

Lab 2

```
ahmed@ahmed-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
ahmed@ahmed-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 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)
ahmed@ahmed-VirtualBox:~$ cat /proc/cpuinfo |grep processor
processor       : 0
ahmed@ahmed-VirtualBox:~$ cat /proc/cpuinfo |grep cores
cpu cores      : 1
```

- Lsusb
- Lspci
- Cat /proc/cpuinfo |grep processor
- Cat /proc/cpuinfo |grep cores

Lab 2

```
ahmed@ahmed-VirtualBox:~$ sudo apt install sysstat
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  isag
The following NEW packages will be installed:
  sysstat
0 upgraded, 1 newly installed, 0 to remove and 227 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 2s (218 kB/s)
Preconfiguring packages ...
Selecting previously unselected package sysstat.
(Reading database ... 204411 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 → /lib/systemd/system/sysstat.service.
Processing triggers for man-db (2.10.2-1) ...
```

- Sudo apt install sysstat

```
ahmed@ahmed-VirtualBox:~$ iostat 2 5
Linux 5.19.0-32-generic (ahmed-VirtualBox)      01 2023, أيار, _x86_64_      (1 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
            41.46    17.32   15.71    1.02    0.00   24.48

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              1.01        16.10         0.00         0.00       38551         0         0
loop10             0.17         1.72         0.00         0.00        4116         0         0
loop11             0.29        10.05         0.00         0.00       24049         0         0
loop12             0.01         0.02         0.00         0.00         54         0         0
loop13             0.01         0.09         0.00         0.00        209         0         0
loop14             0.37        13.42         0.00         0.00       32128         0         0
loop15             0.23         3.24         0.00         0.00        7763         0         0
loop16             0.01         0.11         0.00         0.00        262         0         0
loop2              0.25         2.60         0.00         0.00        6230         0         0
loop3              0.74         7.74         0.00         0.00       18520         0         0
loop4              0.49        24.04         0.00         0.00       57541         0         0
loop5              0.03         0.48         0.00         0.00        1151         0         0
loop6              0.75         7.35         0.00         0.00       17589         0         0
loop7              1.31         6.58         0.00         0.00       15749         0         0
loop8              0.02         0.15         0.00         0.00         349         0         0
loop9              0.40         4.16         0.00         0.00        9952         0         0
sda               33.31       916.38      1707.37         0.00    2193833    4087493         0
sr0               0.02         0.09         0.00         0.00         212         0         0

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
            7.69    0.00    2.05    0.00    0.00   90.26
```

- iostat 2 5

Lab 2

avg-cpu:	%user	%nice	%system	%iowait	%steal	%idle			
	7.69	0.00	2.05	0.00	0.00	90.26			
Device	tps	kB_read/s	kB_wrtn/s	kB_dscd/s	kB_read	kB_wrtn	kB_dscd		
loop0	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop1	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop10	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop11	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop12	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop13	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop14	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop15	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop16	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop2	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop3	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop4	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop5	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop6	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop7	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop8	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop9	0.00	0.00	0.00	0.00	0.00	0	0	0	
sda	0.50	64.00	0.00	0.00	0.00	128	0	0	
sr0	0.00	0.00	0.00	0.00	0.00	0	0	0	

avg-cpu:	%user	%nice	%system	%iowait	%steal	%idle			
	5.61	0.00	1.53	0.00	0.00	92.86			
Device	tps	kB_read/s	kB_wrtn/s	kB_dscd/s	kB_read	kB_wrtn	kB_dscd		
loop0	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop1	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop10	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop11	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop12	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop13	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop14	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop15	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop16	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop2	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop3	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop4	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop5	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop6	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop7	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop8	0.00	0.00	0.00	0.00	0.00	0	0	0	
loop9	0.00	0.00	0.00	0.00	0.00	0	0	0	
sda	0.00	0.00	0.00	0.00	0.00	0	0	0	
sr0	0.00	0.00	0.00	0.00	0.00	0	0	0	

Lab 2

avg-cpu:	%user	%nice	%system	%iowait	%steal	%idle		
	7.14	0.00	1.53	0.00	0.00	91.33		
Device	tps	kB_read/s	kB_wrtn/s	kB_dscd/s	kB_read	kB_wrtn	kB_dscd	
loop0	0.00	0.00	0.00	0.00	0	0	0	
loop1	0.00	0.00	0.00	0.00	0	0	0	
loop10	0.00	0.00	0.00	0.00	0	0	0	
loop11	0.00	0.00	0.00	0.00	0	0	0	
loop12	0.00	0.00	0.00	0.00	0	0	0	
loop13	0.00	0.00	0.00	0.00	0	0	0	
loop14	0.00	0.00	0.00	0.00	0	0	0	
loop15	0.00	0.00	0.00	0.00	0	0	0	
loop16	0.00	0.00	0.00	0.00	0	0	0	
loop2	0.00	0.00	0.00	0.00	0	0	0	
loop3	0.00	0.00	0.00	0.00	0	0	0	
loop4	0.00	0.00	0.00	0.00	0	0	0	
loop5	0.00	0.00	0.00	0.00	0	0	0	
loop6	0.00	0.00	0.00	0.00	0	0	0	
loop7	0.00	0.00	0.00	0.00	0	0	0	
loop8	0.00	0.00	0.00	0.00	0	0	0	
loop9	0.00	0.00	0.00	0.00	0	0	0	
sda	1.00	0.00	6.00	0.00	0	12	0	
sr0	0.00	0.00	0.00	0.00	0	0	0	

avg-cpu:	%user	%nice	%system	%iowait	%steal	%idle		
	3.06	0.00	1.53	0.00	0.00	95.41		
Device	tps	kB_read/s	kB_wrtn/s	kB_dscd/s	kB_read	kB_wrtn	kB_dscd	
loop0	0.00	0.00	0.00	0.00	0	0	0	
loop1	0.00	0.00	0.00	0.00	0	0	0	
loop10	0.00	0.00	0.00	0.00	0	0	0	
loop11	0.00	0.00	0.00	0.00	0	0	0	
loop12	0.00	0.00	0.00	0.00	0	0	0	
loop13	0.00	0.00	0.00	0.00	0	0	0	
loop14	0.00	0.00	0.00	0.00	0	0	0	
loop15	0.00	0.00	0.00	0.00	0	0	0	
loop16	0.00	0.00	0.00	0.00	0	0	0	
loop2	0.00	0.00	0.00	0.00	0	0	0	
loop3	0.00	0.00	0.00	0.00	0	0	0	
loop4	0.00	0.00	0.00	0.00	0	0	0	
loop5	0.00	0.00	0.00	0.00	0	0	0	
loop6	0.00	0.00	0.00	0.00	0	0	0	
loop7	0.00	0.00	0.00	0.00	0	0	0	
loop8	0.00	0.00	0.00	0.00	0	0	0	
loop9	0.00	0.00	0.00	0.00	0	0	0	
sda	0.00	0.00	0.00	0.00	0	0	0	
sr0	0.00	0.00	0.00	0.00	0	0	0	

Lab 2

```
ahmed@ahmed-VirtualBox:~$ sudo apt install nicstat
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  nicstat
0 upgraded, 1 newly installed, 0 to remove and 227 not upgraded.
Need to get 18.2 kB of archives.
After this operation, 54.3 kB of additional disk space will be used.
Get:1 http://eg.archive.ubuntu.com/ubuntu jammy/main amd64 nicstat amd64 1.95-1build3 [18.2 kB]
Fetched 18.2 kB in 1s (31.8 kB/s)
Selecting previously unselected package nicstat.
(Reading database ... 204473 files and directories currently installed)
Preparing to unpack .../nicstat_1.95-1build3_amd64.deb ...
Unpacking nicstat (1.95-1build3) ...
Setting up nicstat (1.95-1build3) ...
Processing triggers for man-db (2.10.2-1) ...
ahmed@ahmed-VirtualBox:~$ nicstat
  Time      Int    rKB/s    wKB/s    rPk/s    wPk/s    rAvs    wAvs %Util    Sat
16:08:13    lo     0.03     0.03     0.24     0.24    106.4    106.4  0.00    0.00
16:08:13  enp0s3  477.0    3.72   329.9    62.02   1480.4    61.47  0.39    0.00
ahmed@ahmed-VirtualBox:~$ ls -lh *.zip
ls: cannot access '*.zip': No such file or directory
ahmed@ahmed-VirtualBox:~$ sudo find / -name
find: missing argument to '-name'
ahmed@ahmed-VirtualBox:~$ sudo find / -name "*.zip"
/usr/share/libreoffice/share/config/images_elementary_svg.zip
/usr/share/libreoffice/share/config/images_breeze_svg.zip
/usr/share/libreoffice/share/config/images_yaru.zip
/usr/share/libreoffice/share/config/images_helpimg.zip
/usr/share/libreoffice/share/config/images_elementary.zip
```

- Sudo apt install nicstat
- Sudo find / -name "*.zip"

```
ahmed@ahmed-VirtualBox:~$ grep -e "0x" /var/log/syslog
Mar 28 15:33:01 ahmed-VirtualBox NetworkManager[630]: <info> [1680010381.2602] dns_mgr[0x5620158ff2a0]: init: dns=systemd-resolved rc-manager
=unmanaged (auto), plugin=systemd-resolved
Mar 28 15:33:01 ahmed-VirtualBox NetworkManager[630]: <info> [1680010381.2650] manager[0x56201591f040]: rfkill: Wi-Fi hardware radio set enab
led
Mar 28 15:33:01 ahmed-VirtualBox NetworkManager[630]: <info> [1680010381.2663] manager[0x56201591f040]: rfkill: WWAN hardware radio set enab
led
Mar 28 15:35:49 ahmed-VirtualBox kernel: [ 285.703588] audit: type=1326 audit(1680010548.998:68): auid=1000 uid=1000 gid=1000 ses=3 subj=snap
.snapd-desktop-integration.snapd-desktop-integration pid=2021 comm="snapd-desktop-l" exe="/snap/snapd-desktop-integration/49/usr/bin/snapd-des
ktop-integration" sig=0 arch=c000003e syscall=314 compat=0 ip=0x7fa08cc8773d code=0x50000
Mar 28 15:36:07 ahmed-VirtualBox kernel: [ 303.810015] audit: type=1326 audit(1680010567.116:69): auid=1000 uid=1000 gid=1000 ses=3 subj=snap
.snap-store.snap-store pid=2277 comm="snap-store" exe="/snap/snap-store/638/usr/bin/snap-store" sig=0 arch=c000003e syscall=314 compat=0 ip=0x
7ff4610e873d code=0x50000
Mar 28 15:36:37 ahmed-VirtualBox kernel: [ 334.136785] audit: type=1326 audit(1680010597.455:70): auid=1000 uid=1000 gid=1000 ses=3 subj=snap
.snap-store.snap-store pid=2277 comm="snap-store" exe="/snap/snap-store/638/usr/bin/snap-store" sig=0 arch=c000003e syscall=93 compat=0 ip=0x
ff4610df39b code=0x50000
Mar 28 16:04:24 ahmed-VirtualBox kernel: [ 2000.692611] audit: type=1326 audit(1680012264.848:79): auid=1000 uid=1000 gid=1000 ses=3 subj=snap
.firefox.firefox pid=3678 comm="firefox" exe="/snap/firefox/2391/usr/lib/firefox/firefox" sig=0 arch=c000003e syscall=314 compat=0 ip=0x7eff2c
bd873d code=0x50000
Mar 28 16:04:34 ahmed-VirtualBox gnome-shell[1926]: Window manager warning: Buggy client sent a _NET_ACTIVE_WINDOW message with a timestamp of
0 for 0xc0003c
Mar 28 16:06:59 ahmed-VirtualBox gnome-shell[1926]: Object .Gjs_ui_messageTray_Notification (0x55b9de117e40), has been already disposed - impo
ssible to emit any signal on it. This might be caused by the object having been destroyed from C code using something such as destroy(), dispo
se(), or remove() vfuncs.
Mar 28 16:06:59 ahmed-VirtualBox gnome-shell[1926]: == Stack trace for context 0x55b9dc849490 ==
Mar 28 16:06:59 ahmed-VirtualBox gnome-shell[1926]: Object .Gjs_ui_messageTray_Notification (0x55b9de117e40), has been already disposed - impo
ssible to access it. This might be caused by the object having been destroyed from C code using something such as destroy(), dispose(), or rem
ove() vfuncs.
Mar 28 16:06:59 ahmed-VirtualBox gnome-shell[1926]: == Stack trace for context 0x55b9dc849490 ==
Mar 28 16:07:26 ahmed-VirtualBox kernel: [ 2182.156544] audit: type=1326 audit(1680012446.403:80): auid=1000 uid=1000 gid=1000 ses=3 subj=snap
.snap-store.snap-store pid=4535 comm="snap-store" exe="/snap/snap-store/638/usr/bin/snap-store" sig=0 arch=c000003e syscall=314 compat=0 ip=0x
7fcd2fcce73d code=0x50000
```

- Grep -e "0x" /var/log/syslog