

Lab1 Objectives:

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

- command:
 - lsusb
- screen shot:

```
mariam@mariam-VirtualBox:~/Desktop$ 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)

- commands:
 - cat /proc/cpuinfo | grep processor | wc -l
- screen shot:

```
mariam@mariam-VirtualBox:~/Desktop$ cat /proc/cpuinfo | grep processor | wc -l
2
```

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

- commands:
 - sudo apt install sysstat
 - iostat -d 2 5
- screen shot:

```
mariam@mariam-VirtualBox:~/Desktop$ iostat -d 2 5
Linux 5.19.0-32-generic (mariam-VirtualBox)   01 2023   أيار ١   _x86_64_   (2 CPU)

Device            tps    kB_read/s    kB_wrtn/s    kB_dscd/s    kB_read    kB_wrtn    kB_dscd
loop0              0.01         0.01         0.00         0.00         17          0          0
loop1              0.25         2.54         0.00         0.00        5853          0          0
loop10             0.15         1.94         0.00         0.00        4474          0          0
loop11             0.42         4.32         0.00         0.00        9968          0          0
loop12             0.02         0.15         0.00         0.00         348          0          0
loop13             0.31        10.87         0.00         0.00       25096          0          0
loop14             0.01         0.02         0.00         0.00          54          0          0
loop15             0.01         0.12         0.00         0.00         281          0          0
loop16             0.01         0.02         0.00         0.00          37          0          0
loop17             0.03         0.47         0.00         0.00        1094          0          0
loop2              0.03         0.47         0.00         0.00        1083          0          0
loop3              0.02         0.47         0.00         0.00        1074          0          0
loop4              0.02         0.15         0.00         0.00         348          0          0
loop5              0.63         5.91         0.00         0.00       13638          0          0
loop6              0.51         6.12         0.00         0.00       14136          0          0
loop7              1.10         4.71         0.00         0.00       10868          0          0
loop8              0.02         0.15         0.00         0.00         349          0          0
loop9              0.03         0.49         0.00         0.00        1122          0          0
sda               16.92       777.58       811.18         0.00     1794816     1872381          0
sr0               0.02         0.07         0.00         0.00         152          0          0
```

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

- commands:
 - `sudo apt install nicstat`
 - `sudo nicstat`
- screen shot:

```
mariam@mariam-VirtualBox:~/Desktop$ sudo nicstat
  Time      Int    rKB/s    wKB/s    rPk/s    wPk/s    rAvs    wAvs %Util    Sat
14:34:30     lo     0.02     0.02     0.17     0.17    109.6    109.6  0.00    0.00
14:34:30  enp0s3   42.10     0.19    29.58     2.40   1457.6    82.90  0.03    0.00
mariam@mariam-VirtualBox:~/Desktop$
```

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

- commands:
 - `lspci`
- screen shot:

```
mariam@mariam-VirtualBox:~/Desktop$ 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/FRW (ICH6 Family) USB2 EHCI Controller
00:0d.0 SATA controller: Intel Corporation 82801HM/HEM (ICH8M/ICH8M-E) SATA Controller [AHCI mode] (rev 02)
```

6. List all files which are compressed by ZIP utilities

- commands:
 - `sudo find / -name "*.zip"`
- screen shot:

```
/usr/lib/libreoffice/share/config/images_breeze_dark_svg.zip
/usr/lib/libreoffice/share/config/images_colibre.zip
/usr/lib/libreoffice/share/config/images_yaru_mate_svg.zip
/usr/lib/libreoffice/share/config/images_yaru.zip
/usr/lib/libreoffice/share/config/images_breeze.zip
/usr/lib/libreoffice/share/config/images_yaru_mate.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/simple.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/round-white.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/sukapura.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/elementary.zip
/usr/lib/libreoffice/share/config/images_elementary_svg.zip
```

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

- commands:
 - `grep -e "0x" /var/log/syslog`
- screen shot:

```
mariam@mariam-VirtualBox:~/Desktop$ grep -e "0x" /var/log/syslog
Mar 28 14:16:46 mariam-VirtualBox kernel: [ 79.813981] audit: type=1326 audit(1680005806.468:53): auid=1000 uid=1000 gid=1000 ses=3 subj=snap.snapd-desktop-integration.snapd-desktop-integration pid=1541 comm="snapd-desktop-i" exe="/snap/snapd-desktop-integration/49/usr/bin/snapd-desktop-integration" sig=0 arch=c000003e syscall=314 compat=0 ip=0x7f9aa3c4573d code=0x50000
Mar 28 14:17:17 mariam-VirtualBox kernel: [ 110.420308] audit: type=1326 audit(1680005837.068:54): auid=1000 uid=1000 gid=1000 ses=3 subj=snap.snap-store.snap-store pid=1887 comm="snap-store" exe="/snap/snap-store/638/usr/bin/snap-store" sig=0 arch=c000003e syscall=314 compat=0 ip=0x7f84cd99073d code=0x50000
Mar 28 14:18:16 mariam-VirtualBox kernel: [ 170.051017] audit: type=1326 audit(1680005906.605:55)
```