System Admin II :Lab 2

- Identify the current USB devices

```
maysara@Linux-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
maysara@Linux-Ubuntu:~$
```

- Count how many CPUs (cores) on your device

```
maysara@Linux-Ubuntu:~$ cat /proc/cpuinfo | grep processor |wc -l
1
maysara@Linux-Ubuntu:~$
```

- Take a snapshot of current disk statistics 5 times with 2s intervals

```
maysara@Linux-Ubuntu:~$ sudo apt install sysstat
[sudo] password for maysara:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
  systemd-hwe-hwdb
Use 'sudo apt autoremove' to remove it.
Suggested packages:
  isag
The following NEW packages will be installed:
  sysstat
0 upgraded, 1 newly installed, 0 to remove and 258 not upgraded.
Need to get 487 kB of archives.
After this operation, 1,507 kB of additional disk space will be used.
Get:1 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 sysstat amd64 12.5.2-2ubuntu0.1 [487 kB]
Fetched 487 kB in 3s (190 kB/s)
Preconfiguring packages ...
Selecting previously unselected package sysstat.
(Reading database ... 232571 files and directories currently installed.)
Preparing to unpack .../sysstat_12.5.2-2ubuntu0.1_amd64.deb ...
Unpacking sysstat (12.5.2-2ubuntu0.1) ...
Setting up sysstat (12.5.2-2ubuntu0.1) ...

Creating config file /etc/default/sysstat with new version
update-alternatives: using /usr/bin/sar.sysstat to provide /usr/bin/sar (sar) in
 auto mode
Created symlink /etc/systemd/system/sysstat.service.wants/sysstat-collect.timer
→ /lib/systemd/system/sysstat-collect.timer.
Created symlink /etc/systemd/system/sysstat.service.wants/sysstat-summary.timer
→ /lib/systemd/system/sysstat-summary.timer.
Created symlink /etc/systemd/system/multi-user.target.wants/sysstat.service → /l
ib/systemd/system/sysstat.service.
Processing triggers for man-db (2.10.2-1) ...
maysara@Linux-Ubuntu:~$ iostat 5 2
Linux 5.19.0-35-generic (Linux-Ubuntu)  04/11/2023      _x86_64_        (1 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
          11.09    3.73    7.78    1.91    0.00   75.49

Device             tps    kB_read/s    kB_wrtn/s    kB_dscd/s    kB_read    kB_wrtn    kB_dscd
loop0             0.05         0.06         0.00         0.00         17          0          0
loop1             2.04        21.29         0.00         0.00       5888          0          0
loop10            3.66       134.37         0.00         0.00      37167          0          0
loop11            0.16         1.26         0.00         0.00        348          0          0
loop12            0.07         0.20         0.00         0.00         54          0          0
loop13            3.47        36.04         0.00         0.00       9968          0          0
loop14            0.10         0.24         0.00         0.00         67          0          0
loop15            0.04         0.05         0.00         0.00         14          0          0
loop2             1.09        19.59         0.00         0.00       5419          0          0
loop3             0.16         1.26         0.00         0.00        348          0          0
```

- Measure the network activities

```
maysara@Linux-Ubuntu:~$ nicstat
    Time      Int   rKB/s   wKB/s   rPk/s   wPk/s    rAvs    wAvs %Util    Sat
16:41:20       lo    0.36    0.36    4.19    4.19   87.06   87.06  0.00   0.00
16:41:20   enp0s3    3.10    0.86    4.70    6.09   676.2   144.5  0.00   0.00
maysara@Linux-Ubuntu:~$
```

- List current PCI devices on your device

```
maysara@Linux-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 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)
maysara@Linux-Ubuntu:~$
```

- List all files which are compressed by zip utilities

```
maysara@Linux-Ubuntu:~$ ls *.zip
ls: cannot access '*.zip': No such file or directory
maysara@Linux-Ubuntu:~$ touch file.zip
maysara@Linux-Ubuntu:~$ ls *.zip
file.zip
maysara@Linux-Ubuntu:~$
```

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

```
maysara@Linux-Ubuntu:~$ grep -e "0x" /var/log/syslog
grep: /var/log/syslog: Permission denied
maysara@Linux-Ubuntu:~$ sudo grep -e "0x" /var/log/syslog
[sudo] password for maysara:
Apr  9 23:55:02 Linux-Ubuntu kernel: [   27.707896] audit: type=1326 audit(1681077302.399:51): auid=1000 uid=100
0 gid=1000 ses=3 subj=snap.snapd-desktop-integration.snapd-desktop-integration pid=1676 comm="snapd-desktop-i" e
xe="/snap/snapd-desktop-integration/49/usr/bin/snapd-desktop-integration" sig=0 arch=c000003e syscall=314 compat
=0 ip=0x7fa3a3e3c73d code=0x50000
Apr  9 23:55:05 Linux-Ubuntu kernel: [   30.364104] audit: type=1326 audit(1681077305.055:52): auid=1000 uid=100
0 gid=1000 ses=3 subj=snap.snap-store.snap-store pid=1904 comm="snap-store" exe="/snap/snap-store/638/usr/bin/sn
ap-store" sig=0 arch=c000003e syscall=314 compat=0 ip=0x7ff498f8b73d code=0x50000
```