

Identify the current USB devices (hint. : lsusb)

```
omar@omar-VirtualBox:~$ lsusb
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 002 Device 002: ID 80ee:0021 VirtualBox USB Tablet
Bus 002 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
```

Count how many CPUs (cores) on your device.

```
omar@omar-VirtualBox:~$ cat /proc/cpuinfo
processor       : 0
vendor_id      : AuthenticAMD
cpu family     : 25
model          : 80
model name     : AMD Ryzen 5 5600H with Radeon Graphics
stepping      : 0
cpu MHz        : 3293.012
cache size     : 512 KB
physical id    : 0
siblings       : 1
core id        : 0
cpu cores      : 1
apicid         : 0
initial apicid : 0
fpu            : yes
fpu_exception  : yes
cpuid level    : 16
wp             : yes
flags           : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt rdtscp lm constant_tsc
td_apicid tsc_known_freq pni pclmulqdq monitor sse3 cx16 sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx rdrand hypervisor lahf_lm cr8_legacy abm sse4a misalignsse 3dnow
x2_bmi2 invpcid rdseed clflushopt arat
bugs           : fxsavleak sysret_ss_attrs null_seg spectre_v1 spectre_v2
bogomips       : 6587.62
TLB size       : 2560 4K pages
clflush size   : 64
cache_alignment : 64
address sizes   : 48 bits physical, 48 bits virtual
power management:

omar@omar-VirtualBox:~$ cat /proc/cpuinfo | grep cores
cpu cores      : 1
```

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

```
omar@omar-VirtualBox:~$ iostat 2 5
Linux 5.19.0-38-generic (omar-VirtualBox)      01 2023 أيار_أول_ _x86_64_      (1 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           7.01    3.13    2.67    0.15    0.00   87.04

Device            tps    kB_read/s    kB_wrtn/s    kB_dscd/s    kB_read    kB_wrtn    kB_dscd
loop0              0.10         1.82         0.00         0.00       1068         0         0
loop1              0.02         0.03         0.00         0.00         17         0         0
loop10             0.10         1.82         0.00         0.00       1071         0         0
loop11             2.47        23.21         0.00         0.00      13637         0         0
loop12             0.07         0.59         0.00         0.00        349         0         0
loop13             3.72        17.14         0.00         0.00      10074         0         0
loop14             1.93        22.60         0.00         0.00      13283         0         0
loop15             0.07         0.59         0.00         0.00        348         0         0
loop16             1.63        16.95         0.00         0.00      9959         0         0
loop17             0.03         0.09         0.00         0.00         54         0         0
loop18             1.17        40.89         0.00         0.00     24030         0         0
loop19             0.05         0.44         0.00         0.00        259         0         0
loop2              0.10         2.22         0.00         0.00       1302         0         0
loop20             0.02         0.02         0.00         0.00         14         0         0
loop3              0.61         7.33         0.00         0.00       4310         0         0
loop4              0.12         1.85         0.00         0.00       1090         0         0
loop5              0.09         1.82         0.00         0.00       1068         0         0
loop6              0.97         9.96         0.00         0.00      5852         0         0
loop7              0.08         0.59         0.00         0.00        348         0         0
loop8              0.09         1.83         0.00         0.00       1074         0         0
loop9              0.10         1.91         0.00         0.00       1122         0         0
sda                47.69       1652.95       764.26         0.00     971309     449093         0
sr0                 0.07         0.26         0.00         0.00         152         0         0

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           1.01    0.00    0.00    0.00    0.00   98.99

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         0         0         0
loop1              0.00         0.00         0.00         0.00         0         0         0
loop10             0.00         0.00         0.00         0.00         0         0         0
loop11             0.00         0.00         0.00         0.00         0         0         0
loop12             0.00         0.00         0.00         0.00         0         0         0
loop13             0.00         0.00         0.00         0.00         0         0         0
loop14             0.00         0.00         0.00         0.00         0         0         0
loop15             0.00         0.00         0.00         0.00         0         0         0
```

measure the network activities using (hint: nicstat)

List current PCI devices on your device

List all files which are compressed by ZIP utilities

Using

```
omar@omar-VirtualBox:~$ nicstat
  Time   Int    rKB/s   wKB/s   rPk/s   wPk/s   rAvs    wAvs %Util   Sat
15:58:44   lo     0.02    0.02    0.15    0.15   112.0   112.0  0.00  0.00
15:58:44  enp0s3  283.7   4.58   197.6   76.52  1470.0  61.27  0.23  0.00
omar@omar-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)
00:0b.0 USB controller: Intel Corporation 82801FB/FBM/FR/FW/FRM (ICH6 Family) USB2 EHCI Controller
00:0d.0 SATA controller: Intel Corporation 82801HM/HEM (ICH8M/ICH8M-E) SATA Controller [AHCI mode] (rev 02)
omar@omar-VirtualBox:~$ sudo find / -name "*.zip"
/usr/lib/libreoffice/share/config/images_elementary.zip
/usr/lib/libreoffice/share/config/images_yaru.zip
/usr/lib/libreoffice/share/config/images_yaru_mate.zip
/usr/lib/libreoffice/share/config/images_breeze.zip
/usr/lib/libreoffice/share/config/images_elementary_svg.zip
/usr/lib/libreoffice/share/config/images_helping.zip
/usr/lib/libreoffice/share/config/images_breeze_dark.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/sample.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/sukapura.zip
/usr/lib/libreoffice/share/config/images_yaru_svg.zip
/usr/lib/libreoffice/share/config/images_breeze_svg.zip
/usr/lib/libreoffice/share/config/images_breeze_dark_svg.zip
/usr/lib/libreoffice/share/config/images_collbre.zip
/usr/lib/libreoffice/share/config/images_yaru_mate_svg.zip
/usr/share/libreoffice/share/config/images_elementary.zip
/usr/share/libreoffice/share/config/images_yaru.zip
/usr/share/libreoffice/share/config/images_yaru_mate.zip
/usr/share/libreoffice/share/config/images_breeze.zip
/usr/share/libreoffice/share/config/images_elementary_svg.zip
/usr/share/libreoffice/share/config/images_helping.zip
/usr/share/libreoffice/share/config/images_breeze_dark.zip
/usr/share/libreoffice/share/config/images_yaru_svg.zip
/usr/share/libreoffice/share/config/images_breeze_svg.zip
/usr/share/libreoffice/share/config/images_breeze_dark_svg.zip
/usr/share/libreoffice/share/config/images_collbre.zip
/usr/share/libreoffice/share/config/images_yaru_mate_svg.zip
find: '/run/user/1000/doc': Permission denied
find: '/run/user/1000/gvfs': Permission denied
```

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

```
omar@omar-VirtualBox:~$ grep -e "0x" /var/log/syslog
Apr 1 15:44:30 omar-VirtualBox kernel: [ 21.758835] audit: type=1326 audit(1680356670.503:58): auid=1000 uid=1000 gid=1000 ses=3 subj=snap.snapd-desktop-integration.snapd-desk
comm="snapd-desktop-l" exe="/snap/snapd-desktop-integration/57/usr/bin/snapd-desktop-integration" sig=0 arch=c000003e syscall=314 compat=0 ip=0x7fb09cb51a3d code=0x50000
Apr 1 15:44:35 omar-VirtualBox kernel: [ 27.002436] audit: type=1326 audit(1680356675.749:59): auid=1000 uid=1000 gid=1000 ses=3 subj=snap.snap-store.snap-store pid=2153 comm="
nap-store/638/usr/bin/snap-store" sig=0 arch=c000003e syscall=314 compat=0 ip=0x7f4195bb673d code=0x50000
Apr 1 15:44:40 omar-VirtualBox kernel: [ 32.158102] audit: type=1326 audit(1680356680.908:60): auid=1000 uid=1000 gid=1000 ses=3 subj=snap.snap-store.snap-store pid=2153 comm="
nap-store/638/usr/bin/snap-store" sig=0 arch=c000003e syscall=93 compat=0 ip=0x7f4195bad39b code=0x50000
Apr 1 15:45:07 omar-VirtualBox kernel: [ 59.165849] audit: type=1326 audit(1680356707.929:67): auid=1000 uid=1000 gid=1000 ses=3 subj=snap.snap-store.snap-store pid=2153 comm="
nap/snap-store/638/usr/bin/snap-store" sig=0 arch=c000003e syscall=93 compat=0 ip=0x7f4195bad39b code=0x50000
omar@omar-VirtualBox:~$
```