

Lab 2

- identify the current USB devices.

```
nada@Ubuntu:~$ 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 on your device

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

- take a snap shots of current disk statistics 5 times 2 seconds interval

```
nada@Ubuntu:~$ iostat -d 2 5
Linux 5.15.0-60-generic (Ubuntu)      04/01/2023      _x86_64_      (2 CPU)

Device            tps    kB_read/s    kB_wrtn/s    kB_dscd/s    kB_read    kB_w
rtn    kB_dscd
loop0              0.06         0.43         0.00         0.00        348
  0          0
loop1              0.02         0.02         0.00         0.00         17
  0          0
loop10             0.24         1.93         0.00         0.00       1565
  0          0
loop11             0.05         0.43         0.00         0.00        349
  0          0
loop12             0.06         0.45         0.00         0.00        362
  0          0
loop13             0.81         38.22         0.00         0.00      22805
  0          0
```

- measure the network activity

```
nada@Ubuntu:~$ ifconfig -a
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 10.0.2.15  netmask 255.255.255.0  broadcast 10.0.2.255
    inet6 fe80::daff:18f9:795e:a755  prefixlen 64  scopeid 0x20<link>
    ether 08:00:27:81:1c:bb  txqueuelen 1000  (Ethernet)
    RX packets 413  bytes 532419 (532.4 KB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 478  bytes 35064 (35.0 KB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
    inet 127.0.0.1  netmask 255.0.0.0
    inet6 ::1  prefixlen 128  scopeid 0x10<host>
    loop txqueuelen 1000  (Local Loopback)
    RX packets 57  bytes 5655 (5.6 KB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 57  bytes 5655 (5.6 KB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0
```

- list current PCI devices on your device

```
nada@Ubuntu:~$ 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) USB 2 EHCI Controller
00:0d.0 SATA controller: Intel Corporation 82801HM/HEM (ICH8M/ICH8M-E) SATA Controller [AHCI mode] (rev 02)
```

- list all files which are compressed by ZIP utilities

```
nada@Ubuntu:~$ sudo find / -name "*.zip" -type f 2>/dev/null
/usr/share/libreoffice/share/config/images_breeze_svg.zip
/usr/share/libreoffice/share/config/images_yaru_svg.zip
/usr/share/libreoffice/share/config/images_breeze_dark.zip
/usr/share/libreoffice/share/config/images_yaru.zip
/usr/share/libreoffice/share/config/images_yaru_mate_svg.zip
/usr/share/libreoffice/share/config/images_elementary.zip
/usr/share/libreoffice/share/config/images_breeze.zip
/usr/share/libreoffice/share/config/images_breeze_dark_svg.zip
/usr/share/libreoffice/share/config/images_yaru_mate.zip
/usr/share/libreoffice/share/config/images_colibre.zip
/usr/share/libreoffice/share/config/images_helpimg.zip
/usr/share/libreoffice/share/config/images_elementary_svg.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/elementary.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/sukapura.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/round-white.zip
/usr/lib/libreoffice/share/config/wizard/web/buttons/simple.zip
```

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

```
nada@Ubuntu:~$ sudo grep -e "0x" /var/log/syslog
Mar 28 12:38:08 Ubuntu /usr/libexec/gdm-x-session[1929]: (==) Max clients allowed: 256, resource mask: 0x1fffff
Mar 28 12:38:08 Ubuntu /usr/libexec/gdm-x-session[1929]: (II) Loader magic: 0x55f999581020
Mar 28 12:38:09 Ubuntu /usr/libexec/gdm-x-session[1929]: (--) PCI:*(0@0:2:0) 15ad:0405:15ad:0405 rev 0, Mem @ 0xe0000000/16777216, 0xf0000000/2097152, I/O @ 0x000d010/16, BIOS @ 0x????????/131072
Mar 28 12:38:10 Ubuntu /usr/libexec/gdm-x-session[1929]: (II) vmware(0): Modeline "2560x1600"x60.0 348.50 2560 2752 3032 3504 1600 1603 1609 1658 -hsync +vsync (99.5 kHz e)
Mar 28 12:38:10 Ubuntu /usr/libexec/gdm-x-session[1929]: (II) vmware(0): Modeline "2560x1440"x60.0 241.50 2560 2608 2640 2720 1440 1443 1448 1481 +hsync -vsync (88.8 kHz e)
Mar 28 12:38:10 Ubuntu /usr/libexec/gdm-x-session[1929]: (II) vmware(0): Modeline "1920x1440"x60.0 234.00 1920 2048 2256 2600 1440 1441 1444 1500 -hsync +vsync (90.0 kHz e)
Mar 28 12:38:10 Ubuntu /usr/libexec/gdm-x-session[1929]: (II) vmware(0): Modeline "1920x1200"x59.9 193.25 1920 2056 2256 2592 1200 1203 1209 1245 -hsync +vsync (74.6 kHz e)
Mar 28 12:38:10 Ubuntu /usr/libexec/gdm-x-session[1929]: (II) vmware(0): Modeline "1920x1080"x60.0 173.00 1920 2048 2248 2576 1080 1083 1088 1120 -hsync +vsync (67.2 kHz e)
```