

Identify the current USB devices (hint. : lsusb)

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

Count how many CPUs (cores) on your device. (hint: /proc/cpuinfo)

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

Take a snapshot of current disk statistics 5 times with 2 seconds interval. (hint: iostat)

```
nehad@nehad-VirtualBox:~$ sudo apt install sysstat
[sudo] password for nehad:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
 chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi i965-va-driver
 intel-media-va-driver libaacs0 libaom3 libass9 libavcodec58 libavformat58
 libavutil56 libbdplus0 libbluray2 libbs2b0 libchromaprint1 libcodec2-1.0
 libdavid5 libflite1 libgme0 libgsm1 libgstreamer-plugins-bad1.0-0
 libigdgmm12 liblilv-0-0 libllvm15 libmfx1 libmysofa1 libnorm1 libopenmpt0
 libpgm-5.3-0 libpostproc55 librabbitmq4 librubberband2 libserd-0-0
 libshine3 libsnappy1v5 libsord-0-0 libsratom-0-0 libsrt1.4-gnutls
 libssh-gcrypt-4 libswresample3 libswscale5 libudfread0 libva-drm2
 libva-wayland2 libva-x11-2 libva2 libvdpau1 libvidstab1.1 libx265-199
 libxvidcore4 libzim2 libzmq5 libzvbi-common libzvbi0 mesa-va-drivers
 mesa-vdpau-drivers pocketsphinx-en-us va-driver-all vdpau-driver-all
Use 'sudo apt autoremove' to remove them.
Suggested packages:
  isag
The following NEW packages will be installed:
 sysstat
```

```

nehad@nehad-VirtualBox:~$ iostat 2 5
Linux 5.19.0-38-generic (nehad-VirtualBox)      09 2023 , أبر ,      _x86_64_      (
1 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           0.28    0.14    0.90    0.75    0.00   97.92

Device            tps    kB_read/s    kB_wrtn/s    kB_dscd/s    kB_read    kB_
wrtn    kB_dscd
loop0              0.00         0.00         0.00         0.00         17
0              0
loop1              0.01         0.04         0.00         0.00        348
0              0
loop10             0.15         1.77         0.00         0.00       14131
0              0
loop11             0.07         0.78         0.00         0.00       6260
0              0
loop12             0.01         0.05         0.00         0.00        364
0              0
loop13             0.01         0.04         0.00         0.00        349
0              0
loop14             0.01         0.05         0.00         0.00        362
0              0
loop15             0.01         0.04         0.00         0.00        348
0              0
loop16             0.09         3.01         0.00         0.00      24030
0              0

```

measure the network activities using (hint: nicstat)

```

nehad@nehad-VirtualBox:~$ sudo apt install nicstat
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
 chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi i965-va-driver
 intel-media-va-driver libaacs0 libaom3 libass9 libavcodec58 libavformat58
 libavutil56 libbdplus0 libbluray2 libbs2b0 libchromaprint1 libcodec2-1.0
 libdav1d5 libflite1 libgme0 libgsm1 libgstreamer-plugins-bad1.0-0
 libigdgmm12 liblilv-0-0 libllvm15 libmfx1 libmysofa1 libnorm1 libopenmpt0
 libpgm-5.3-0 libpostproc55 librabbitmq4 librubberband2 libserd-0-0
 libshine3 libsnappy1v5 libsord-0-0 libsratom-0-0 libsrt1.4-gnutls
 libssh-gcrypt-4 libswresample3 libswscale5 libudfread0 libva-drm2
 libva-wayland2 libva-x11-2 libva2 libvdpau1 libvidstab1.1 libx265-199
 libxvidcore4 libzing2 libzmq5 libzvbi-common libzvbi0 mesa-va-drivers
 mesa-vdpu-drivers pocketsphinx-en-us va-driver-all vdpau-driver-all
Use 'sudo apt autoremove' to remove them.
The following NEW packages will be installed:
 nicstat
0 upgraded, 1 newly installed, 0 to remove and 208 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://eg.archive.ubuntu.com/ubuntu jammy/main amd64 nicstat amd64 1.95-1
build3 [18.2 kB]

```

```
nehad@nehad-VirtualBox:~$ nicstat
```

Time	Int	rKB/s	wKB/s	rPk/s	wPk/s	rAvs	wAvs	%Util	Sat
19:21:15	lo	0.00	0.00	0.02	0.02	89.46	89.46	0.00	0.00
19:21:15	enp0s3	0.10	0.01	0.11	0.09	952.8	92.20	0.00	0.00

List current PCI devices on your device (hint: lspci)

```
nehad@nehad-VirtualBox:~$ 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)
```

List all files which are compressed by ZIP utilities

```
nehad@nehad-VirtualBox:~$ sudo find / -name "*.zip" -type f 2>/dev/null
/usr/lib/libreoffice/share/config/wizard/web/buttons/elementary.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/simple.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/sukapura.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/round-white.zip
/usr/share/libreoffice/share/config/images_yaru_mate_svg.zip
/usr/share/libreoffice/share/config/images_elementary_svg.zip
/usr/share/libreoffice/share/config/images_elementary.zip
/usr/share/libreoffice/share/config/images_breeze_dark.zip
/usr/share/libreoffice/share/config/images_colibre.zip
/usr/share/libreoffice/share/config/images_helpimg.zip
/usr/share/libreoffice/share/config/images_breeze_dark_svg.zip
/usr/share/libreoffice/share/config/images_breeze.zip
/usr/share/libreoffice/share/config/images_breeze_svg.zip
/usr/share/libreoffice/share/config/images_yaru_mate.zip
/usr/share/libreoffice/share/config/images_yaru_svg.zip
/usr/share/libreoffice/share/config/images_yaru.zip
```

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

```
nehad@nehad-VirtualBox:~$ sudo grep -e "0x" /var/log/syslog
Apr  9 16:22:16 nehad-VirtualBox kernel: [  49.566299] audit: type=1326 audit
1681050136.811:55): auid=1000 uid=1000 gid=1000 ses=2 subj=snap.snapd-desktop-
integration.snapd-desktop-integration pid=1178 comm="snapd-desktop-i" exe="/sna
/snapd-desktop-integration/57/usr/bin/snapd-desktop-integration" sig=0 arch=c0
0003e syscall=314 compat=0 ip=0x7f8cf944ca3d code=0x50000
Apr  9 16:22:20 nehad-VirtualBox kernel: [  52.277531] audit: type=1326 audit
1681050140.873:56): auid=1000 uid=1000 gid=1000 ses=2 subj=snap.snapd-desktop-
integration.snapd-desktop-integration pid=1253 comm="snapd-desktop-i" exe="/sna
/snapd-desktop-integration/57/usr/bin/snapd-desktop-integration" sig=0 arch=c0
0003e syscall=314 compat=0 ip=0x7fc195a12a3d code=0x50000
```