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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.
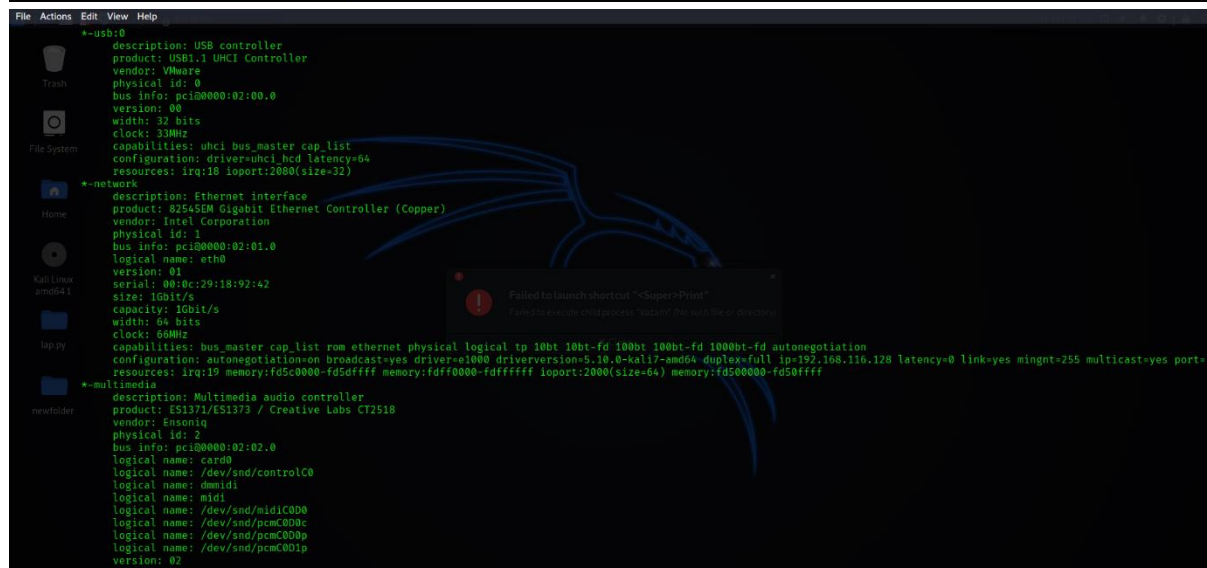
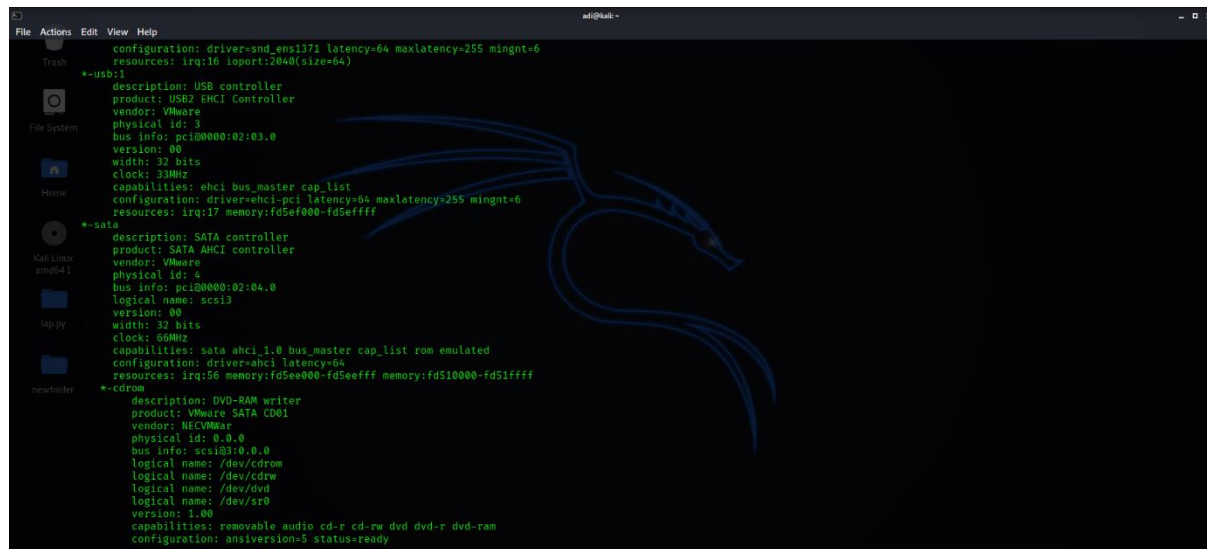**Operating System** – Kali Linux (on virtual machine)

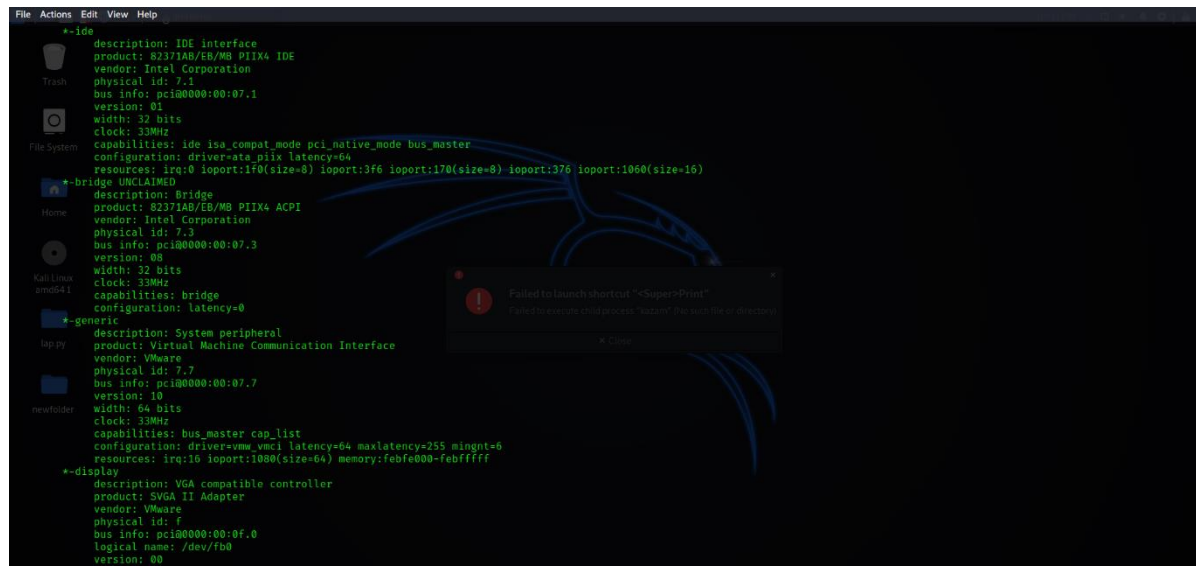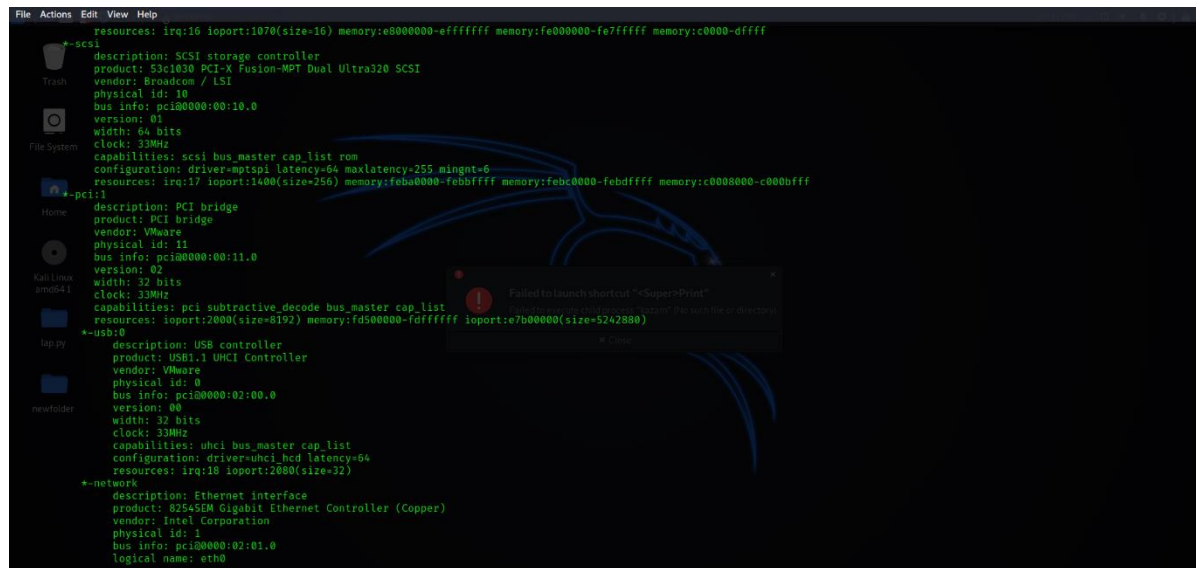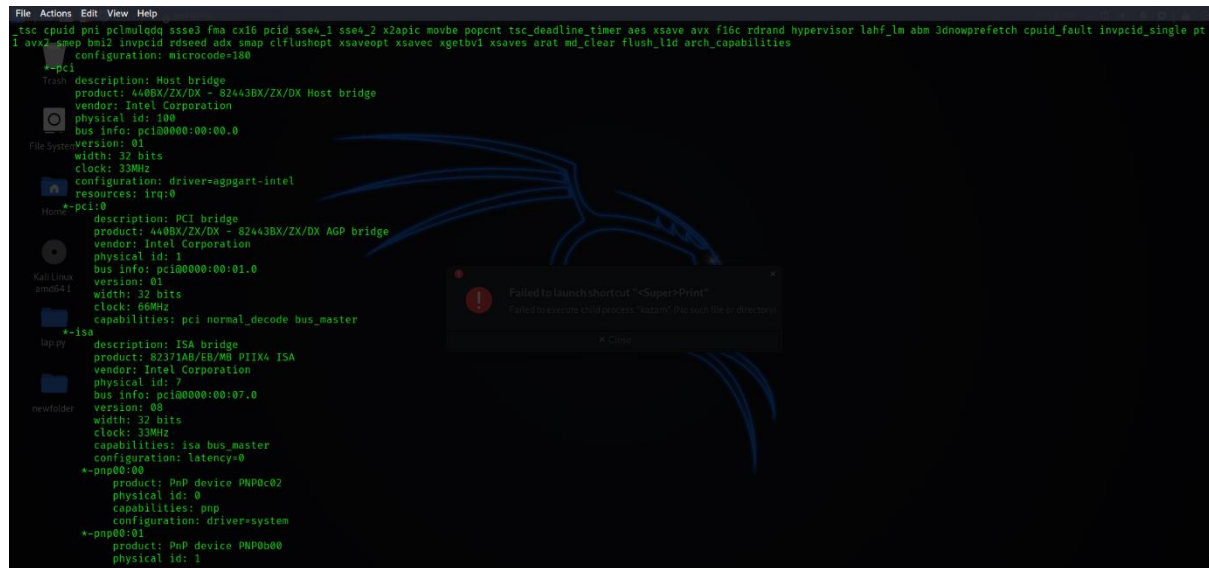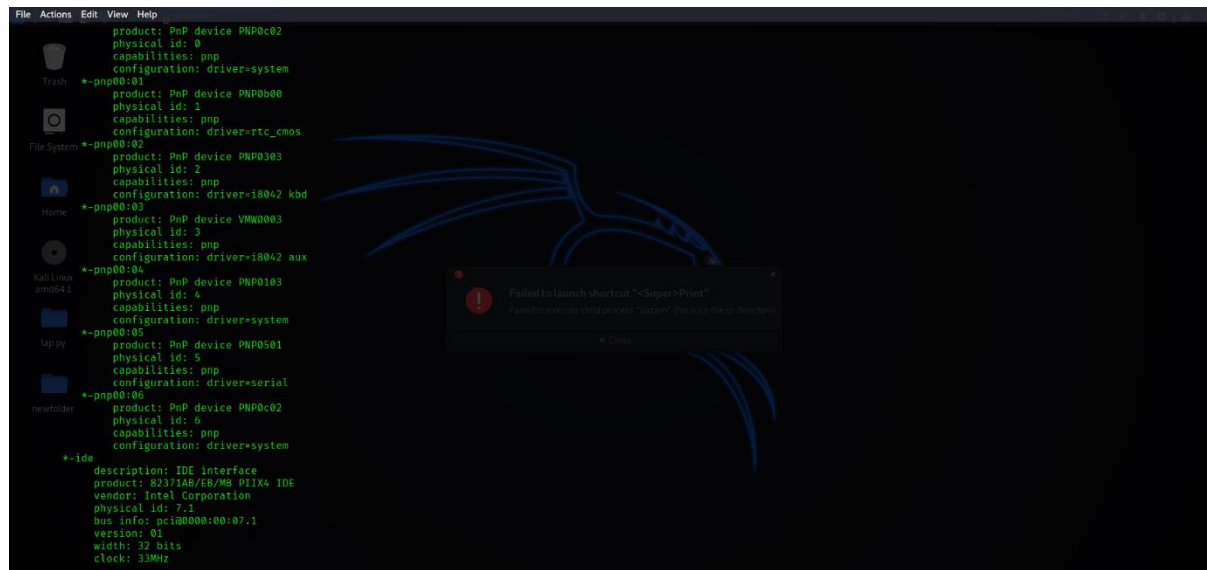**Open-Source Software** – lshw, dmidecode, ifconfig, lsblk, xrandr

lshw

lshw 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.

```
        resources: irq:52 memory:fc100000-fc1fffff ioport:e6700000(size=1048576)
  *-pci:31
        description: PCI bridge
        product: PCI Express Root Port
        vendor: VMware
        physical id: 18.5
        bus info: pci@0000:00:18.5
        version: 01
        width: 32 bits
        clock: 33MHz
        capabilities: pci normal_decode bus_master cap_list
        configuration: driver=pcieport
        resources: irq:53 memory:fbd00000-fbdfffff ioport:e6300000(size=1048576)
  *-pci:32
        description: PCI bridge
        product: PCI Express Root Port
        vendor: VMware
        physical id: 18.6
        bus info: pci@0000:00:18.6
        version: 01
        width: 32 bits
        clock: 33MHz
        capabilities: pci normal_decode bus_master cap_list
        configuration: driver=pcieport
        resources: irq:54 memory:fb900000-fb9fffff ioport:e5f00000(size=1048576)
  *-pci:33
        description: PCI bridge
        product: PCI Express Root Port
        vendor: VMware
        physical id: 18.7
        bus info: pci@0000:00:18.7
        version: 01
        width: 32 bits
        clock: 33MHz
        capabilities: pci normal_decode bus_master cap_list
        configuration: driver=pcieport
        resources: irq:55 memory:fb500000-fb5fffff ioport:e5b00000(size=1048576)
*-input:0
     product: AT Translated Set 2 keyboard
     physical id: 1
```

```
           logical name: /dev/dvd
           logical name: /dev/sr0
           version: 1.00
           capabilities: removable audio cd-r cd-rw dvd dvd-r dvd-ram
           configuration: ansiversion=5 status=ready
         *-medium
              physical id: 0
              logical name: /dev/cdrom
              capabilities: partitioned partitioned:dos
              configuration: signature=3d08bfa1
            *-volume UNCLAIMED
                 description: Windows FAT volume
                 vendor: mkfs.fat
                 physical id: 2
                 version: FAT12
                 serial: f543-c8bd
                 size: 15EiB
                 capabilities: primary boot fat initialized
                 configuration: FATs=2 filesystem=fat
  *-pci:2
        description: PCI bridge
        product: PCI Express Root Port
        vendor: VMware
        physical id: 15
        bus info: pci@0000:00:15.0
        version: 01
        width: 32 bits
        clock: 33MHz
        capabilities: pci normal_decode bus_master cap_list
        configuration: driver=pcieport
        resources: irq:24 ioport:4000(size=4096) memory:fd400000-fd4fffff ioport:e7a00000(size=1048576)
  *-pci:3
        description: PCI bridge
        product: PCI Express Root Port
        vendor: VMware
        physical id: 15.1
        bus info: pci@0000:00:15.1
        version: 01
        width: 32 bits
        clock: 33MHz
```

          configuration: driver=snd_ens1371 latency=64 maxlatency=255 mingnt=6
          resources: irq:16 ioport:2040(size=64)
     *-usb:1
          description: USB controller
          product: USB2 EHCI Controller
          vendor: VMware
          physical id: 3
          bus info: pci@0000:02:03.0
          version: 00
          width: 32 bits
          clock: 33MHz
          capabilities: ehci bus_master cap_list
          configuration: driver=ehci-pci latency=64 maxlatency=255 mingnt=6
          resources: irq:17 memory:fd5ef000-fd5effff
     *-sata
          description: SATA controller
          product: SATA AHCI controller
          vendor: VMware
          physical id: 4
          bus info: pci@0000:02:04.0
          logical name: scsi3
          version: 00
          width: 32 bits
          clock: 66MHz
          capabilities: sata ahci_1.0 bus_master cap_list rom emulated
          configuration: driver=ahci latency=64
          resources: irq:56 memory:fd5ee000-fd5eeffff memory:fd510000-fd51ffff
        *-cdrom
             description: DVD-RAM writer
             product: VMware SATA CD01
             vendor: NECVMWar
             physical id: 0.0.0
             bus info: scsi@3:0.0.0
             logical name: /dev/cdrom
             logical name: /dev/cdrw
             logical name: /dev/dvd
             logical name: /dev/sr0
             version: 1.00
             capabilities: removable audio cd-r cd-rw dvd dvd-r dvd-ram
             configuration: ansiversion=5 status=ready

     *-usb:0
          description: USB controller
          product: USB1.1 UHCI Controller
          vendor: VMware
          physical id: 0
          bus info: pci@0000:02:00.0
          version: 00
          width: 32 bits
          clock: 33MHz
          capabilities: uhci bus_master cap_list
          configuration: driver=uhci_hcd latency=64
          resources: irq:18 ioport:2080(size=32)
     *-network
          description: Ethernet interface
          product: 82545EM Gigabit Ethernet Controller (Copper)
          vendor: Intel Corporation
          physical id: 1
          bus info: pci@0000:02:01.0
          logical name: eth0
          version: 01
          serial: 00:0c:29:18:92:42
          size: 1Gbit/s
          capacity: 1Gbit/s
          width: 64 bits
          clock: 66MHz
          capabilities: bus_master cap_list rom ethernet physical logical tp 10bt 10bt-fd 100bt 100bt-fd 1000bt-fd autonegotiation
          configuration: autonegotiation=on broadcast=yes driver=e1000 driverversion=5.10.0-kali7-amd64 duplex=full ip=192.168.116.128 latency=0 link=yes mingnt=255 multicast=yes port=
          resources: irq:19 memory:fd5c0000-fd5dffff memory:fdff0000-fdffffff ioport:2000(size=64) memory:fd500000-fd50ffff
     *-multimedia
          description: Multimedia audio controller
          product: ES1371/ES1373 / Creative Labs CT2518
          vendor: Ensoniq
          physical id: 2
          bus info: pci@0000:02:02.0
          logical name: card0
          logical name: /dev/snd/controlC0
          logical name: dmmidi
          logical name: midi
          logical name: /dev/snd/midiC0D0
          logical name: /dev/snd/pcmC0D0c
          logical name: /dev/snd/pcmC0D0p
          logical name: /dev/snd/pcmC0D1p
          version: 02

Failed to launch shortcut "<Super>Print"

Failed to execute child process "bazarr" (No such file or directory)

File Actions Edit View Help

       resources: irq:16 ioport:1070(size=16) memory:e8000000-efffffff memory:fe000000-fe7fffff memory:c0000-dffff
  *-scsi
       description: SCSI storage controller
       product: 53c1030 PCI-X Fusion-MPT Dual Ultra320 SCSI
       vendor: Broadcom / LSI
       physical id: 10
       bus info: pci@0000:00:10.0
       version: 01
       width: 64 bits
       clock: 33MHz
       capabilities: scsi bus_master cap_list rom
       configuration: driver=mptspi latency=64 maxlatency=255 mingnt=6
       resources: irq:17 ioport:1400(size=256) memory:feba0000-febbffff memory:febc0000-febdffff memory:c0008000-c000bfff
  *-pci:1
       description: PCI bridge
       product: PCI bridge
       vendor: VMware
       physical id: 11
       bus info: pci@0000:00:11.0
       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
          description: USB controller
          product: USB1.1 UHCI Controller
          vendor: VMware
          physical id: 0
          bus info: pci@0000:02:00.0
          version: 00
          width: 32 bits
          clock: 33MHz
          capabilities: uhci bus_master cap_list
          configuration: driver=uhci_hcd latency=64
          resources: irq:18 ioport:2080(size=32)
     *-network
          description: Ethernet interface
          product: 82545EM Gigabit Ethernet Controller (Copper)
          vendor: Intel Corporation
          physical id: 1
          bus info: pci@0000:02:01.0
          logical name: eth0

File Actions Edit View Help

     *-ide
          description: IDE interface
          product: 82371AB/EB/MB PIIX4 IDE
          vendor: Intel Corporation
          physical id: 7.1
          bus info: pci@0000:00:07.1
          version: 01
          width: 32 bits
          clock: 33MHz
          capabilities: ide isa_compat_mode pci_native_mode bus_master
          configuration: driver=ata_piix latency=64
          resources: irq:0 ioport:1f0(size=8) ioport:3f6 ioport:170(size=8) ioport:376 ioport:1060(size=16)
     *-bridge UNCLAIMED
          description: Bridge
          product: 82371AB/EB/MB PIIX4 ACPI
          vendor: Intel Corporation
          physical id: 7.3
          bus info: pci@0000:00:07.3
          version: 08
          width: 32 bits
          clock: 33MHz
          capabilities: bridge
          configuration: latency=0
     *-generic
          description: System peripheral
          product: Virtual Machine Communication Interface
          vendor: VMware
          physical id: 7.7
          bus info: pci@0000:00:07.7
          version: 10
          width: 64 bits
          clock: 33MHz
          capabilities: bus_master cap_list
          configuration: driver=vmw_vmci latency=64 maxlatency=255 mingnt=6
          resources: irq:16 ioport:1080(size=64) memory:febfe000-febfffff
  *-display
       description: VGA compatible controller
       product: SVGA II Adapter
       vendor: VMware
       physical id: f
       bus info: pci@0000:00:0f.0
       logical name: /dev/fb0
       version: 00

```
            product: PnP device PNP0c02
            physical id: 0
            capabilities: pnp
            configuration: driver=system
     *-pnp00:01
            product: PnP device PNP0b00
            physical id: 1
            capabilities: pnp
            configuration: driver=rtc_cmos
     *-pnp00:02
            product: PnP device PNP0303
            physical id: 2
            capabilities: pnp
            configuration: driver=i8042 kbd
     *-pnp00:03
            product: PnP device VMW0003
            physical id: 3
            capabilities: pnp
            configuration: driver=i8042 aux
     *-pnp00:04
            product: PnP device PNP0103
            physical id: 4
            capabilities: pnp
            configuration: driver=system
     *-pnp00:05
            product: PnP device PNP0501
            physical id: 5
            capabilities: pnp
            configuration: driver=serial
     *-pnp00:06
            product: PnP device PNP0c02
            physical id: 6
            capabilities: pnp
            configuration: driver=system
  *-ide
        description: IDE interface
        product: 82371AB/EB/MB PIIX4 IDE
        vendor: Intel Corporation
        physical id: 7.1
        bus info: pci@0000:00:07.1
        version: 01
        width: 32 bits
        clock: 33MHz
```

```
_tsc cpuid pni pclmulqdq ssse3 fma cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand hypervisor lahf_lm abm 3dnowprefetch cpuid_fault invpcid_single pt
1 avx2 smep bmi2 invpcid rdseed adx smap clflushopt xsaveopt xsavec xgetbv1 xsaves arat md_clear flush_l1d arch_capabilities
        configuration: microcode=180
  *-pci
     description: Host bridge
     product: 440BX/ZX/DX - 82443BX/ZX/DX Host bridge
     vendor: Intel Corporation
     physical id: 100
     bus info: pci@0000:00:00.0
     version: 01
     width: 32 bits
     clock: 33MHz
     configuration: driver=agpgart-intel
     resources: irq:0
   *-pci:0
        description: PCI bridge
        product: 440BX/ZX/DX - 82443BX/ZX/DX AGP bridge
        vendor: Intel Corporation
        physical id: 1
        bus info: pci@0000:00:01.0
        version: 01
        width: 32 bits
        clock: 66MHz
        capabilities: pci normal_decode bus_master
   *-isa
        description: ISA bridge
        product: 82371AB/EB/MB PIIX4 ISA
        vendor: Intel Corporation
        physical id: 7
        bus info: pci@0000:00:07.0
        version: 08
        width: 32 bits
        clock: 33MHz
        capabilities: isa bus_master
        configuration: latency=0
      *-pnp00:00
            product: PnP device PNP0c02
            physical id: 0
            capabilities: pnp
            configuration: driver=system
      *-pnp00:01
            product: PnP device PNP0b00
            physical id: 1
```

┌──(adi㉿kali)-[~]
└─$ lshw
WARNING: you should run this program as super-user.
kali
    description: Computer
    width: 64 bits
    capabilities: smp vsyscall32
  *-core
       description: Motherboard
       physical id: 0
     *-memory
          description: System memory
          physical id: 0
          size: 2GiB
     *-cpu:0
          product: Intel(R) Core(TM) i3-7020U CPU @ 2.30GHz
          vendor: Intel Corp.
          physical id: 1
          bus info: cpu@0
          version: 6.142.10
          width: 64 bits
          capabilities: fpu fpu_exception wp vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ss syscall nx pdpe1gb rdtscp x86-64 constant_tsc arch_perfmon nopl xtopology tsc_reliable nonstop_tsc cpuid pni pclmulqdq ssse3 fma cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand hypervisor lahf_lm abm 3dnowprefetch cpuid_fault invpcid_single pti ssbd ibrs ibpb stibp fsgsbase tsc_adjust bmi1 avx2 smep bmi2 invpcid rdseed adx smap clflushopt xsaveopt xsavec xgetbv1 xsaves arat md_clear flush_l1d arch_capabilities
          configuration: microcode=180
     *-cpu:1
          product: Intel(R) Core(TM) i3-7020U CPU @ 2.30GHz
          vendor: Intel Corp.
          physical id: 2
          bus info: cpu@1
          version: 6.142.10
          width: 64 bits
          capabilities: fpu fpu_exception wp vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ss syscall nx pdpe1gb rdtscp x86-64 constant_tsc arch_perfmon nopl xtopology tsc_reliable nonstop_tsc cpuid pni pclmulqdq ssse3 fma cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand hypervisor lahf_lm abm 3dnowprefetch cpuid_fault invpcid_single pti ssbd ibrs ibpb stibp fsgsbase tsc_adjust bmi1 avx2 smep bmi2 invpcid rdseed adx smap clflushopt xsaveopt xsavec xgetbv1 xsaves arat md_clear flush_l1d arch_capabilities
          configuration: microcode=180
     *-pci
          description: Host bridge
          product: 440BX/ZX/DX - 82443BX/ZX/DX Host bridge
          vendor: Intel Corporation
          physical id: 100
          bus info: pci@0000:00:00.0
          version: 01
          width: 32 bits
          clock: 33MHz
          configuration: driver=agpgart-intel
          resources: irq:0
        *-pci:0
             description: PCI bridge
             product: 440BX/ZX/DX - 82443BX/ZX/DX AGP bridge
             vendor: Intel Corporation
             physical id: 1
             bus info: pci@0000:00:01.0

             logical name: input0::capslock
             logical name: input0::numlock
             logical name: input0::scrolllock
             capabilities: i8042
  *-input:1
          product: Power Button
          physical id: 2
          logical name: input2
          logical name: /dev/input/event1
          capabilities: platform
  *-input:2
          product: VirtualPS/2 VMware VMMouse
          physical id: 3
          logical name: input3
          logical name: /dev/input/event3
          logical name: /dev/input/mouse1
          capabilities: i8042
  *-input:3
          product: VirtualPS/2 VMware VMMouse
          physical id: 4
          logical name: input4
          logical name: /dev/input/event2
          logical name: /dev/input/mouse0
          capabilities: i8042
  *-input:4
          product: VMware VMware Virtual USB Mouse
          physical id: 5
          logical name: input5
          logical name: /dev/input/event4
          logical name: /dev/input/mouse2
          capabilities: usb
  *-input:5
          product: PC Speaker
          physical id: 6
          logical name: input6
          logical name: /dev/input/event5
          capabilities: isa
WARNING: output may be incomplete or inaccurate, you should run this program as super-user.

┌──(adi㉿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.

```
Memory Device Mapped Address
        Starting Address: 0x0007FFFFC00
        Ending Address: 0x0007FFFFFFF
        Range Size: 1 kB
        Physical Device Handle: 0x01DB
        Memory Array Mapped Address Handle: 0x0224
        Partition Row Position: Unknown
        Interleave Position: Unknown
        Interleaved Data Depth: Unknown

Handle 0x025E, DMI type 20, 35 bytes
Memory Device Mapped Address
        Starting Address: 0x0007FFFFC00
        Ending Address: 0x0007FFFFFFF
        Range Size: 1 kB
        Physical Device Handle: 0x01DC
        Memory Array Mapped Address Handle: 0x0224
        Partition Row Position: Unknown
        Interleave Position: Unknown
        Interleaved Data Depth: Unknown

Handle 0x025F, DMI type 20, 35 bytes
Memory Device Mapped Address
        Starting Address: 0x0007FFFFC00
        Ending Address: 0x0007FFFFFFF
        Range Size: 1 kB
        Physical Device Handle: 0x01DD
        Memory Array Mapped Address Handle: 0x0224
        Partition Row Position: Unknown
        Interleave Position: Unknown
        Interleaved Data Depth: Unknown

Handle 0x0260, DMI type 20, 35 bytes
Memory Device Mapped Address
        Starting Address: 0x0007FFFFC00
        Ending Address: 0x0007FFFFFFF
        Range Size: 1 kB
        Physical Device Handle: 0x01DE
        Memory Array Mapped Address Handle: 0x0224
        Partition Row Position: Unknown
```

```
                    64-bit capable
                    Execute Protection

Handle 0×001E, DMI type 4, 42 bytes
Processor Information
        Socket Designation: CPU #027
        Type: Central Processor
        Family: Unknown
        Manufacturer: GenuineIntel
        ID: EA 06 00 00 FF FB 8B 0F
        Version: Intel(R) Core(TM) i3-7020U CPU @ 2.30GHz
        Voltage: 3.3 V
        External Clock: Unknown
        Max Speed: 30000 MHz
        Current Speed: 2300 MHz
        Status: Populated, Disabled By BIOS
        Upgrade: ZIF Socket
        L1 Cache Handle: 0×00AE
        L2 Cache Handle: 0×012E
        L3 Cache Handle: Not Provided
        Serial Number: Not Specified
        Asset Tag: Not Specified
        Part Number: Not Specified
        Core Count: 1
        Core Enabled: 1
        Characteristics:
                64-bit capable
                Execute Protection

Handle 0×001F, DMI type 4, 42 bytes
Processor Information
        Socket Designation: CPU #028
        Type: Central Processor
        Family: Unknown
        Manufacturer: GenuineIntel
        ID: EA 06 00 00 FF FB 8B 0F
        Version: Intel(R) Core(TM) i3-7020U CPU @ 2.30GHz
        Voltage: 3.3 V
        External Clock: Unknown
        Max Speed: 30000 MHz
```

```
        Characteristics:
                ISA is supported
                PCI is supported
                PC Card (PCMCIA) is supported
                PNP is supported
                APM is supported
                BIOS is upgradeable
                BIOS shadowing is allowed
                ESCD support is available
                Boot from CD is supported
                Selectable boot is supported
                EDD is supported
                Print screen service is supported (int 5h)
                8042 keyboard services are supported (int 9h)
                Serial services are supported (int 14h)
                Printer services are supported (int 17h)
                CGA/mono video services are supported (int 10h)
                ACPI is supported
                Smart battery is supported
                BIOS boot specification is supported
                Function key-initiated network boot is supported
                Targeted content distribution is supported
        BIOS Revision: 4.6
        Firmware Revision: 0.0

Handle 0x0001, DMI type 1, 27 bytes
System Information
        Manufacturer: VMware, Inc.
        Product Name: VMware Virtual Platform
        Version: None
        Serial Number: VMware-56 4d 1d 5f 31 e5 19 16-c4 52 2d fa 56 18 92 42
        UUID: 5f1d4d56-e531-1619-c452-2dfa56189242
        Wake-up Type: Power Switch
        SKU Number: Not Specified
        Family: Not Specified

Handle 0x0002, DMI type 2, 15 bytes
Base Board Information
        Manufacturer: Intel Corporation
        Product Name: 440BX Desktop Reference Platform
```

```
# dmidecode 3.4
/sys/firmware/dmi/tables/smbios_entry_point: Permission denied
Scanning /dev/mem for entry point.
/dev/mem: Permission denied

  ┌──(adi㉿kali)-[~]
  └─$ sudo dmidecode
[sudo] password for adi:
# dmidecode 3.4
Getting SMBIOS data from sysfs.
SMBIOS 2.7 present.
620 structures occupying 29060 bytes.
Table at 0×000E0010.

Handle 0×0000, DMI type 0, 24 bytes
BIOS Information
        Vendor: Phoenix Technologies LTD
        Version: 6.00
        Release Date: 11/12/2020
        Address: 0×EA480
        Runtime Size: 88960 bytes
        ROM Size: 64 kB
        Characteristics:
                ISA is supported
                PCI is supported
                PC Card (PCMCIA) is supported
                PNP is supported
                APM is supported
                BIOS is upgradeable
                BIOS shadowing is allowed
                ESCD support is available
                Boot from CD is supported
                Selectable boot is supported
                EDD is supported
                Print screen service is supported (int 5h)
                8042 keyboard services are supported (int 9h)
                Serial services are supported (int 14h)
                Printer services are supported (int 17h)
                CGA/mono video services are supported (int 10h)
                ACPI is supported
```

File Actions Edit View Help

Timeout: Unknown

Handle 0×0266, DMI type 24, 5 bytes
Hardware Security
        Power-On Password Status: Disabled
        Keyboard Password Status: Unknown
        Administrator Password Status: Enabled
        Front Panel Reset Status: Unknown

Handle 0×0267, DMI type 30, 6 bytes
Out-of-band Remote Access
        Manufacturer Name: Intel
        Inbound Connection: Enabled
        Outbound Connection: Disabled

Handle 0×0268, DMI type 32, 20 bytes
System Boot Information
        Status: No errors detected

Handle 0×0269, DMI type 33, 31 bytes
64-bit Memory Error Information
        Type: OK
        Granularity: Unknown
        Operation: Unknown
        Vendor Syndrome: Unknown
        Memory Array Address: Unknown
        Device Address: Unknown
        Resolution: Unknown

Handle 0×026A, DMI type 126, 4 bytes
Inactive

Handle 0×026B, DMI type 127, 4 bytes
End Of Table

┌──(adi㉿kali)-[~]
└─$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
        inet 192.168.116.128 netmask 255.255.255.0 broadcast 192.168.116.255

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.

```
┌──(adi㉿kali)-[~]
└─$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.116.128  netmask 255.255.255.0  broadcast 192.168.116.255
        inet6 fe80::20c:29ff:fe18:9242  prefixlen 64  scopeid 0x20<link>
        ether 00:0c:29:18:92:42  txqueuelen 1000  (Ethernet)
        RX packets 17783  bytes 24768354 (23.6 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 6011  bytes 391364 (382.1 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 16  bytes 800 (800.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 16  bytes 800 (800.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0


┌──(adi㉿kali)-[~]
└─$ sudo apt-get install iproute2
Reading package lists ... Done
Building dependency tree ... Done
Reading state information ... Done
iproute2 is already the newest version (6.1.0-1).
0 upgraded, 0 newly installed, 0 to remove and 1857 not upgraded.


┌──(adi㉿kali)-[~]
└─$ ip
Usage: ip [ OPTIONS ] OBJECT { COMMAND | help }
       ip [ -force ] -batch filename
where  OBJECT := { address | addrlabel | amt | fou | help | ila | ioam | l2tp |
                   link | macsec | maddress | monitor | mptcp | mroute | mrule |
                   neighbor | neighbour | netconf | netns | nexthop | ntable |
                   ntbl | route | rule | sr | tap | tcpmetrics |
                   token | tunnel | tuntap | vrf | xfrm }
       OPTIONS := { -V[ersion] | -s[tatistics] | -d[etails] | -r[esolve] |
                    -h[uman-readable] | -iec | -j[son] | -p[retty] |
```

lsblk

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

Storage Info

File   Edit   View   Search   Terminal   Help

Filesystem	Size	Used	Avail	Use%	Mounted on
udev	930M	0	930M	0%	/dev
tmpfs	194M	1.2M	193M	1%	/run
/dev/sda1	19G	12G	6.0G	67%	/
tmpfs	969M	0	969M	0%	/dev/shm
tmpfs	5.0M	0	5.0M	0%	/run/lock
tmpfs	194M	84K	194M	1%	/run/user/1000

Press enter to exit

File Edit View Search Terminal Help
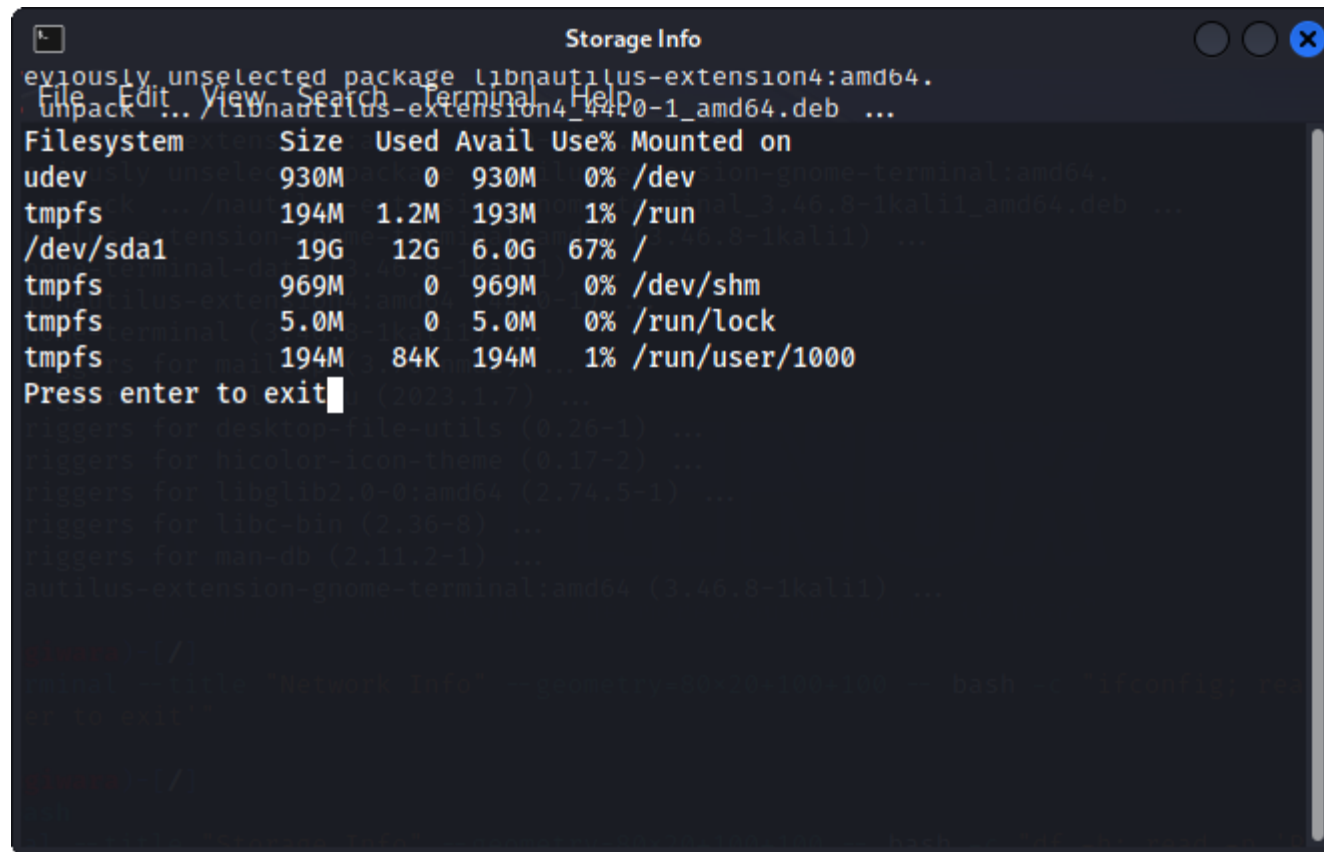
ibnautilus-extension4.amd64 (44.0-1) ...

1680x1050	59.95
1400x1050	59.98
1280x1024	60.02
1440x900	59.89
1280x960	60.00
1360x768	60.02
1280x800	59.81
1152x864	75.00
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

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
3840x2400	59.97
3840x2160	59.97
2880x1800	59.95
2560x1600	59.99
2560x1440	59.95
1920x1440	60.00
1856x1392	60.00
1792x1344	60.00
1920x1200	59.88
1920x1080	59.96
1600x1200	60.00
1680x1050	59.95
1400x1050	59.98
1280x1024	60.02
1440x900	59.89
1280x960	60.00

```
ring to unpack .../gnome-terminal-data_3.46.8-1kali1_all.deb ...
```
```
king gnome-terminal-data (3.46.8-1kali1) ...
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
```