

Lab 1– Kali Linux VM

NAME – Student ID	COURSE CODE	WEIGHT
Ishan Aakash Patel - 146151238	CYT130	7%

Lab Objectives

- Install VirtualBox;
- Install VirtualBox Extension Pack;
- Fix VirtualBox NAT Networks configuration option;
- Install Kali Linux Virtual Machine (VM);
- Troubleshoot Kali Linux installation;
- Update and configure Kali Linux VM;
- Update and configure Kali Linux OS;
- Take a snapshot of Kali Linux VM.

Please note: Your screenshots must include your name and student ID.

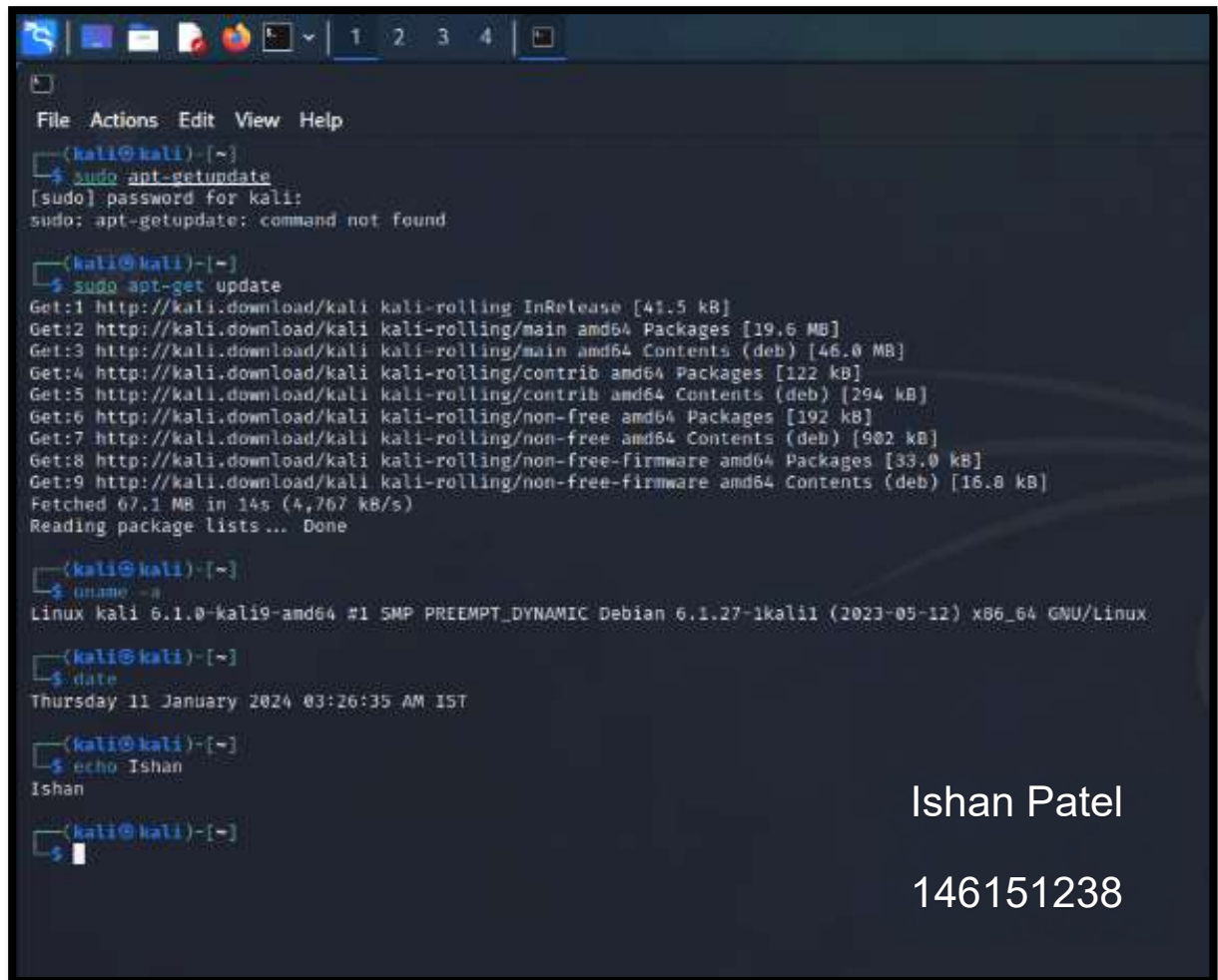
1- Follow the steps in Part 1 to Part 4. No need to add anything here.

Follow the steps in Part 5: Updating Kali Linux

As per indicated in Part 5, step 11, at the command prompt type several command and your name.

- uname -a*
- date*
- <Your name>*

<Insert “your” last Screenshot Here>



```
File Actions Edit View Help
kali@kali:~$ sudo apt-get update
[sudo] password for kali:
sudo: apt-getupdate: command not found

kali@kali:~$ sudo apt-get update
Get:1 http://kali.download/kali kali-rolling InRelease [41.5 kB]
Get:2 http://kali.download/kali kali-rolling/main amd64 Packages [19.6 MB]
Get:3 http://kali.download/kali kali-rolling/main amd64 Contents (deb) [46.0 MB]
Get:4 http://kali.download/kali kali-rolling/contrib amd64 Packages [122 kB]
Get:5 http://kali.download/kali kali-rolling/contrib amd64 Contents (deb) [294 kB]
Get:6 http://kali.download/kali kali-rolling/non-free amd64 Packages [192 kB]
Get:7 http://kali.download/kali kali-rolling/non-free amd64 Contents (deb) [902 kB]
Get:8 http://kali.download/kali kali-rolling/non-free-firmware amd64 Packages [33.0 kB]
Get:9 http://kali.download/kali kali-rolling/non-free-firmware amd64 Contents (deb) [16.8 kB]
Fetched 67.1 MB in 14s (4,767 kB/s)
Reading package lists... Done

kali@kali:~$ uname -a
Linux kali 6.1.0-kali9-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.27-1kali1 (2023-05-12) x86_64 GNU/Linux

kali@kali:~$ date
Thursday 11 January 2024 03:26:35 AM IST

kali@kali:~$ echo Ishan
Ishan

kali@kali:~$
```

Ishan Patel

146151238

As per indicated in step 12 of the lab instructions, take a screenshot of the output (Host + e) and insert it below. Find a screenshot in your Operating System's "VirtulaBox VMs" directory.

Screenshot: Kali Linux installation screenshot.

Oracle VM VirtualBox Manager

FileMachineHelp

Tools

Ubuntu

Powered Off

Kali 2023 (Snapshot 1)

Running

General

Name:

Kali 2023

Operating System:

Debian (64-bit)

System

Base Memory:

4096 MB

Boot Order:

Floppy, Optical, Hard Disk

Acceleration:

VT-x/AMD-V, Nested Paging, KVM Paravirtualization

Display

Video Memory:

16 MB

Graphics Controller:

VMSVGA

Remote Desktop Server:

Disabled

Recording:

Disabled

Storage

Controller:

IDE

IDE Secondary Device 0:

[Optical Drive] Empty

Controller:

SATA

SATA Port 0:

Kalilinux2023.vdi (Normal, 20.00 GB)

Audio

Host Driver:

Windows DirectSound

Controller:

ICH AC97

Network

Adapter 1:

Intel PRO/1000 MT Desktop (NAT)

USB

USB Controller:

OHCI

Device Filters:

0 (0 active)

Shared folders

None

Description

None

Preview

-1°C

Cloudy

Search

Taskbar icons: File Explorer, Microsoft Edge, VS Code, etc.

ENG IN 17:19 1/10/2024

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146151238

Oracle VM VirtualBox Manager

FileMachineSnapshotHelp

Tools

Ubuntu

Powered Off

Kali 2023

Running

TakeDeleteRestorePropertiesCloneSettingsDiscardShow

Name

Current State

Taken

AttributesInformation

General

Name:

Kali 2023

Operating System:

Debian (64-bit)

Settings File Location:

C:\Users\ASUS\VirtualBox VMs\Kali 2023

System

Base Memory:

4096 MB

Boot Order:

Floppy, Optical, Hard Disk

Acceleration:

VT-x/AMD-V, Nested Paging, KVM Paravirtualization

Display

Video Memory:

16 MB

Graphics Controller:

VMSVGA

Remote Desktop Server:

Disabled

Recording File:

C:\Users\ASUS\VirtualBox VMs\Kali 2023\Kali 2023.webm

Recording Attributes:

Frame Size: 1024x768, Frame Rate: 25fps, Bit Rate: 512kbps

Audio

Host Driver:

Windows DirectSound

Controller:

ICH AC97

Storage

Controller:

IDE

IDE Secondary Device 0 [Optical Drive]:

Empty

Controller:

SATA

SATA Port 0:

Kalilinux2023.vdi (Normal, 20.00 GB)

Network

Adapter 1:

Intel PRO/1000 MT Desktop (NAT)

Serial ports

Disabled

USB

USB Controller:

OHCI

Device Filters:

0 (0 active)

Shared folders

None

-1°C

Cloudy

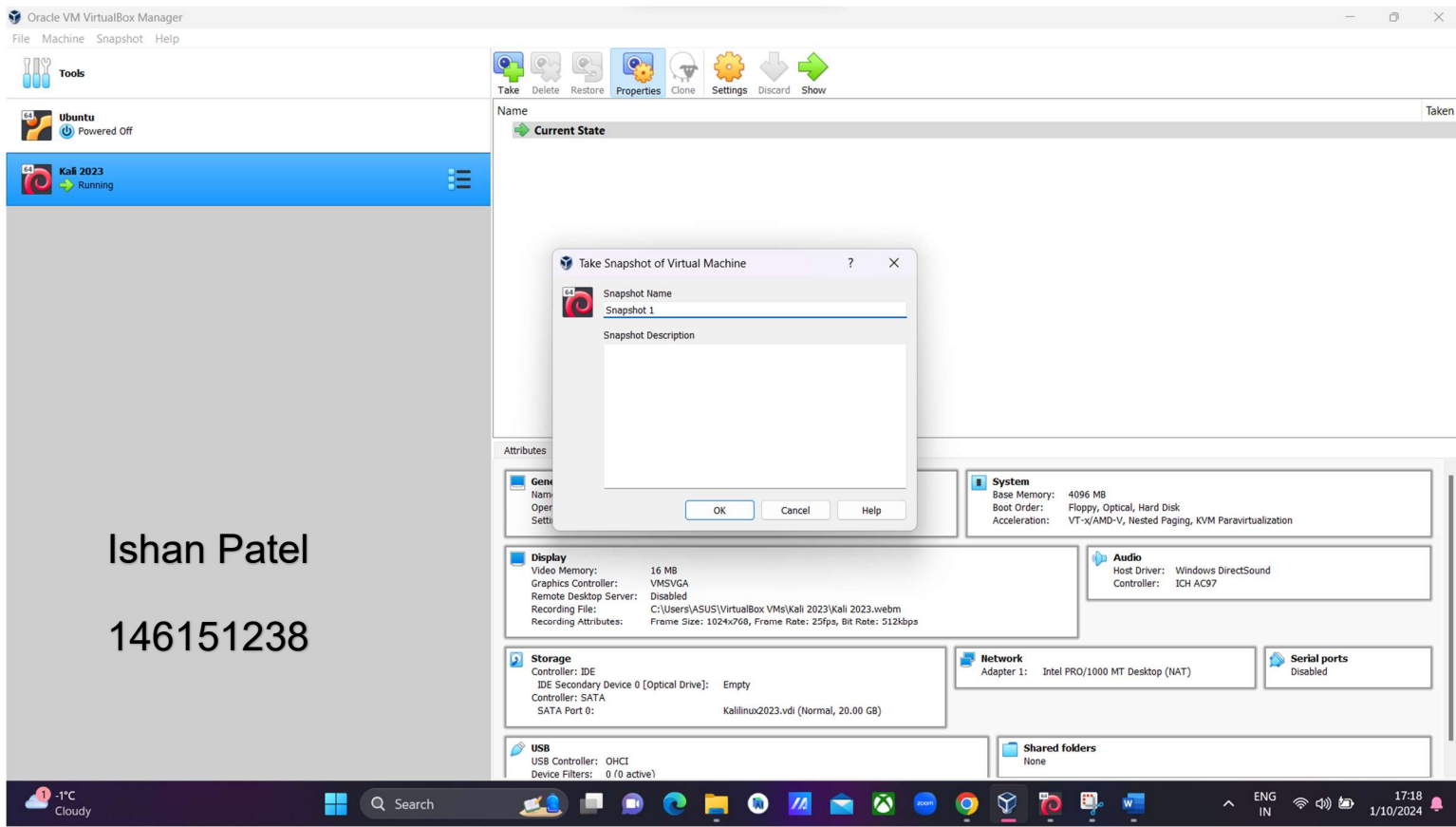
Search

Taskbar icons: File Explorer, Microsoft Edge, VS Code, etc.

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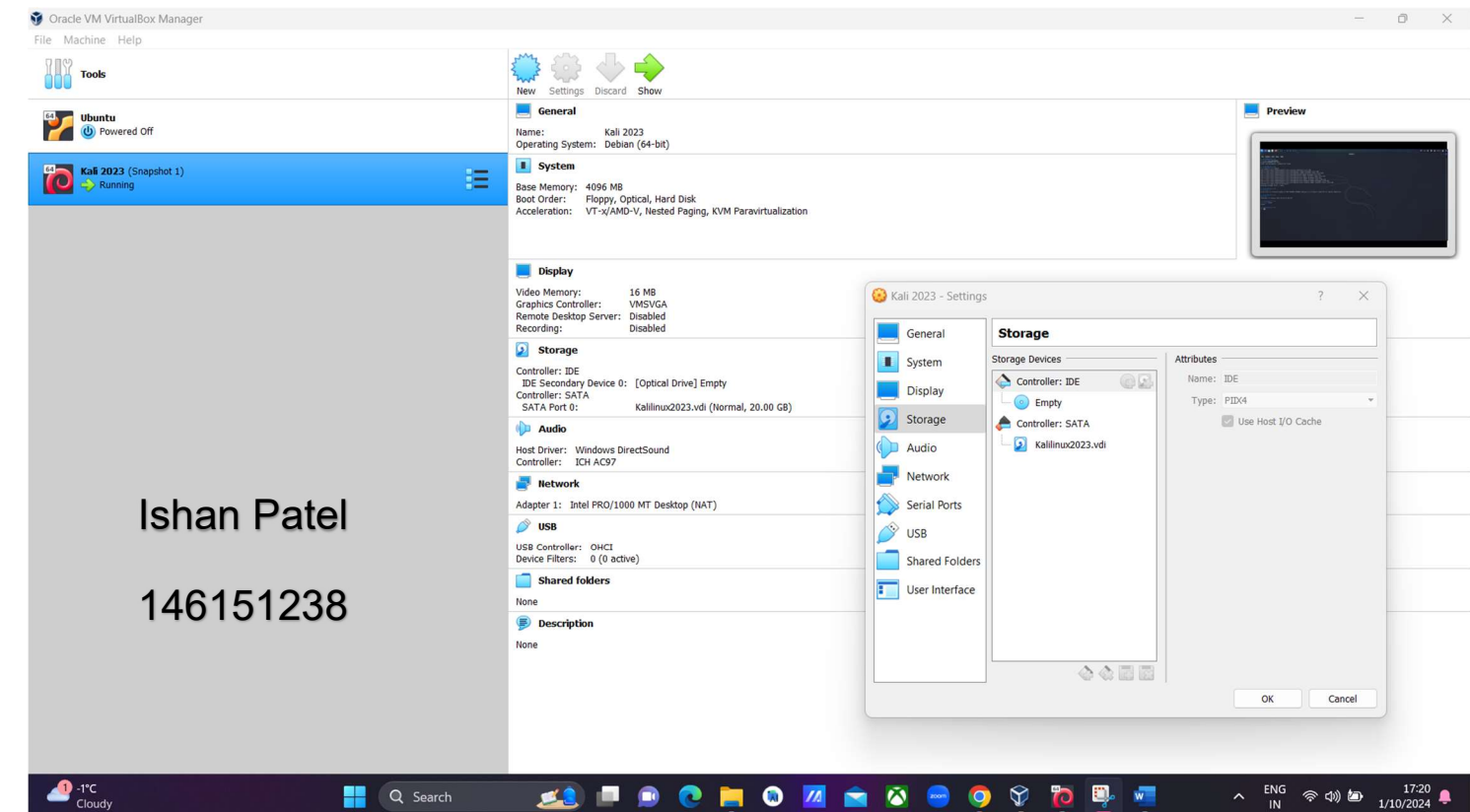
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146151238



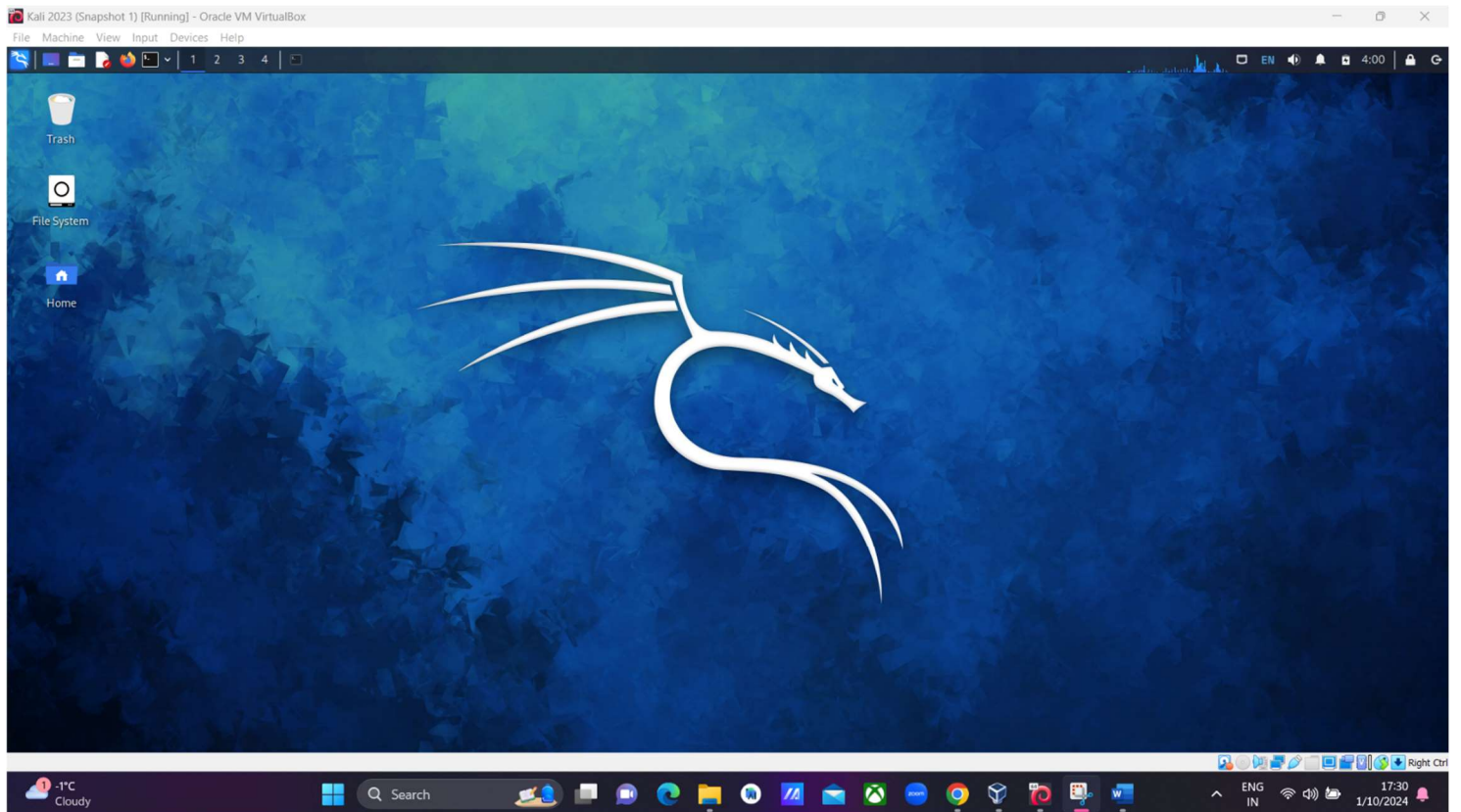
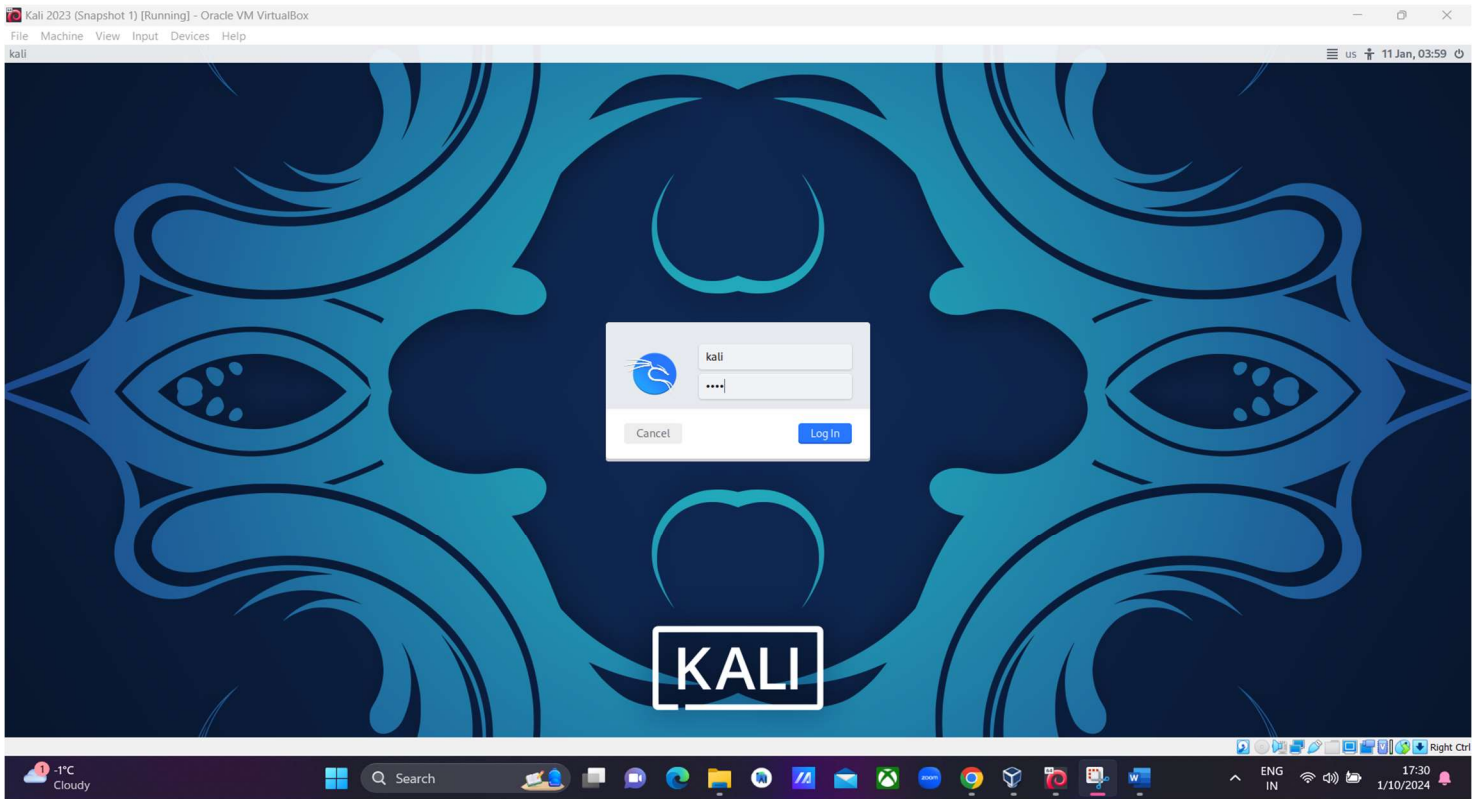
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146151238



Ishan Patel

146151238





Answer the following questions using **your own words** ONLY

- What is **apt** command in Kali Linux?

The full form of apt is Advanced Packaging Tool. It is basically used for installing new packages, updating current packages, upgrading the current system etc.

- What is **sudo** command in Linux?

Sudo command is used in linux to access the admin privileged services and tools. If you want to use the sudo command, you can use it right away by giving the password of your linux system for authentication.

- According to Code of Conduct, you should ensure all penetration testing activities are (complete the sentence and describe what it means?)

According to the EC Council Code of Conduct, Ensure all penetration testing activities are authorized and within legal limits. Not to take part in any black hat activity or be associated with any black hat community that serves to endanger networks. Not to be part of any underground hacking community for purposes of preaching and expanding black hat activities. (Source : [EC Council](#)) This means that anyone performing the pentesting should be done if he/she is only authorized to do it. The person should not take part in any illegal activities or any group.

- What are the two elements of a Security Risk?

The two important elements of a security risk are:

- 1) Severity of Harm (Impact)
- 2) Likelihood.

Using both of the above elements we can ensure the level of the security risk to occur and harm. This is mostly used in the reports made by the Pen-testers. The report is also known as Detailed Developer Report. In simple words, using this the client can understand how much dangerous the vulnerability is.

Submit your lab considering the following guidance:



- Doublecheck all your answers.
- Save the file on your computer for future reference.
- Save the file again as a “.pdf” file.
- Submit the **PDF** file for grading.