB/s)
Selecting previously unselected package nicstat.
(Reading database ... 206971 files and directories currently installed.)
Preparing to unpack .../nicstat_1.95-1build3_amd64.deb ...
Unpacking nicstat (1.95-1build3) ...
Setting up nicstat (1.95-1build3) ...
Processing triggers for man-db (2.10.2-1) ...
ubuntu@ubuntu:~$ sudo nicstat
Time      Int    rKB/s    wKB/s    rPk/s    wPk/s    rAvs    wAvs %Util    Sat
22:38:45   lo     0.02     0.02     0.32     0.32    77.75    77.75  0.00    0.00
22:38:45 enp0s3   4.30     0.09     3.17     1.30   1390.3    70.28  0.00    0.00
ubuntu@ubuntu:~$
```


5. List current PCI devices on your device

```
ubuntu@ubuntu:~$ lspci
00:00.0 Host bridge: Intel Corporation 440FX - 82441FX PMC [Natoma] (rev 02)
00:01.0 ISA bridge: Intel Corporation 82371SB PIIX3 ISA [Natoma/Triton II]
00:01.1 IDE interface: Intel Corporation 82371AB/EB/MB PIIX4 IDE (rev 01)
00:02.0 VGA compatible controller: VMware SVGA II Adapter
00:03.0 Ethernet controller: Intel Corporation 82540EM Gigabit Ethernet Controller (rev 02)
00:04.0 System peripheral: InnoTek Systemberatung GmbH VirtualBox Guest Service
00:05.0 Multimedia audio controller: Intel Corporation 82801AA AC'97 Audio Controller (rev 01)
00:06.0 USB controller: Apple Inc. KeyLargo/Intrepid USB
00:07.0 Bridge: Intel Corporation 82371AB/EB/MB PIIX4 ACPI (rev 08)
00:0d.0 SATA controller: Intel Corporation 82801HM/HEM (ICH8M/ICH8M-E) SATA Controller [AHCI mode] (rev 02)
ubuntu@ubuntu:~$
```

6. List all files which are compressed by ZIP utilities

```
ubuntu@ubuntu:~$ sudo find / -name "*.zip"
find: '/run/user/999/doc': Permission denied
find: '/run/user/999/gvfs': Permission denied
/usr/lib/libreoffice/share/config/images_breeze.zip
/usr/lib/libreoffice/share/config/images_breeze_dark.zip
/usr/lib/libreoffice/share/config/images_breeze_dark_svg.zip
/usr/lib/libreoffice/share/config/images_breeze_svg.zip
/usr/lib/libreoffice/share/config/images_colibre.zip
/usr/lib/libreoffice/share/config/images_elementary.zip
/usr/lib/libreoffice/share/config/images_elementary_svg.zip
/usr/lib/libreoffice/share/config/images_helpimg.zip
/usr/lib/libreoffice/share/config/images_yaru.zip
/usr/lib/libreoffice/share/config/images_yaru_mate.zip
/usr/lib/libreoffice/share/config/images_yaru_mate_svg.zip
/usr/lib/libreoffice/share/config/images_yaru_svg.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/elementary.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/round-white.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/simple.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/sukapura.zip
/usr/share/libreoffice/share/config/images_breeze.zip
/usr/share/libreoffice/share/config/images_breeze_dark.zip
/usr/share/libreoffice/share/config/images_breeze_dark_svg.zip
/usr/share/libreoffice/share/config/images_breeze_svg.zip
/usr/share/libreoffice/share/config/images_colibre.zip
/usr/share/libreoffice/share/config/images_elementary.zip
/usr/share/libreoffice/share/config/images_elementary_svg.zip
/usr/share/libreoffice/share/config/images_helpimg.zip
/usr/share/libreoffice/share/config/images_yaru.zip
/usr/share/libreoffice/share/config/images_yaru_mate.zip
```

7. Using grep and regex list all lines containing hex numbers on a /var/log/syslog

```
ubuntu@ubuntu:~$ grep -E '0x' /var/log/syslog
Apr  1 22:14:22 ubuntu alsactl[1427]: Found hardware: "ICH" "Analog Devices AD1
980" "AC97a:41445370" "0x1028" "0x0177"
Apr  1 22:14:22 ubuntu kernel: [    0.000000] x86/fpu: Supporting XSAVE feature
0x001: 'x87 floating point registers'
Apr  1 22:14:22 ubuntu kernel: [    0.000000] x86/fpu: Supporting XSAVE feature
0x002: 'SSE registers'
Apr  1 22:14:22 ubuntu kernel: [    0.000000] x86/fpu: Supporting XSAVE feature
0x004: 'AVX registers'
Apr  1 22:14:22 ubuntu kernel: [    0.000000] x86/fpu: Enabled xstate features
0x7, context size is 832 bytes, using 'standard' format.
Apr  1 22:14:22 ubuntu kernel: [    0.000000] BIOS-e820: [mem 0x0000000000000000
0-0x00000000000009fbff] usable
Apr  1 22:14:22 ubuntu kernel: [    0.000000] BIOS-e820: [mem 0x00000000000009fc0
0-0x00000000000009ffff] reserved
Apr  1 22:14:22 ubuntu kernel: [    0.000000] BIOS-e820: [mem 0x000000000000f000
0-0x000000000000ffffff] reserved
Apr  1 22:14:22 ubuntu kernel: [    0.000000] BIOS-e820: [mem 0x0000000000010000
0-0x000000000000dfffffff] usable
Apr  1 22:14:22 ubuntu kernel: [    0.000000] BIOS-e820: [mem 0x00000000dffff000
0-0x00000000dfffffff] ACPI data
Apr  1 22:14:22 ubuntu kernel: [    0.000000] BIOS-e820: [mem 0x00000000fec00000
0-0x00000000fec00fff] reserved
Apr  1 22:14:22 ubuntu kernel: [    0.000000] BIOS-e820: [mem 0x00000000fee00000
0-0x00000000fee00fff] reserved
Apr  1 22:14:22 ubuntu kernel: [    0.000000] BIOS-e820: [mem 0x00000000fffc000
0-0x00000000ffffffff] reserved
Apr  1 22:14:22 ubuntu kernel: [    0.000000] BIOS-e820: [mem 0x0000000100000000
```