

System Admin Lab2

- Identify the current USB devices (hint: `lsusb`)

```
omarwalid@omarwalid-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. (hint: `/proc/cpuinfo`)

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

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

```
omarwalid@omarwalid-VirtualBox:~$ iostat 2 5
Linux 5.19.0-38-generic (omarwalid-VirtualBox) 01 2023 أبر, _x86_64_ (
2 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           22.08    5.13   10.52    2.65    0.00   59.61

Device            tps    kB_read/s    kB_wrtn/s    kB_dscd/s    kB_read    kB_
wrtn    kB_dscd
loop0              0.10         0.13         0.00         0.00         17
0
loop1              0.42         7.97         0.00         0.00        1068
0
loop10             0.42         7.99         0.00         0.00        1071
0
loop11            10.84        101.75         0.00         0.00       13632
0
loop12             0.46         8.05         0.00         0.00        1079
0
```

- measure the network activities using (hint: `nicstat`)

```
omarwalid@omarwalid-VirtualBox:~$ nicstat
Time      Int    rKB/s    wKB/s    rPk/s    wPk/s    rAvs    wAvs %Util    Sat
14:25:34   lo     0.21     0.21     1.99     1.99    109.8    109.8  0.00    0.00
14:25:34 enp0s3  76.66    1.98    58.18    23.36   1349.2    86.74  0.06    0.00
```

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

```
omarwalid@omarwalid-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 Control
ler (rev 02)
00:04.0 System peripheral: InnoTek Systemberatung GmbH VirtualBox Guest Service
```

- List all files which are compressed by ZIP utilities

```
omarwalid@omarwalid-VirtualBox:~/Labs/Lab1$ ls | grep ".zip"
iti-0.zip
```

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

```
omarwalid@omarwalid-VirtualBox:~/Labs/Lab1$ grep -e "0x" /var/log/syslog
Mar 28 12:59:30 omarwalid-VirtualBox NetworkManager[654]: <info> [1680001170.9
969] manager[0x55cd8c0bd030]: rfkill: Wi-Fi hardware radio set enabled
Mar 28 12:59:30 omarwalid-VirtualBox NetworkManager[654]: <info> [1680001170.9
969] manager[0x55cd8c0bd030]: rfkill: WWAN hardware radio set enabled
Mar 28 12:59:39 omarwalid-VirtualBox kernel: [ 15.425977] audit: type=1326 au
dit(1680001179.552:60): auid=1000 uid=1000 gid=1000 ses=2 subj=snap.snapd-deskt
op-integration.snapd-desktop-integration pid=1641 comm="snapd-desktop-i" exe="/
snap/snapd-desktop-integration/49/usr/bin/snapd-desktop-integration" sig=0 arch
=c000003e syscall=314 compat=0 ip=0x7fc6ccb9f73d code=0x50000
```