Lab 2

1. Identify the current USB devices (hint. : lsusb)

```
omnia@Linuxx:~$ 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
```

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

```
omnia@Linuxx:~$ cat /proc/cpuinfo | grep processor | wc -l
2
```

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

```
omnia@Linuxx:~$ iostat -d 2 5
Linux 5.19.0-35-generic (Linuxx)        02/04/23        _x86_64_        (2 CPU)

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            0.00         0.03         0.00         0.00        348          0          0
loop10           0.00         0.03         0.00         0.00        349          0          0
loop11           0.08         0.81         0.00         0.00       9967          0          0
loop12           0.00         0.03         0.00         0.00        348          0          0
loop13           0.08         3.02         0.00         0.00      37172          0          0
loop14           0.00         0.00         0.00         0.00         54          0          0
loop15           0.00         0.02         0.00         0.00        282          0          0
loop16           0.12         1.12         0.00         0.00      13773          0          0
loop17           0.10         1.16         0.00         0.00      14209          0          0
loop2            0.05         0.48         0.00         0.00       5854          0          0
loop3            0.03         0.37         0.00         0.00       4486          0          0
loop4            0.00         0.09         0.00         0.00       1074          0          0
loop5            0.00         0.09         0.00         0.00       1124          0          0
loop6            0.00         0.09         0.00         0.00       1083          0          0
loop7            0.00         0.09         0.00         0.00       1085          0          0
loop8            0.01         0.09         0.00         0.00       1090          0          0
loop9            0.18         0.82         0.00         0.00      10097          0          0
sda             13.06       293.00       690.28         0.00    3601013    8483553          0
sr0              0.00         0.01         0.00         0.00        152          0          0
```

4. measure the network activities using (hint: nicstat)

```
omnia@Linuxx:~$ sudo nicstat
    Time       Int    rKB/s    wKB/s    rPk/s    wPk/s     rAvs    wAvs %Util    Sat
16:22:08        lo     0.00     0.00     0.02     0.02    97.72   97.72  0.00    0.00
16:22:08    enp0s3     7.75     0.07     5.33     1.05   1489.5   66.13  0.01    0.00
omnia@Linuxx:~$
```

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

```
omnia@Linuxx:~$ 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 Controll
er (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 Contr
oller (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/FRW (ICH6 Family) US
B2 EHCI Controller
00:0d.0 SATA controller: Intel Corporation 82801HM/HEM (ICH8M/ICH8M-E) SATA Cont
roller [AHCI mode] (rev 02)
omnia@Linuxx:~$
```

6. List all files which are compressed by ZIP utilities

```
/usr/lib/libreoffice/share/config/images_breeze.zip
/usr/lib/libreoffice/share/config/images_yaru.zip
/usr/lib/libreoffice/share/config/images_breeze_dark_svg.zip
/usr/lib/libreoffice/share/config/images_yaru_svg.zip
/usr/lib/libreoffice/share/config/images_colibre.zip
/usr/lib/libreoffice/share/config/images_breeze_dark.zip
/usr/share/libreoffice/share/config/images_yaru_mate.zip
/usr/share/libreoffice/share/config/images_breeze_svg.zip
/usr/share/libreoffice/share/config/images_helpimg.zip
/usr/share/libreoffice/share/config/images_elementary_svg.zip
/usr/share/libreoffice/share/config/images_elementary.zip
/usr/share/libreoffice/share/config/images_yaru_mate_svg.zip
/usr/share/libreoffice/share/config/images_breeze.zip
/usr/share/libreoffice/share/config/images_yaru.zip
/usr/share/libreoffice/share/config/images_breeze_dark_svg.zip
/usr/share/libreoffice/share/config/images_yaru_svg.zip
/usr/share/libreoffice/share/config/images_colibre.zip
/usr/share/libreoffice/share/config/images_breeze_dark.zip
```

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

```
omnia@Linuxx:~$ sudo grep -e "0x" /var/log/syslog
Apr  2 15:15:27 Linuxx kernel: [10373.981245] audit: type=1326 audit(1680441327.
106:66): auid=1000 uid=1000 gid=1000 ses=8 subj=snap.snapd-desktop-integration.s
napd-desktop-integration pid=46124 comm="snapd-desktop-i" exe="/snap/snapd-deskt
op-integration/57/usr/bin/snapd-desktop-integration" sig=0 arch=c000003e syscall
=314 compat=0 ip=0x7fde4279fa3d code=0x50000
Apr  2 15:15:29 Linuxx kernel: [10376.739607] audit: type=1326 audit(1680441329.
862:67): auid=1000 uid=1000 gid=1000 ses=8 subj=snap.snapd-desktop-integration.s
napd-desktop-integration pid=46200 comm="snapd-desktop-i" exe="/snap/snapd-deskt
op-integration/57/usr/bin/snapd-desktop-integration" sig=0 arch=c000003e syscall
=314 compat=0 ip=0x7f2a999c3a3d code=0x50000
Apr  2 15:16:03 Linuxx kernel: [10410.534663] audit: type=1326 audit(1680441363.
658:70): auid=1000 uid=1000 gid=1000 ses=8 subj=snap.snap-store.snap-store pid=4
6478 comm="snap-store" exe="/snap/snap-store/638/usr/bin/snap-store" sig=0 arch=
c000003e syscall=314 compat=0 ip=0x7fc9f703e73d code=0x50000
Apr  2 15:16:13 Linuxx kernel: [10420.504591] audit: type=1326 audit(1680441373.
626:71): auid=1000 uid=1000 gid=1000 ses=8 subj=snap.snap-store.snap-store pid=4
6478 comm="snap-store" exe="/snap/snap-store/638/usr/bin/snap-store" sig=0 arch=
c000003e syscall=93 compat=0 ip=0x7fc9f703539b code=0x50000
Apr  2 15:16:53 Linuxx kernel: [10460.174332] audit: type=1326 audit(1680441413.
298:78): auid=1000 uid=1000 gid=1000 ses=8 subj=snap.snap-store.snap-store pid=4
6478 comm="pool-org.gnome." exe="/snap/snap-store/638/usr/bin/snap-store" sig=0
arch=c000003e syscall=93 compat=0 ip=0x7fc9f703539b code=0x50000
omnia@Linuxx:~$
```