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Registration Number – 11914295

Roll Number – 66

Section - KE008

Question - Using desired Open Source Software provide details of the motherboard, network, storage devices, and display. Also, create an HTML report of everything and create favorites to have instant access to any hardware component from the menu bar.

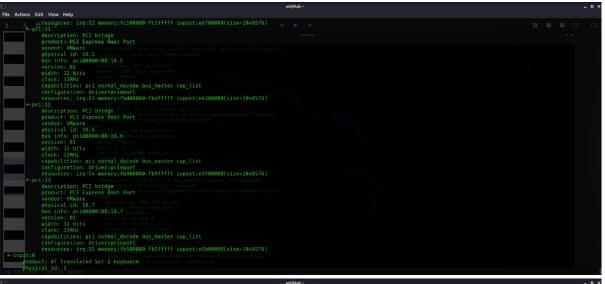
Operating System – Kali Linux (on virtual machine)

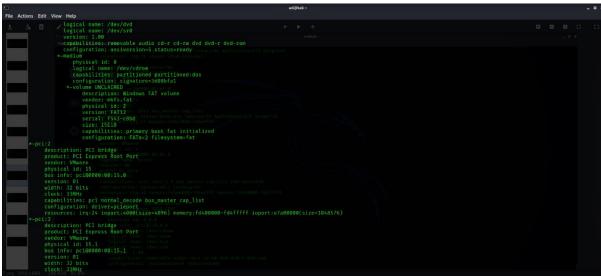
Open-Source Software – Ishw, dmidecode, ifconfig, Isblk, xrandr

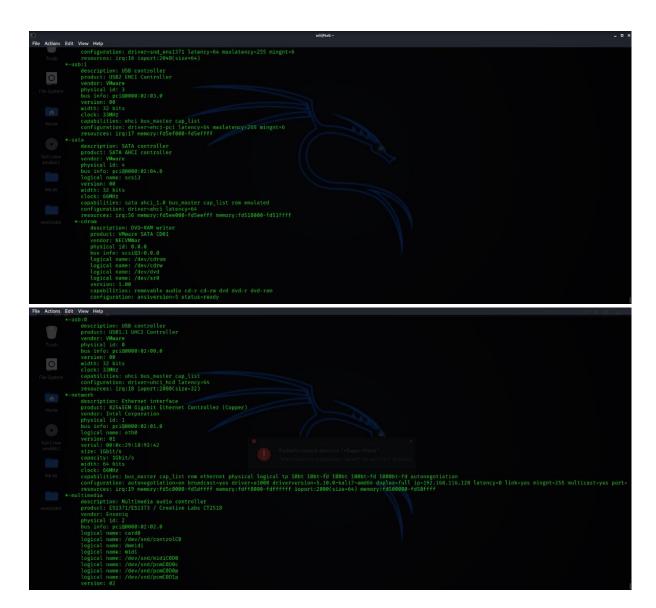
GitHub Link: https://github.com/aditya09july/Open_source_CA3

Ishw

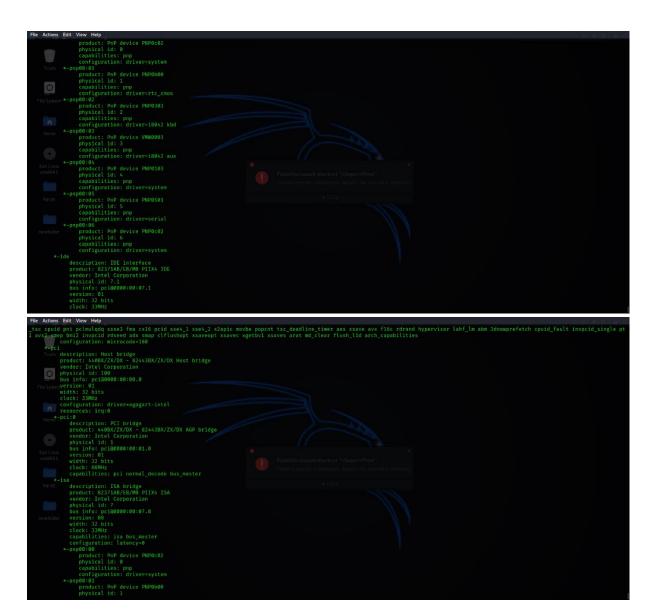
Ishw is a command-line utility tool for Linux and Unix-like operating systems that generates a detailed report of the hardware configuration of the system, including information about various hardware components such as the CPU, motherboard, memory, storage devices, and network interfaces.







```
csi
description: SCSI storage controller
product: 53c1030 PCI-X Fusion-MPT Dual Ultra320 SCSI
vendor: Broadcom /LSI
physical id: 10
bus info: pcia0000:00:10.0
version: 01
ulth: 64 bits
close in the bits
close i
                                                                                                              ci:1
description: PCI bridge
product: PCI bridge
product: PCI bridge
vendor: Vmarre
physical id: 11
bus info: pciaB000:00:11.0
version: 02
width: 32 bits
clock: 33MHz
capabilities: pci subtractive_decode bus_master cap_list
resources: ioport:2000(size=8192) memory:fd500000-fdffffff ioport:e7b00000(size=5242880)
**usb:0
File Actions Edit View Help
                                                                                                                 de
description: IDE interface
product: 82371A9/EBM/MB PIIX4 IDE
vendor: Intel Corporation
physical id: 7.1
bus info: poisB0000:00:07.1
version: 01
version: 01
clock: 33MM/z
capabilities: ide isa_compat_mode pci_native_mode bus_master
configuration: dfiver-ata piix latency=64
                               | Capabilities: ide isa_compat_mode pt_native_mode bus_master
| Capabilities: ide isa_compat_mode bus_mode bus_master
| Capabilities: ide isa_compat_mode bus_mode bus_mode | Capabilities: ide isa_compat_mode | Capabilities: ide is
                                                          configuration: latency=0
2-generic
description: System peripheral
product: Virtual Machine Communication Interface
physical id: 7.7
bus info: pcia0000:00:07.7
version: 10
tolder width: 64 bits
clock: 33MMg
capabilities: bus_master cap_list
configuration: driver-vmm vmci latency=64 maxlatency=255 mingnt=6
-disposerics: inq:10 inport:10806:is=26-6) memory:febfe000-febfffff
description: VGA compatible controller
product: SVGA II Adapter
vendor: VMaxra
bus info: pcia0000:00:0f.0
logical name: /dev/fb0
version: 00
```

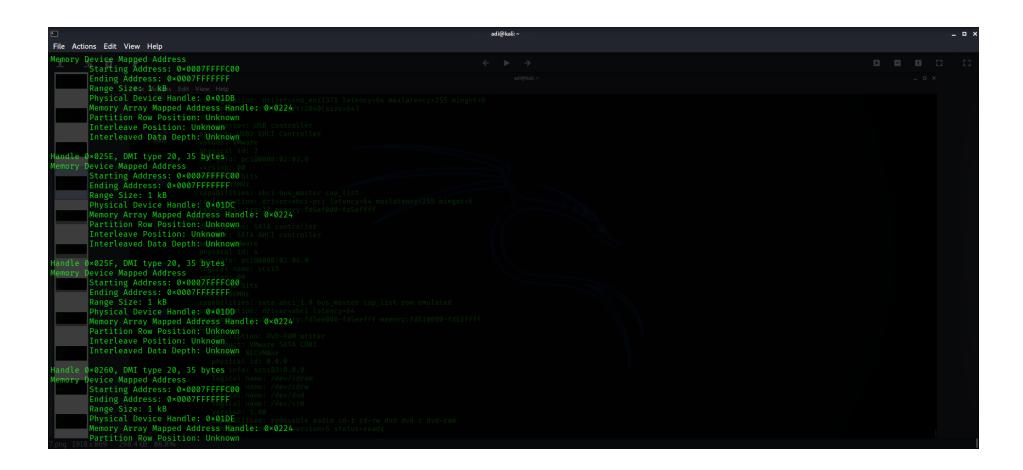


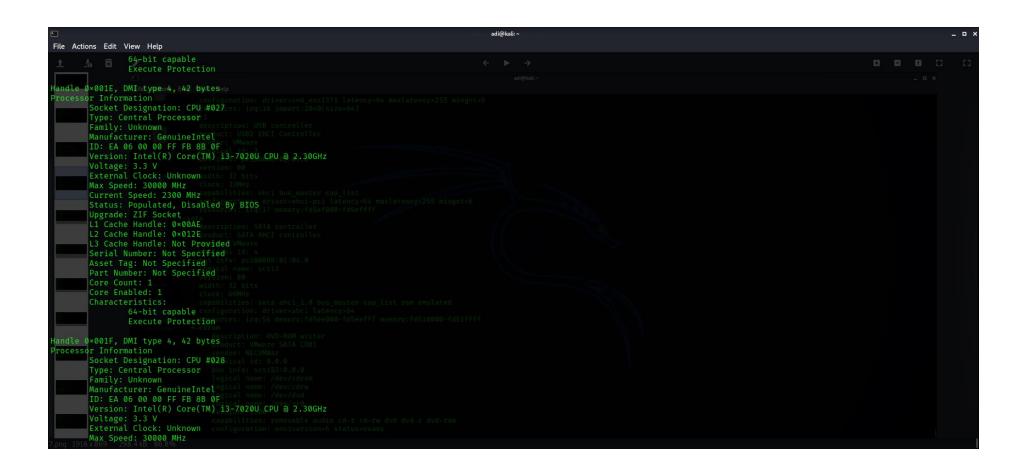


<u> </u>	adi@kali:~	-	0
File Actions Edit View Help			
dogical name: input0::capslock togical name: input0::rumHock logical name: input0::scolllock			
capabilities: /18042Edit View Metp			
product: Power Button resources: 179:16 10port:2040(size-64)			
logical name: input2 describtes und centroller logical name: /dev/input/event1 del uni centroller dapabilities: platform			
*-input:2 product: VirtualPS/2 VMware VMMouse physical id: 3			
Togical name: input3			
<pre>dapabilities: 18042 *-input:3 product: VirtualPS/2 VMware VMMouse</pre>			
physical id: 4 logical name: input4 logical name: /dev/input/event2			
logical name: /dev/input/mouse0 capebilities: i8042 *-input:4			
product: VMware VMware Virtual USB Mouse and 18 mm and 1			
logical name: /dev/input/event4 logical name: /dev/input/mouse2			
dapabilities: usb			
product: PC Speaker has been seem to be seem			
logical name: /dev/input/event5 capabilities: isa WARNING output may be incomplete or inaccurate, you should run this program as super-user.			
(adis kali) [~]			

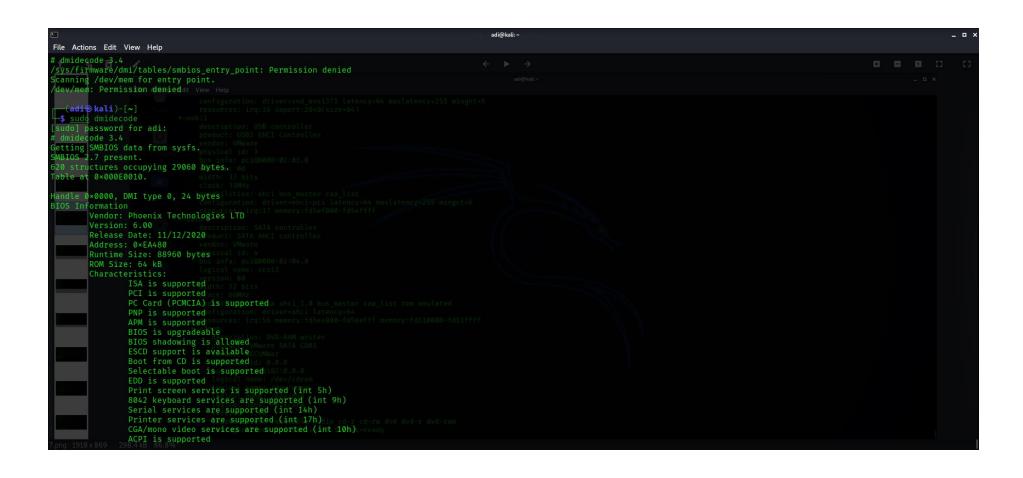
Dmidecode

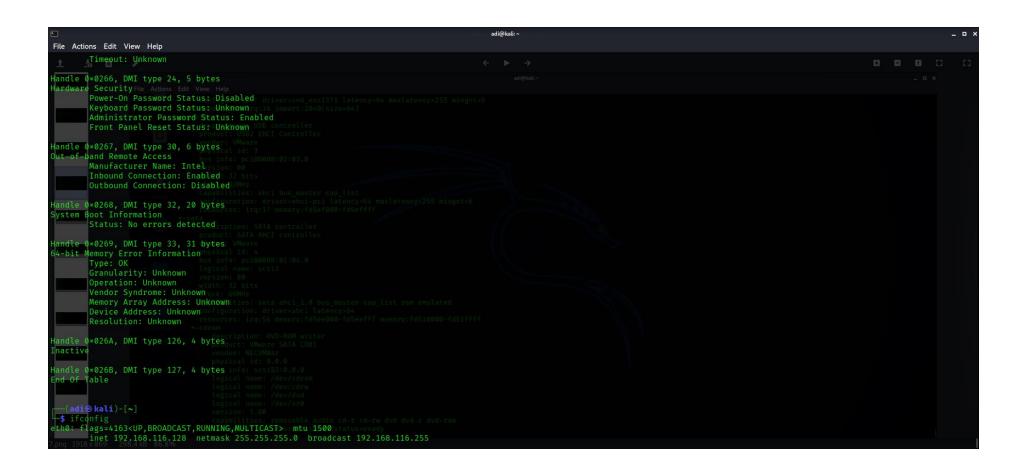
dmidecode is a command-line utility tool for Linux and other Unix-like operating systems that provides information about the system's hardware components, as well as information about the system's BIOS, firmware, and other low-level components. It can display detailed information about the motherboard, processor, memory, and other hardware components in a human-readable format. It can also be used to troubleshoot hardware issues and to gather information for system configuration and upgrades. In summary, dmidecode is a tool for gathering detailed hardware information from the system.







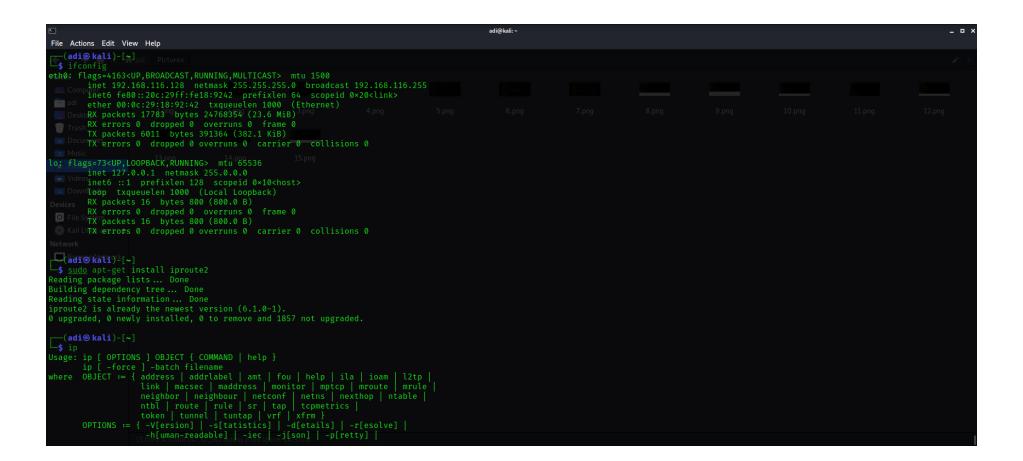




IProute2 & Ifconfig

iproute2 is a collection of command-line utility tools for Linux and other Unix-like operating systems that provides advanced network configuration and management capabilities. It replaces the traditional net-tools package, including ifconfig and route, with more powerful and flexible tools, such as ip, tc, ss, and bridge. These tools can be used for a wide range of network-related tasks, such as network interface configuration, routing, traffic shaping, packet filtering, and more. iproute2 is designed to provide greater control and flexibility over network configuration and management compared to traditional network tools. In summary, iproute2 is a powerful set of command-line utility tools for advanced network configuration and management.

ifconfig is a command-line utility tool for Linux, Unix-like operating systems, and other network-based systems that displays and configures network interfaces on a system. It can be used to view network interface configuration details, such as IP address, netmask, and broadcast address. It can also be used to enable or disable network interfaces, set or change IP addresses, and configure network-related parameters such as MTU (Maximum Transmission Unit). In short, ifconfig is a tool for displaying and configuring network interfaces on a system.



Isblk

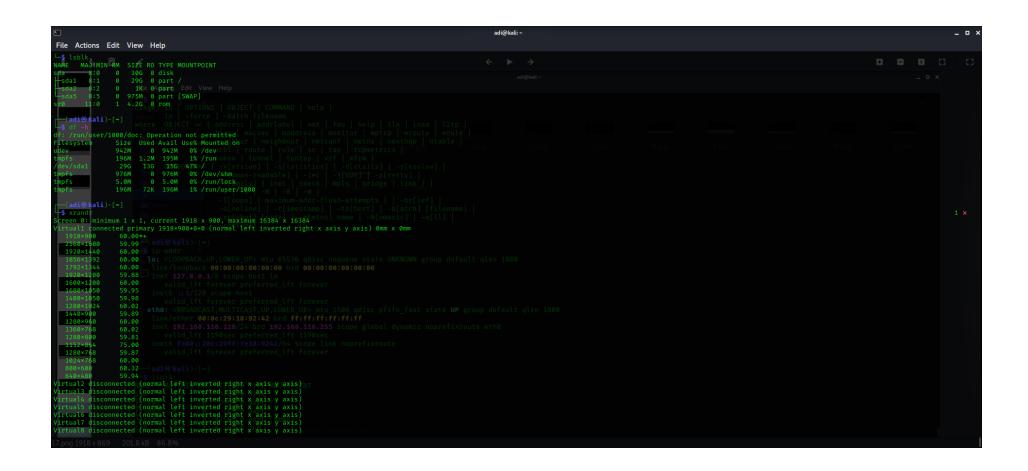
A command-line utility tool for Linux and other Unix-like operating systems that lists all available block devices (such as hard disks and USB drives) and their attributes. It displays information about the device name, size, mount points, and more.

df -h

A command-line utility tool for Linux and other Unix-like operating systems that reports the disk space usage for all available file systems in human-readable format. It displays information about the file system, size, used space, available space, and mount point.

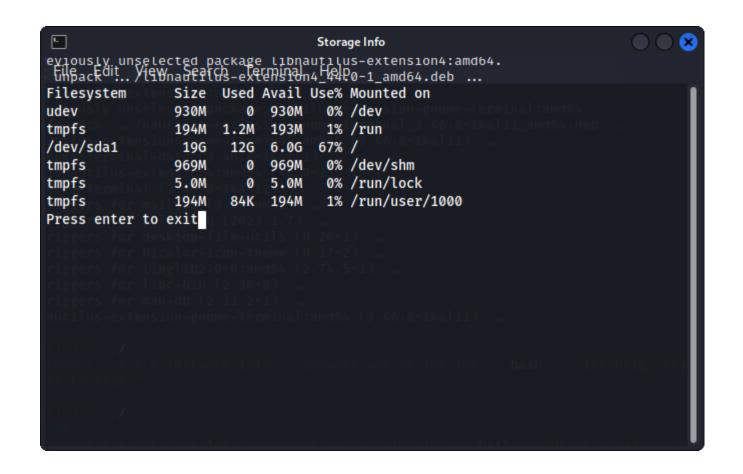
xrandr

A command-line utility tool for Linux and other Unix-like operating systems that provides a way to configure and adjust the display resolution and settings. It can be used to list available displays and modes, configure the layout of displays, and adjust various display-related settings.



Create an HTML report of everything: https://github.com/aditya09july/Open source CA3/tree/main/ca/HTML%20reports

Create favorites to have instant access to any hardware component from the menu bar	



```
Display Info
nome-terminal-data (3.46.8-1kali1) ...
ibnautEdus-extensP6A4chamdberninalo-Help...
                  59.95
   1680x1050
                  59.98
   1400x1050
                  60.02
   1280x1024
   1440x900
                  59.89
   1280x960
                  60.00
   1360x768
                  60.02
   1280x800
                  59.81
                  75.00
   1152x864
   1280x768
                  59.87
   1280x720
                  59.86
   1024x768
                  60.00
   640x480
                  59.94
Virtual2 disconnected (normal left inverted right x axis y axis)
Virtual3 disconnected (normal left inverted right x axis y axis)
Virtual4 disconnected (normal left inverted right x axis y axis)
Virtual5 disconnected (normal left inverted right x axis y axis)
Virtual6 disconnected (normal left inverted right x axis y axis)
Virtual7 disconnected (normal left inverted right x axis y axis)
Virtual8 disconnected (normal left inverted right x axis y axis)
Press enter to exit
```

```
Display Info
nome-terminal-data (3.46.8-1kali1)...
ibnautfels-extens?6A4Chamdbarninalo-Help...
Screen 0: minimum 1 x 1, current 800 x 600, maximum 16384 x 16384
Virtual1 connected primary 800x600+0+0 (normal left inverted right x axis y axis
) 0mm x 0mm
   800x600
                  60.00*+ 60.32
                  59.97
   3840x2400
                  59.97
   3840x2160
   2880x1800
                  59.95
   2560x1600
                  59.99
   2560x1440
                  59.95
                  60.00
   1920x1440
   1856x1392
                  60.00
   1792x1344
                  60.00
                  59.88
   1920x1200
   1920x1080
                  59.96
   1600x1200
                  60.00
                  59.95
   1680x1050
   1400x1050
                  59.98
   1280x1024
                  60.02
   1440x900
                  59.89
                  60.00
   1280x960
```

```
Network Info
ring to unpack .../gnome-terminat-data_3.40.8-ikatii_att.deb ...
kFile gEstite-Viewinsearsta (gratinal-1ktalp1) ...
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
        inet 192.168.239.128 netmask 255.255.255.0 broadcast 192.168.239.255
        inet6 fe80::20c:29ff:fe0b:ccb1 prefixlen 64 scopeid 0x20<link>
        ether 00:0c:29:0b:cc:b1 txqueuelen 1000 (Ethernet)
        RX packets 1013 bytes 1303200 (1.2 MiB)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 371 bytes 25544 (24.9 KiB)
        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 4 bytes 240 (240.0 B)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 4 bytes 240 (240.0 B)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
Press enter to exit
```