Lab-2

1-identify USB drivers

```
yossef@ubuntu-18:/$ lsusb
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 002 Device 003: ID 80ee:0021 VirtualBox USB Tablet
Bus 002 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
yossef@ubuntu-18:/$
```

2-Count how many CPUs

```
cache size      : 3072 KB
physical id     : 0
siblings        : 1
core id         : 0
cpu cores       : 1
apicid          : 0
initial apicid  : 0
fpu             : yes
fpu_exception   : yes
cpuid level     : 20
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 rdtscp lm constant_tsc rep_good nopl xtopology nonstop_tsc cpuid tsc_known
_freq pni pclmulqdq monitor ssse3 cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx rdrand hyp
ervisor lahf_lm abm 3dnowprefetch invpcid_single pti fsgsbase bmi1 avx2 bmi2 invpcid rdseed md_clear f
lush_l1d
bugs            : cpu_meltdown spectre_v1 spectre_v2 spec_store_bypass l1tf mds swapgs itlb_multihit s
rbds mmio_unknown
bogomips        : 4389.84
clflush size    : 64
cache_alignment : 64
address sizes   : 39 bits physical, 48 bits virtual
power management:
```

3- disk statistics 5 times with 2 seconds interval

```
sda             7.58        0.00        86.87       0       172
loop8           0.00        0.00        0.00        0       0
loop9           0.00        0.00        0.00        0       0
loop10          0.00        0.00        0.00        0       0
loop11          0.00        0.00        0.00        0       0
loop12          0.00        0.00        0.00        0       0
loop13          0.00        0.00        0.00        0       0
loop14          0.00        0.00        0.00        0       0
loop15          0.00        0.00        0.00        0       0
loop16          0.00        0.00        0.00        0       0
loop17          0.00        0.00        0.00        0       0
loop18          0.00        0.00        0.00        0       0
loop19          0.00        0.00        0.00        0       0
loop20          0.00        0.00        0.00        0       0
loop21          0.00        0.00        0.00        0       0
loop22          0.00        0.00        0.00        0       0
loop23          0.00        0.00        0.00        0       0
loop24          0.00        0.00        0.00        0       0
loop25          0.00        0.00        0.00        0       0
loop26          0.00        0.00        0.00        0       0
loop27          0.00        0.00        0.00        0       0
loop28          0.00        0.00        0.00        0       0
dm-0            0.00        0.00        0.00        0       0
```

4- measure the network activities

```
yossef@ubuntu-18:/$ nicstat -sn
    Time      Int        rKB/s          wKB/s
15:48:23   enp0s3        0.688          0.015
yossef@ubuntu-18:/$
```

5- List current PCI devices

```
yossef@ubuntu-18:/$ lspci -vmm
Slot:     00:00.0
Class:    Host bridge
Vendor:   Intel Corporation
Device:   440FX - 82441FX PMC [Natoma]
Rev:      02

Slot:     00:01.0
Class:    ISA bridge
Vendor:   Intel Corporation
Device:   82371SB PIIX3 ISA [Natoma/Triton II]

Slot:     00:01.1
Class:    IDE interface
Vendor:   Intel Corporation
Device:   82371AB/EB/MB PIIX4 IDE
Rev:      01
ProgIf:   8a

Slot:     00:02.0
Class:    VGA compatible controller
Vendor:   VMware
Device:   SVGA II Adapter
SVendor:         VMware
SDevice:         SVGA II Adapter
```

6- List all zipped files

```
yossef@ubuntu-18:/tmp$ ls | grep -e "\.zip"
myfile.zip
yossef@ubuntu-18:/tmp$
```

7- list all lines containing hex numbers on a /var/log/syslog

```
yossef@ubuntu-18:/$ sudo grep "0x[0-9A-Z]" /var/log/syslog
Mar 28 10:23:13 ubuntu-18 dhclient[15958]: DHCPREQUEST of 10.0.2.15 on enp0s3 to 255.255.255.255 port
67 (xid=0x55d9fc4a)
Mar 28 10:23:29 ubuntu-18 dhclient[17831]: DHCPREQUEST of 10.0.2.15 on enp0s3 to 255.255.255.255 port
67 (xid=0x13170b83)
Mar 28 10:44:38 ubuntu-18 gnome-shell[2131]: Object .Gjs_AppIndicatorIconActor__1 (0x55b2ba539040), ha
s been already finalized. Impossible to set any property to it.
Mar 28 10:44:38 ubuntu-18 org.gnome.Shell.desktop[2131]: == Stack trace for context 0x55b2b7030340 ==
Mar 28 10:44:38 ubuntu-18 org.gnome.Shell.desktop[2131]: #0 0x7ffe04f21a80 I   resource:///org/gnome/g
js/modules/_legacy.js:83 (0x7f1677eb5de0 @ 87)
Mar 28 10:44:38 ubuntu-18 org.gnome.Shell.desktop[2131]: #1 0x55b2b7441398 i   /usr/share/gnome-shell/
extensions/ubuntu-appindicators@ubuntu.com/indicatorStatusIcon.js:93 (0x7f1667fc1780 @ 58)
Mar 28 10:44:38 ubuntu-18 org.gnome.Shell.desktop[2131]: #2 0x7ffe04f22660 I   resource:///org/gnome/g
js/modules/_legacy.js:82 (0x7f1677eb5de0 @ 71)
Mar 28 10:44:38 ubuntu-18 org.gnome.Shell.desktop[2131]: #3 0x7ffe04f22720 b   self-hosted:916 (0x7f16
77ef12b8 @ 367)
Mar 28 10:44:38 ubuntu-18 org.gnome.Shell.desktop[2131]: #4 0x7ffe04f22810 b   resource:///org/gnome/g
js/modules/signals.js:128 (0x7f1677ed2230 @ 386)
Mar 28 10:44:38 ubuntu-18 org.gnome.Shell.desktop[2131]: #5 0x55b2b7441310 i   /usr/share/gnome-shell/
extensions/ubuntu-appindicators@ubuntu.com/appIndicator.js:190 (0x7f1667fb1450 @ 22)
Mar 28 10:44:38 ubuntu-18 org.gnome.Shell.desktop[2131]: #6 0x7ffe04f23460 I   resource:///org/gnome/g
js/modules/_legacy.js:82 (0x7f1677eb5de0 @ 71)
Mar 28 10:44:38 ubuntu-18 org.gnome.Shell.desktop[2131]: #7 0x55b2b7441268 i   /usr/share/gnome-shell/
extensions/ubuntu-appindicators@ubuntu.com/statusNotifierWatcher.js:219 (0x7f1667fada28 @ 225)
```