ITA1466-ETHICAL HACKING

LAB MANUAL

Exercise No 1: Nmap Scan

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Reg No :
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Aim:

To install and perform Nmap scan (note :- you may use ip address or website name)

Procedure:

Step 1: Open Nmap from Kali Linux (Goto Applications->select Information Gathering->select Nmap)

Step 2: Perform different types of scan
(Tcp, Udp, Ack, Syn, Fin, Null, Xmas, Rpc, Idle)- scan types

Scanning Techniques

Flag	Use	Example
-sS	**TCP syn port scan**	**nmap -sS 192.168.1.1**
-sT	**TCP connect port scan**	**nmap -sT 192.168.1.1**
–sU	**UDP port scan**	**nmap –sU 192.168.1.1**
–sA	**TCP ack port scan**	**nmap –sA 192.168.1.1**

Step 3:-
To perform host discovery

-Pn	only port scan	nmap -Pn192.168.1.1

-sn	only host discover	nmap -sn192.168.1.1
-PR	arp discovery on a local network	nmap -PR192.168.1.1
-n	disable DNS resolution	nmap -n 192.168.1.1

Step4:-

Port Specification

Flag	**Use**	**Example**
-p	**specify a port or port range**	**nmap -p 1-30 192.168.1.1**
-p-	**scan all ports**	**nmap -p- 192.168.1.1**
F	**fast port scan**	**nmap -F 192.168.1.1**

Step 5:-

Service Version and OS Detection

Flag	Use	Example
-sV	detect the version of services running	nmap -sV 192.168.1.1
-A	aggressive scan	nmap -A 192.168.1.1
-O	detect operating system of the target	nmap -O 192.168.1.1

Step 6:-

Timing and Performance

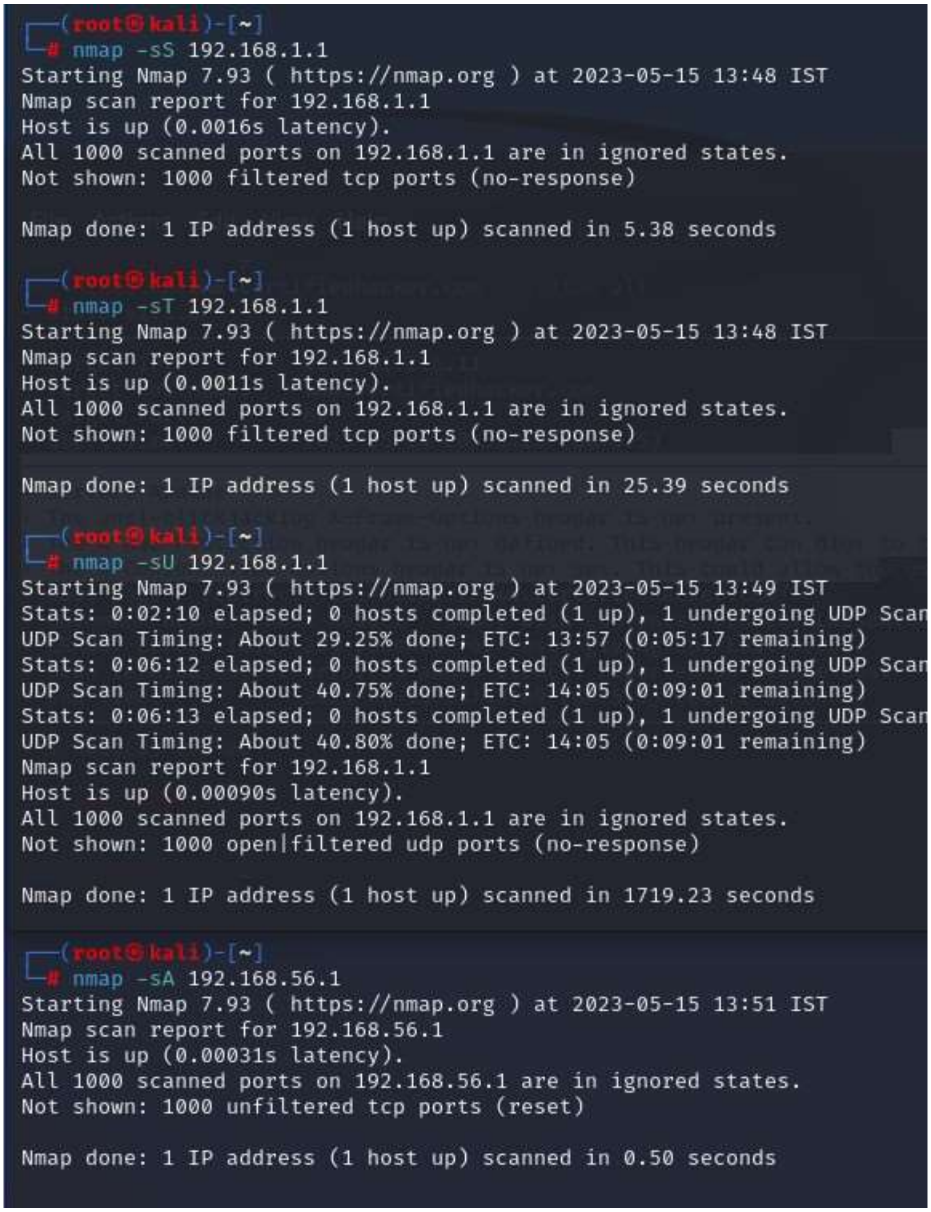
Flag	Use	Example
-T0	paranoid IDS evasion	nmap -T0 192.168.1.1

-T1	sneaky IDS evasion	nmap -T1 192.168.1.1
-T2	polite IDS evasion	nmap -T2 192.168.1.1
-T3	normal IDS evasion	nmap -T3 192.168.1.1
-T4	aggressive speed scan	nmap -T4 192.168.1.1
-T5	insane speed scan	nmap -T5 192.168.1.1

Output:

Step 1: Open Nmap from Kali Linux (Goto Applications->select Information Gathering->select Nmap)

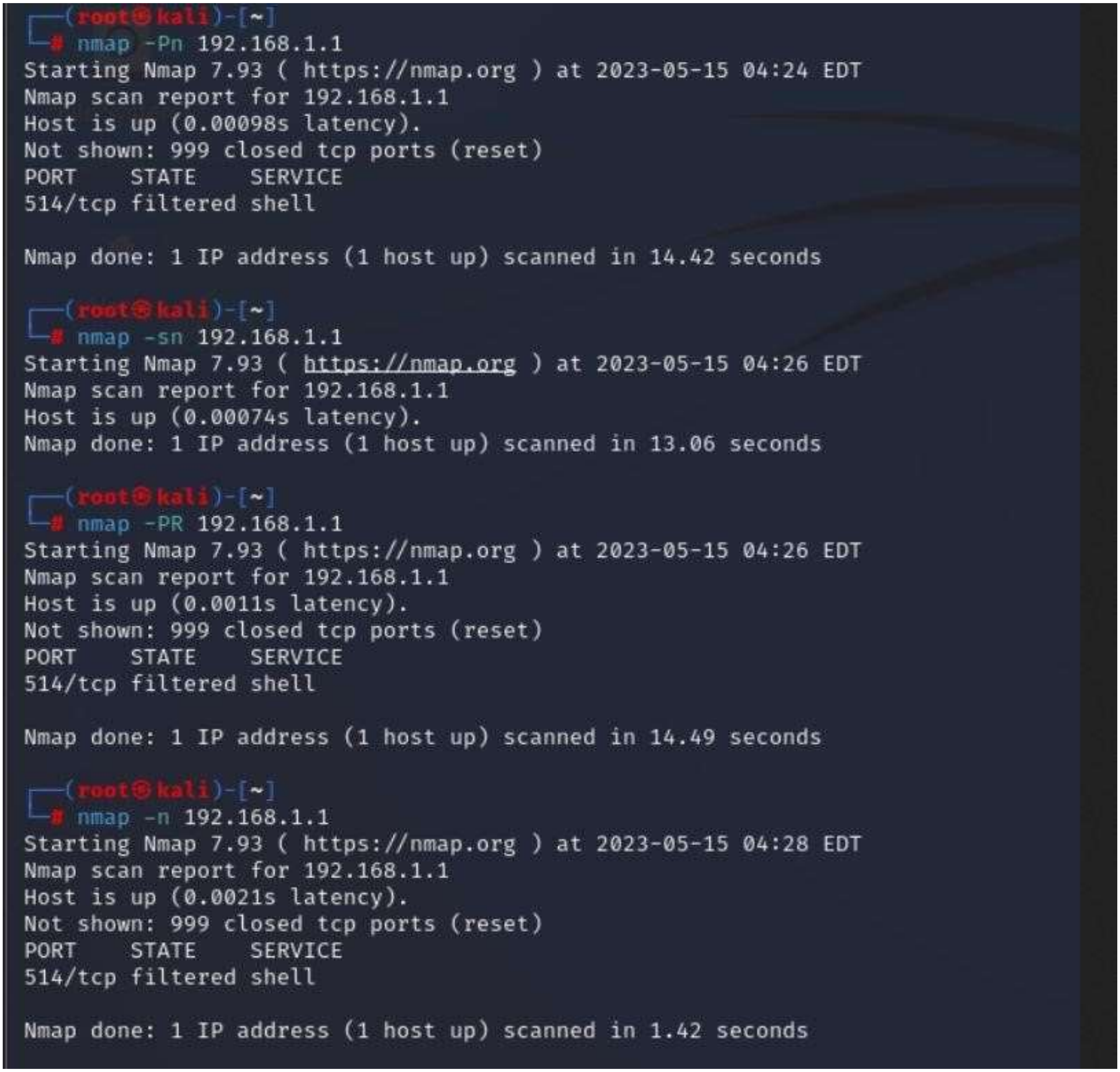
Step 2: Perform different types of scan
(Tcp, Udp, Ack, Syn, Fin, Null, Xmas, Rpc, Idle)- scan types



```
┌──(root㉿kali)-[~]
└─# nmap -sS 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 13:48 IST
Nmap scan report for 192.168.1.1
Host is up (0.0016s latency).
All 1000 scanned ports on 192.168.1.1 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)

Nmap done: 1 IP address (1 host up) scanned in 5.38 seconds

┌──(root㉿kali)-[~]
└─# nmap -sT 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 13:48 IST
Nmap scan report for 192.168.1.1
Host is up (0.0011s latency).
All 1000 scanned ports on 192.168.1.1 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)

Nmap done: 1 IP address (1 host up) scanned in 25.39 seconds

┌──(root㉿kali)-[~]
└─# nmap -sU 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 13:49 IST
Stats: 0:02:10 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 29.25% done; ETC: 13:57 (0:05:17 remaining)
Stats: 0:06:12 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 40.75% done; ETC: 14:05 (0:09:01 remaining)
Stats: 0:06:13 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 40.80% done; ETC: 14:05 (0:09:01 remaining)
Nmap scan report for 192.168.1.1
Host is up (0.00090s latency).
All 1000 scanned ports on 192.168.1.1 are in ignored states.
Not shown: 1000 open|filtered udp ports (no-response)

Nmap done: 1 IP address (1 host up) scanned in 1719.23 seconds

┌──(root㉿kali)-[~]
└─# nmap -sA 192.168.56.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 13:51 IST
Nmap scan report for 192.168.56.1
Host is up (0.00031s latency).
All 1000 scanned ports on 192.168.56.1 are in ignored states.
Not shown: 1000 unfiltered tcp ports (reset)

Nmap done: 1 IP address (1 host up) scanned in 0.50 seconds
```

<u>Step 3:-</u>

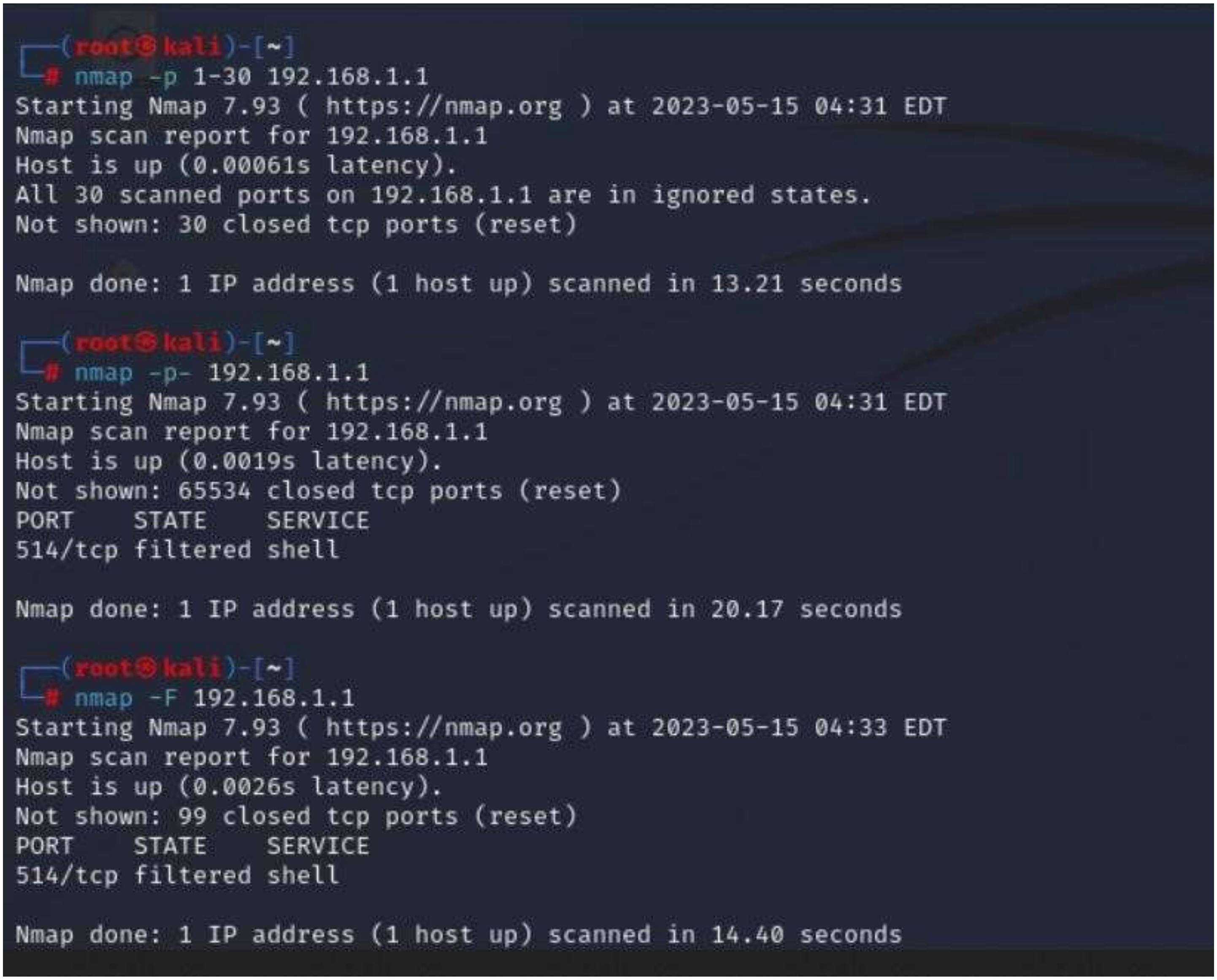
To perform host discovery



```
┌──(root㉿kali)-[~]
└─# nmap -Pn 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 04:24 EDT
Nmap scan report for 192.168.1.1
Host is up (0.00098s latency).
Not shown: 999 closed tcp ports (reset)
PORT    STATE    SERVICE
514/tcp filtered shell

Nmap done: 1 IP address (1 host up) scanned in 14.42 seconds

┌──(root㉿kali)-[~]
└─# nmap -sn 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 04:26 EDT
Nmap scan report for 192.168.1.1
Host is up (0.00074s latency).
Nmap done: 1 IP address (1 host up) scanned in 13.06 seconds

┌──(root㉿kali)-[~]
└─# nmap -PR 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 04:26 EDT
Nmap scan report for 192.168.1.1
Host is up (0.0011s latency).
Not shown: 999 closed tcp ports (reset)
PORT    STATE    SERVICE
514/tcp filtered shell

Nmap done: 1 IP address (1 host up) scanned in 14.49 seconds

┌──(root㉿kali)-[~]
└─# nmap -n 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 04:28 EDT
Nmap scan report for 192.168.1.1
Host is up (0.0021s latency).
Not shown: 999 closed tcp ports (reset)
PORT    STATE    SERVICE
514/tcp filtered shell

Nmap done: 1 IP address (1 host up) scanned in 1.42 seconds
```

Step4:-

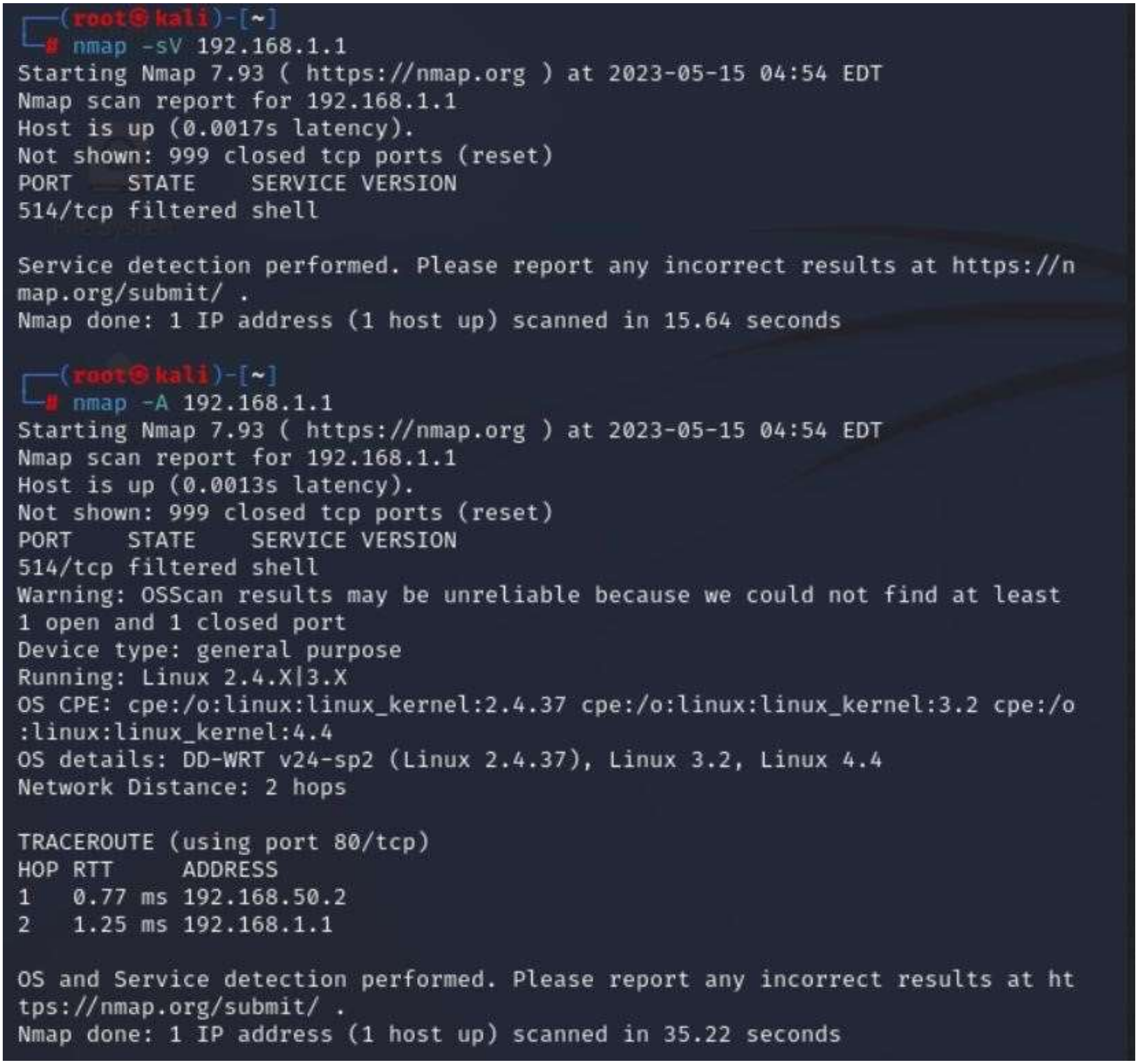
Port Specification



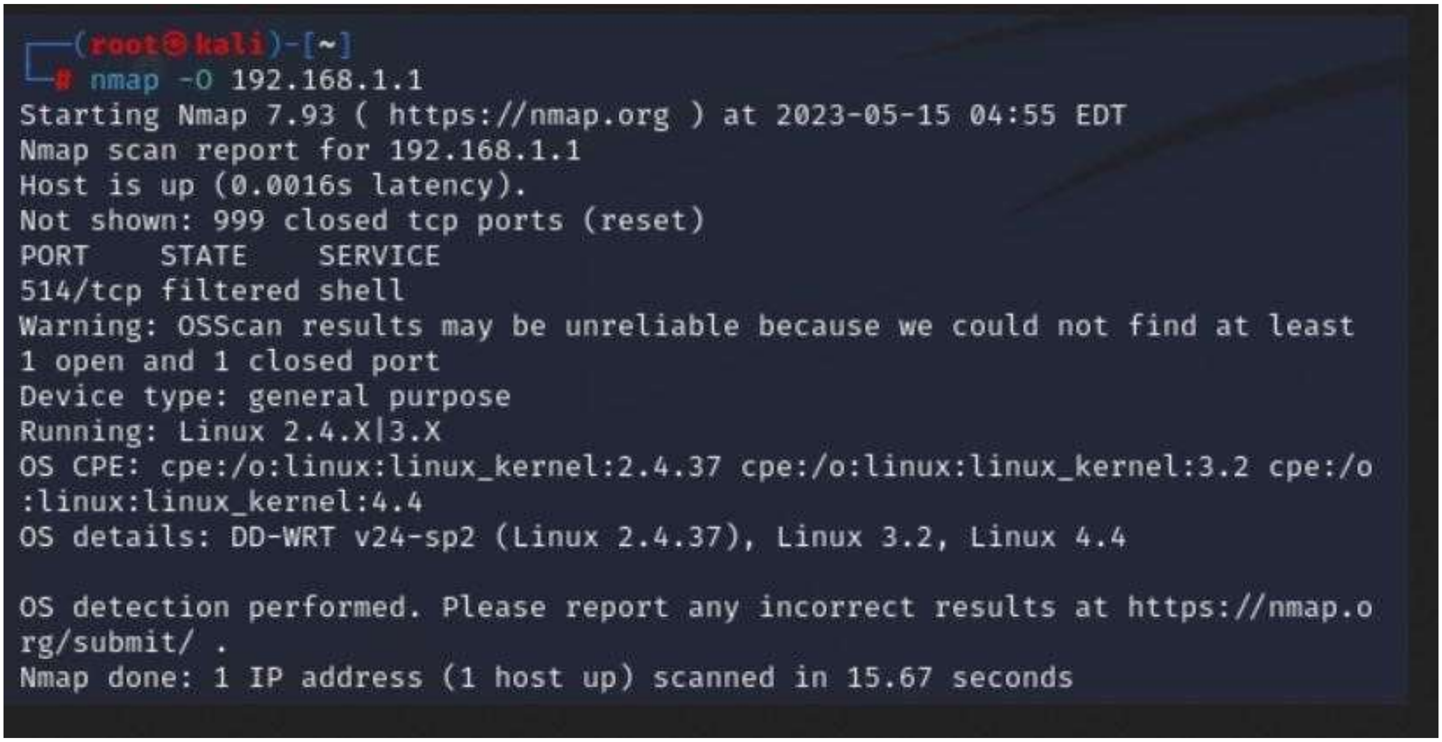
```
┌──(root㉿kali)-[~]
└─# nmap -p 1-30 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 04:31 EDT
Nmap scan report for 192.168.1.1
Host is up (0.00061s latency).
All 30 scanned ports on 192.168.1.1 are in ignored states.
Not shown: 30 closed tcp ports (reset)

Nmap done: 1 IP address (1 host up) scanned in 13.21 seconds

┌──(root㉿kali)-[~]
└─# nmap -p- 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 04:31 EDT
Nmap scan report for 192.168.1.1
Host is up (0.0019s latency).
Not shown: 65534 closed tcp ports (reset)
PORT    STATE    SERVICE
514/tcp filtered shell

Nmap done: 1 IP address (1 host up) scanned in 20.17 seconds

┌──(root㉿kali)-[~]
└─# nmap -F 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 04:33 EDT
Nmap scan report for 192.168.1.1
Host is up (0.0026s latency).
Not shown: 99 closed tcp ports (reset)
PORT    STATE    SERVICE
514/tcp filtered shell

Nmap done: 1 IP address (1 host up) scanned in 14.40 seconds
```

Step 5:-

Service Version and OS Detection



```
┌──(root㉿kali)-[~]
└─# nmap -sV 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 04:54 EDT
Nmap scan report for 192.168.1.1
Host is up (0.0017s latency).
Not shown: 999 closed tcp ports (reset)
PORT    STATE    SERVICE VERSION
514/tcp filtered shell

Service detection performed. Please report any incorrect results at https://n
map.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 15.64 seconds

┌──(root㉿kali)-[~]
└─# nmap -A 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 04:54 EDT
Nmap scan report for 192.168.1.1
Host is up (0.0013s latency).
Not shown: 999 closed tcp ports (reset)
PORT    STATE    SERVICE VERSION
514/tcp filtered shell
Warning: OSScan results may be unreliable because we could not find at least
1 open and 1 closed port
Device type: general purpose
Running: Linux 2.4.X|3.X
OS CPE: cpe:/o:linux:linux_kernel:2.4.37 cpe:/o:linux:linux_kernel:3.2 cpe:/o
:linux:linux_kernel:4.4
OS details: DD-WRT v24-sp2 (Linux 2.4.37), Linux 3.2, Linux 4.4
Network Distance: 2 hops

TRACEROUTE (using port 80/tcp)
HOP RTT     ADDRESS
1   0.77 ms 192.168.50.2
2   1.25 ms 192.168.1.1

OS and Service detection performed. Please report any incorrect results at ht
tps://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 35.22 seconds
```



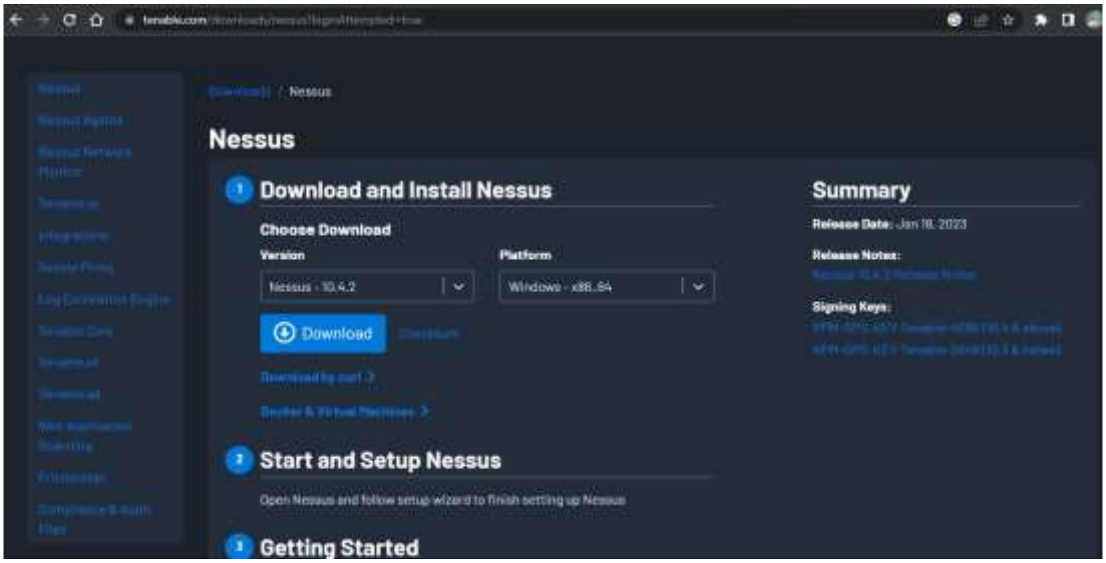
```
┌──(root㉿kali)-[~]
└─# nmap -O 192.168.1.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-15 04:55 EDT
Nmap scan report for 192.168.1.1
Host is up (0.0016s latency).
Not shown: 999 closed tcp ports (reset)
PORT    STATE    SERVICE
514/tcp filtered shell
Warning: OSScan results may be unreliable because we could not find at least
1 open and 1 closed port
Device type: general purpose
Running: Linux 2.4.X|3.X
OS CPE: cpe:/o:linux:linux_kernel:2.4.37 cpe:/o:linux:linux_kernel:3.2 cpe:/o
:linux:linux_kernel:4.4
OS details: DD-WRT v24-sp2 (Linux 2.4.37), Linux 3.2, Linux 4.4

OS detection performed. Please report any incorrect results at https://nmap.o
rg/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 15.67 seconds
```

Result:

Exercise No 2: Vulnerability Access Scan Using Nessus

Aim : To Download and install Nessus tool and perform a Vulnerability Access scan in kali Linux Operating systems.

Step 1:- https://www.tenable.com/downloads/nessus?loginAttempted=true



Nessus

1 Download and Install Nessus

Choose Download

Version: Nessus - 10.4.2

Platform: Windows - x86_64

Summary

Release Date: Jan 18, 2023

Release Notes:

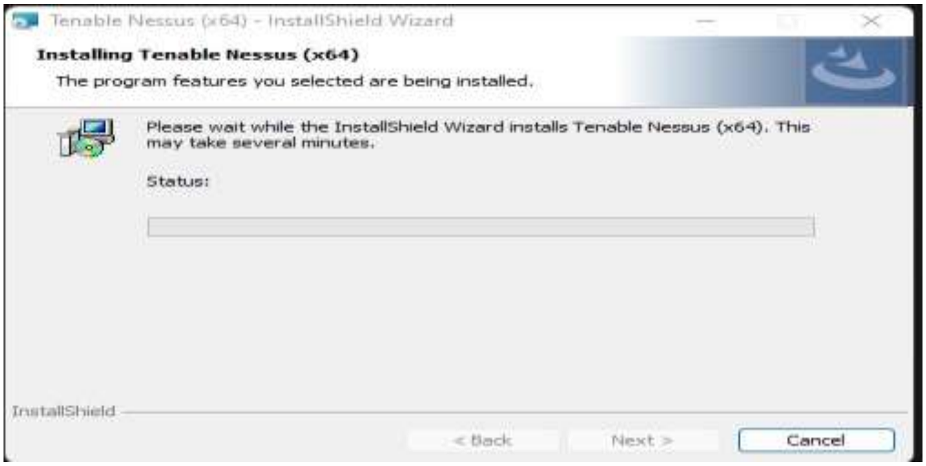
Signing Keys:

2 Start and Setup Nessus

Open Nessus and follow setup wizard to finish setting up Nessus

3 Getting Started

Step 2: Choose your OS and download , install



Tenable Nessus (x64) - InstallShield Wizard

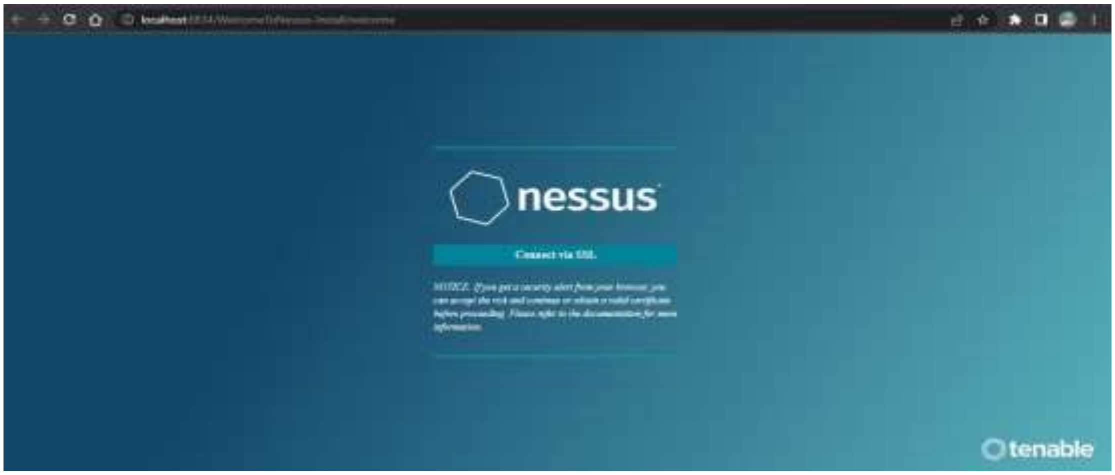
Installing Tenable Nessus (x64)

The program features you selected are being installed.

Please wait while the InstallShield Wizard installs Tenable Nessus (x64). This may take several minutes.

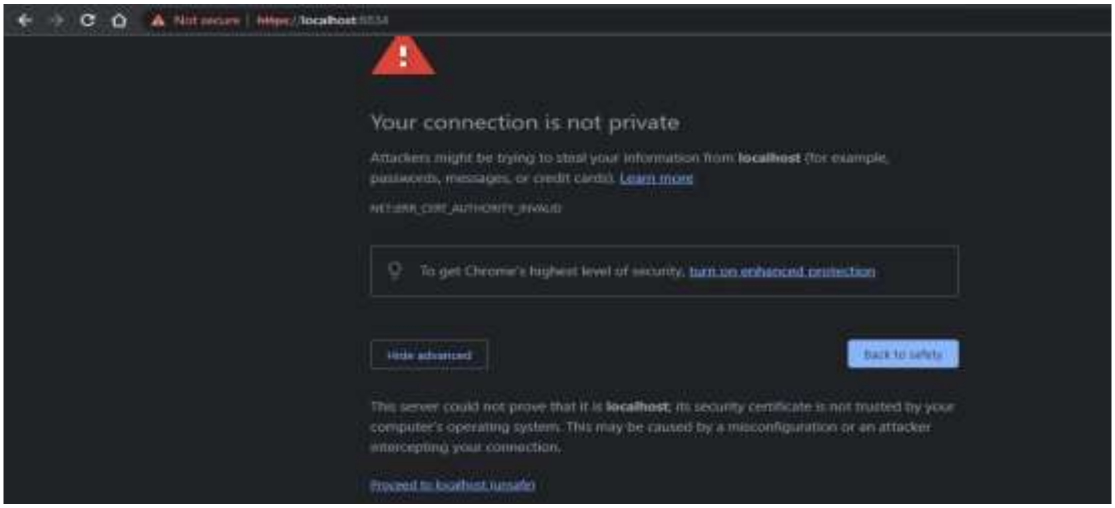
Status:

Step 3: Once installation is completed it will open in default browser



NOTICE: If you get a security alert from your browser, you can accept the risk and continue or obtain a valid certificate before proceeding. Please refer to the documentation for more information.

Step 5:- (click on the proceed to local host)



Not secure | ~~https~~://localhost:8834

Your connection is not private

Attackers might be trying to steal your information from **localhost** (for example, passwords, messages, or credit cards). Learn more

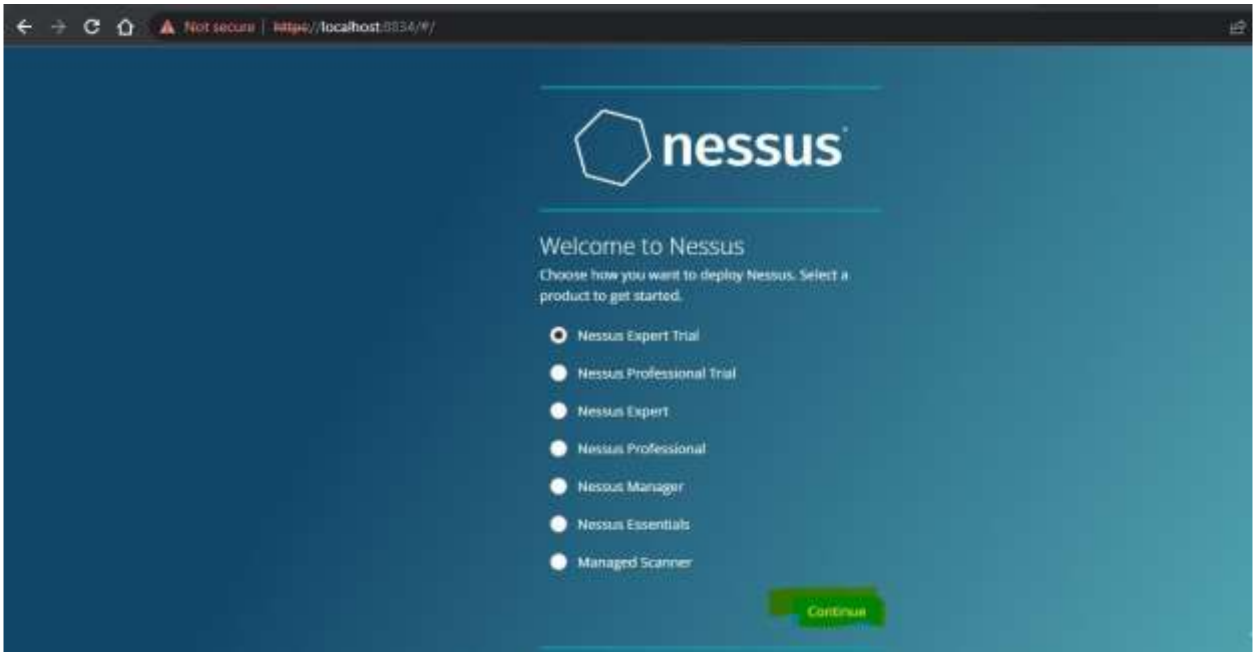
NET::ERR_CERT_AUTHORITY_INVALID

To get Chrome's highest level of security, turn on enhanced protection

This server could not prove that it is **localhost**; its security certificate is not trusted by your computer's operating system. This may be caused by a misconfiguration or an attacker intercepting your connection.

Proceed to localhost (unsafe)

Step 6:- Please choose the Nessus Expert



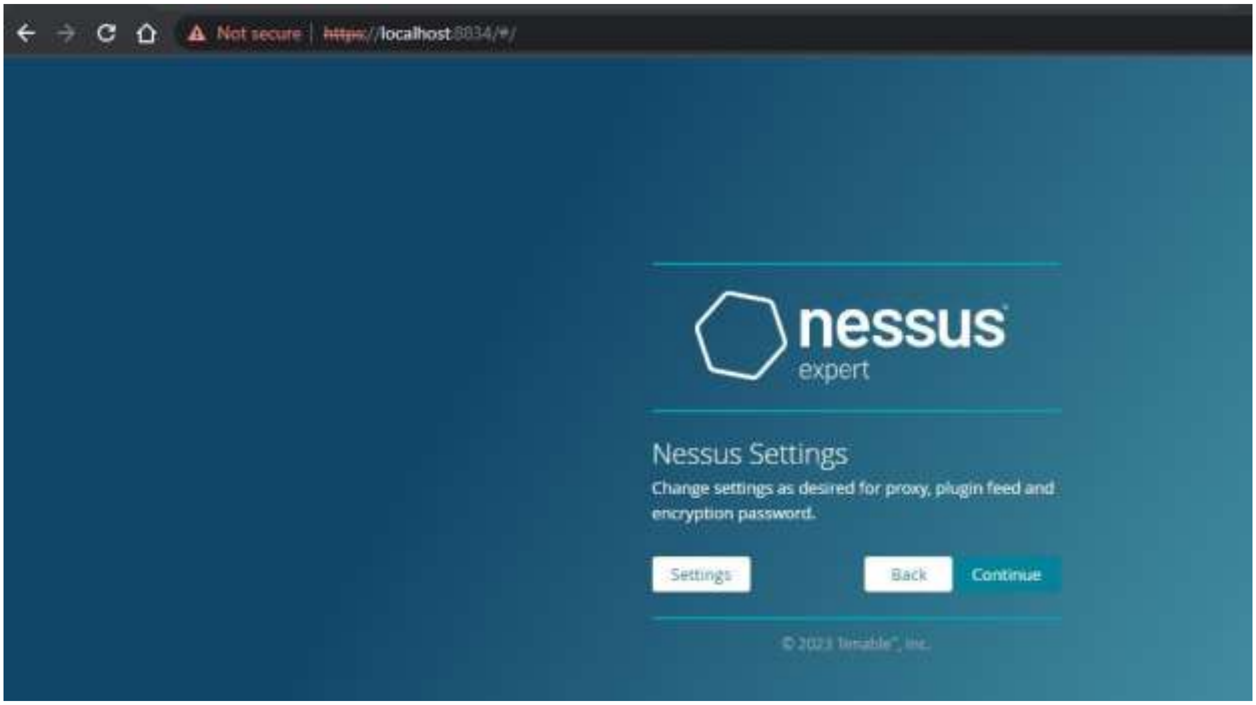
Not secure | ~~https~~://localhost:8834/#/

Welcome to Nessus

Choose how you want to deploy Nessus. Select a product to get started.

- ● Nessus Expert Trial
- ○ Nessus Professional Trial
- ○ Nessus Expert
- ○ Nessus Professional
- ○ Nessus Manager
- ○ Nessus Essentials
- ○ Managed Scanner

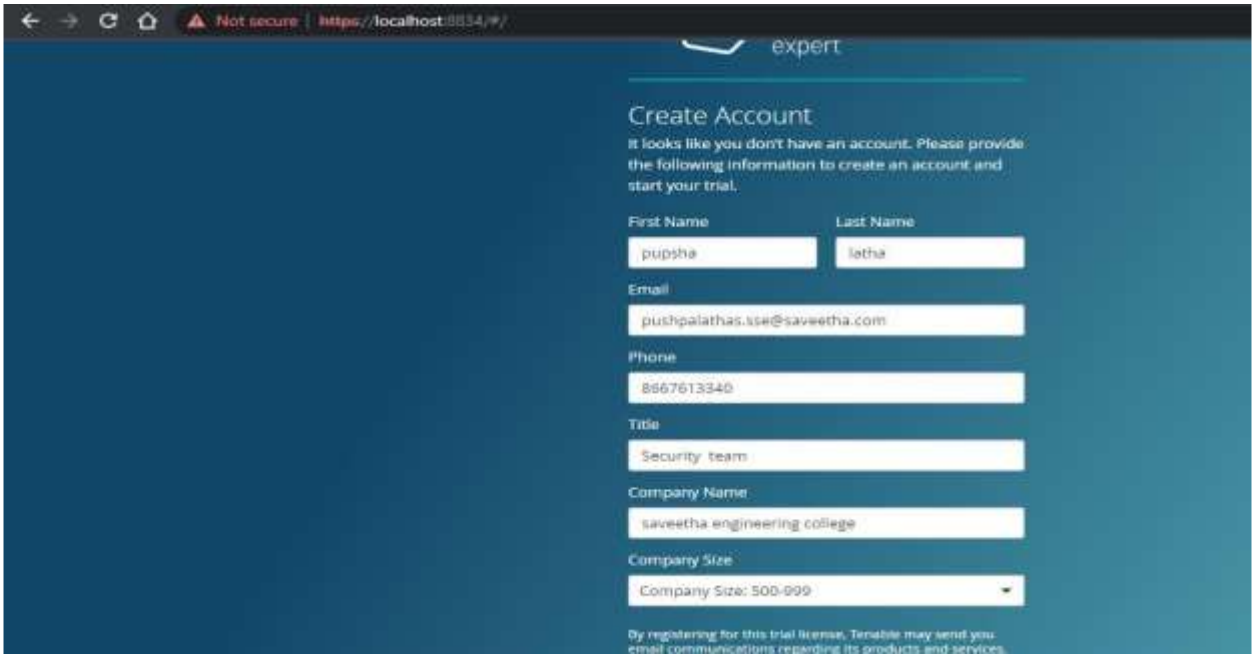
Step 7: Click on continue



Nessus Settings

Change settings as desired for proxy, plugin feed and encryption password.

Step 8:- Register with your organizational email id



Create Account

It looks like you don't have an account. Please provide the following information to create an account and start your trial.

First Name: pupsha

Last Name: latha

Email: pushpalathas.sse@saveetha.com

Phone: 8667613340

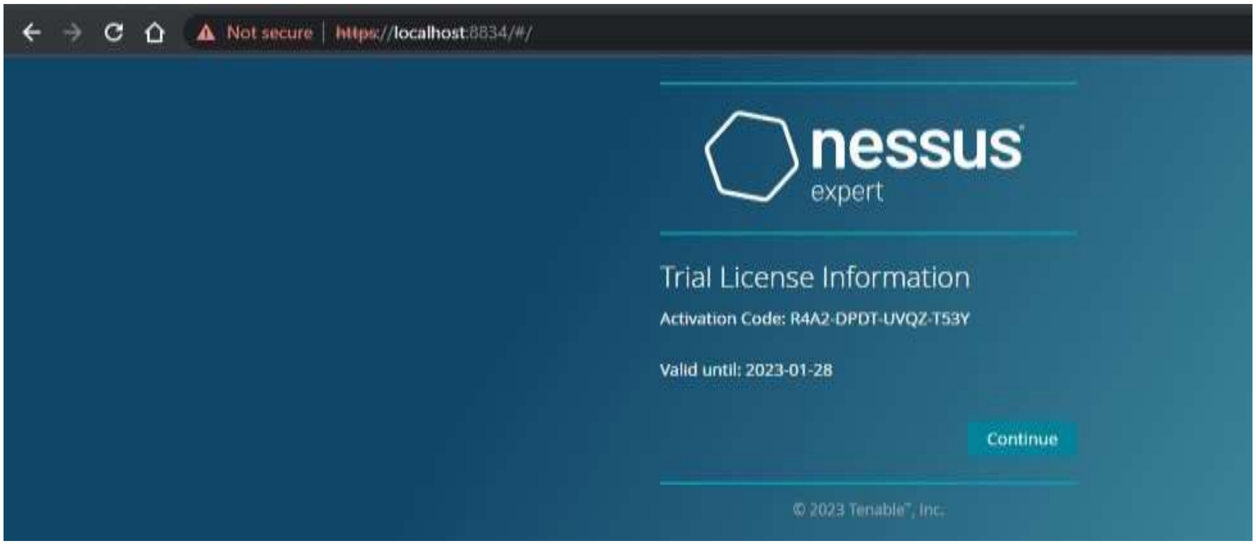
Title: Security team

Company Name: saveetha engineering college

Company Size: Company Size: 500-999

By registering for this trial license, Tenable may send you email communications regarding its products and services.

Step 9:- please note down the activation key



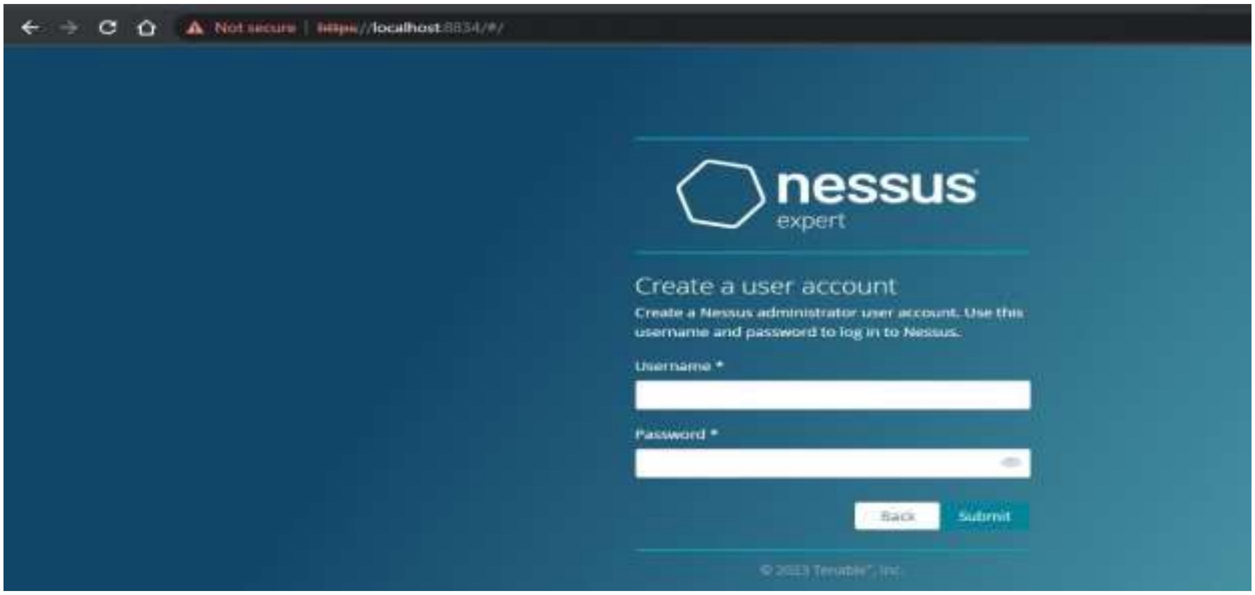
Trial License Information

Activation Code: R4A2-DPDT-UVQZ-T53Y

Valid until: 2023-01-28

© 2023 Tenable™, Inc.

Step 10:- set up your username & password



Create a user account

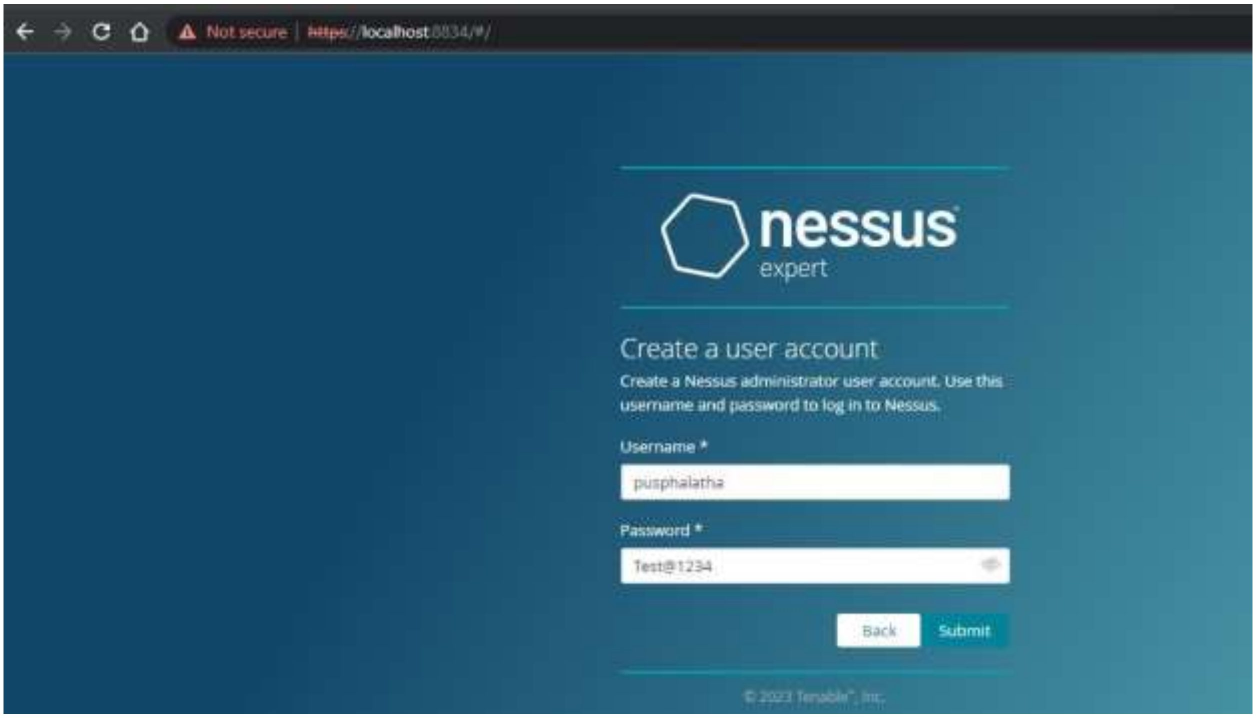
Create a Nessus administrator user account. Use this username and password to log in to Nessus.

Username *

Password *

© 2023 Tenable™, Inc.

Step 11:-Type username and password



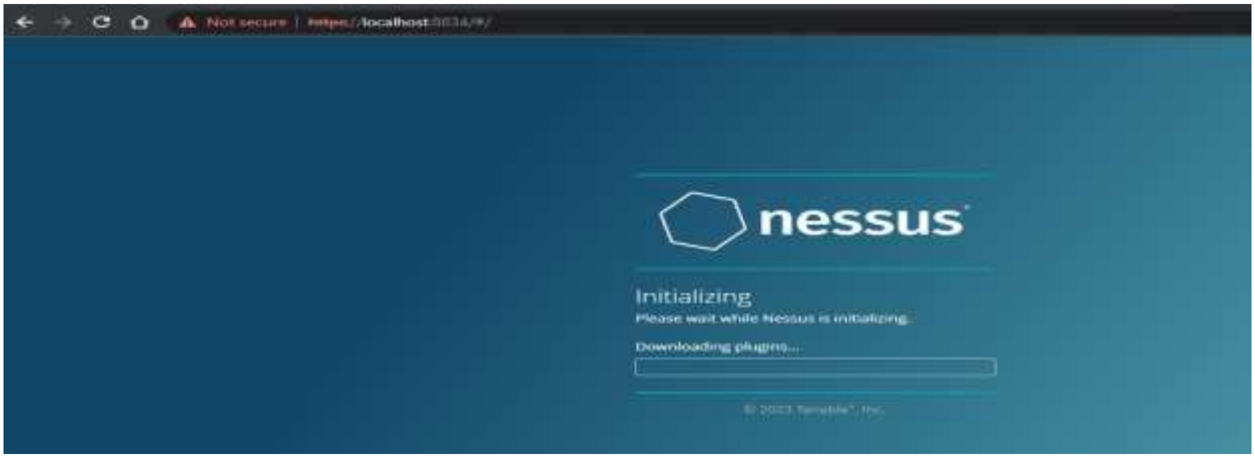
Create a user account

Create a Nessus administrator user account. Use this username and password to log in to Nessus.

Username *
pusphalatha

Password *
Test@1234

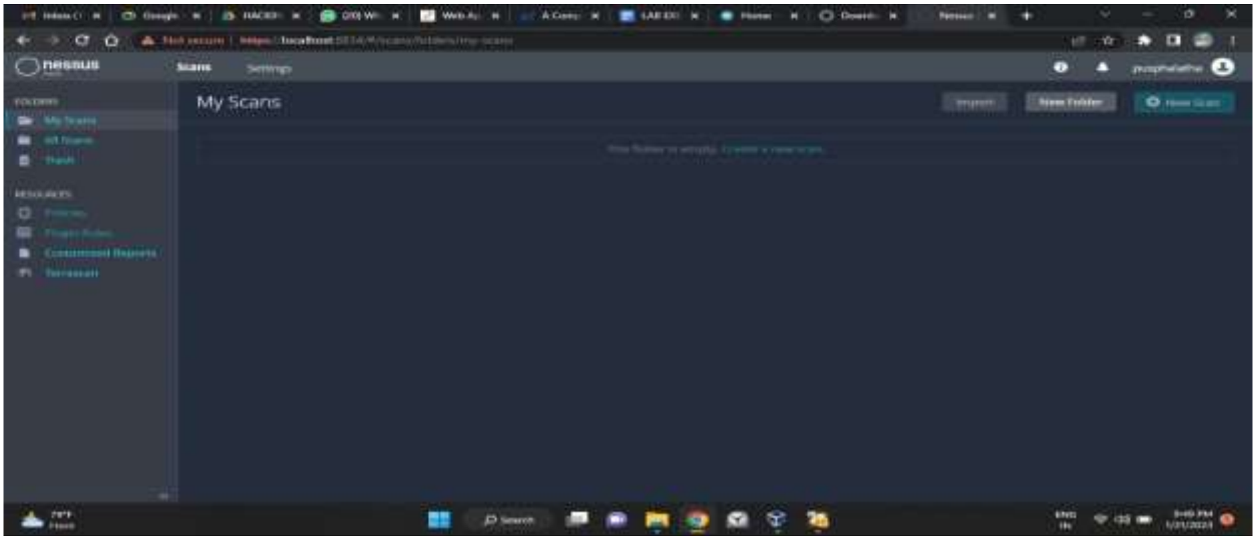
Step 12:- Please wait until download is completed



Initializing

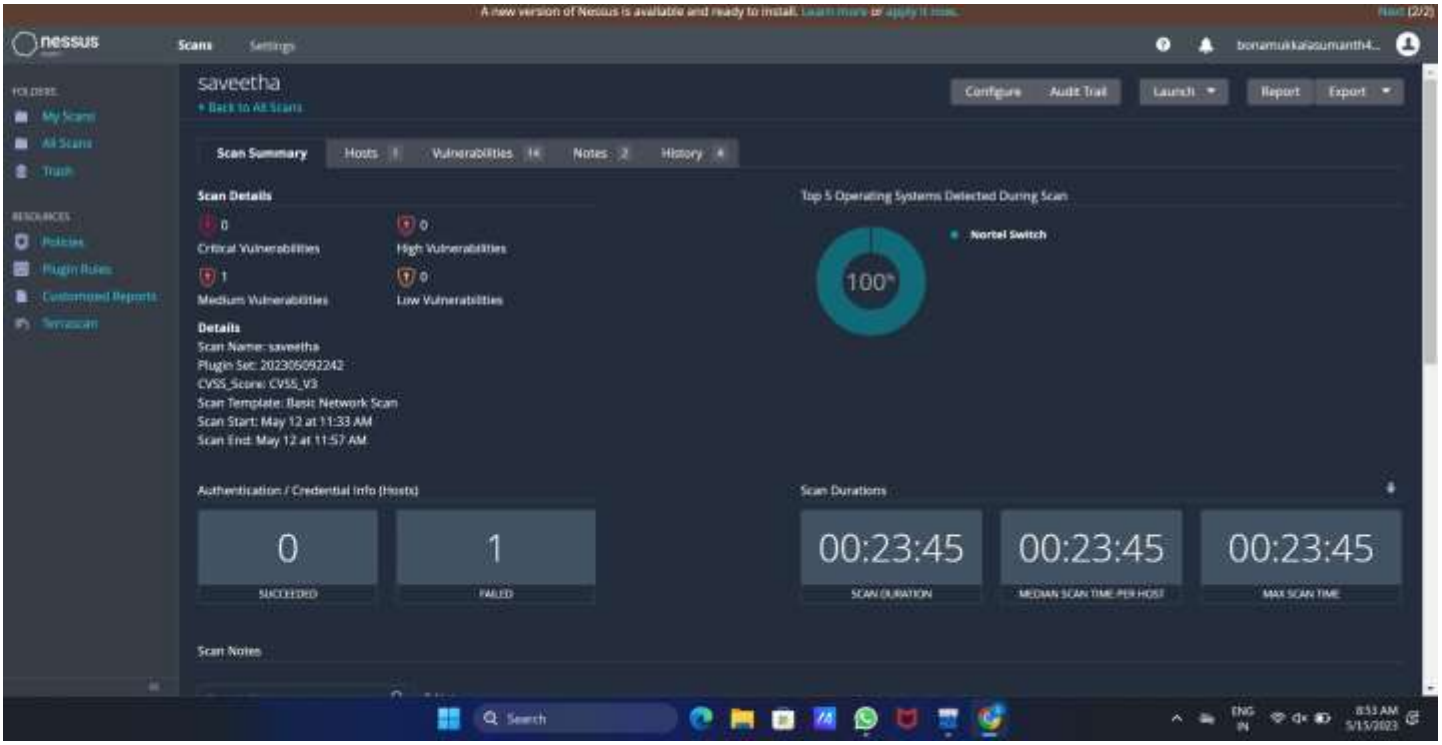
Please wait while Nessus is initializing.

Downloading plugins...



This folder is empty. Create a new scan.

Out Put:



saveetha

Scan Details

0 Critical Vulnerabilities

0 High Vulnerabilities

1 Medium Vulnerabilities

0 Low Vulnerabilities

Details

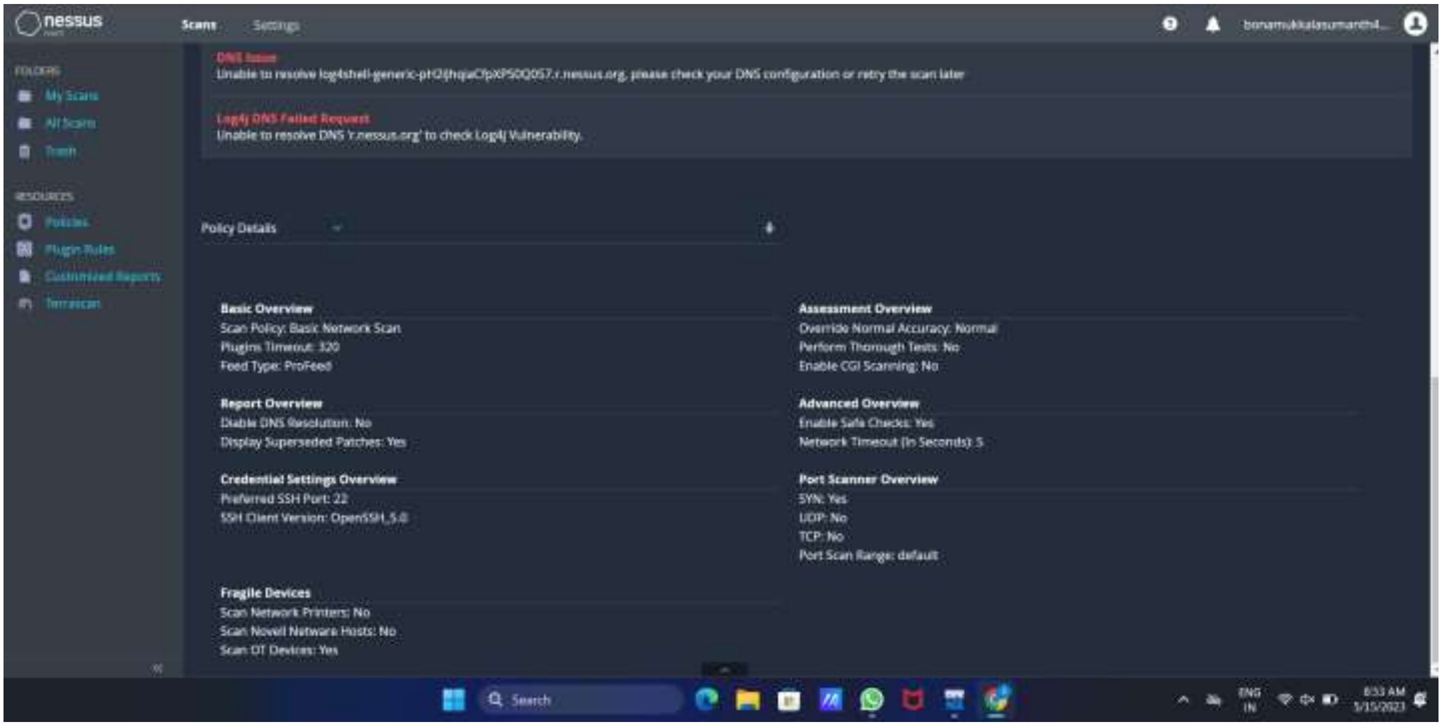
Scan Name: saveetha
Plugin Set: 202305092242
CVSS_Score: CVSS_V3
Scan Template: Basic Network Scan
Scan Start: May 12 at 11:33 AM
Scan End: May 12 at 11:57 AM

Authentication / Credential Info (Hosts)

0	1
SUCCEEDED	FAILED

Scan Durations

00:23:45	00:23:45	00:23:45
SCAN DURATION	MEDIAN SCAN TIME PER HOST	MAX SCAN TIME



DNS Issue
Unable to resolve log4shell-generic-pH2jhqaCfpXP50Q057.r.nessus.org, please check your DNS configuration or retry the scan later

Log4j DNS Failed Request
Unable to resolve DNS 'r.nessus.org' to check Log4j Vulnerability.

Policy Details

Basic Overview
Scan Policy: Basic Network Scan
Plugins Timeout: 320
Feed Type: ProFeed

Report Overview
Diable DNS Resolution: No
Display Superseded Patches: Yes

Credential Settings Overview
Preferred SSH Port: 22
SSH Client Version: OpenSSH_5.0

Fragile Devices
Scan Network Printers: No
Scan Novell Netware Hosts: No
Scan OT Devices: Yes

Assessment Overview
Override Normal Accuracy: Normal
Perform Thorough Tests: No
Enable CGI Scanning: No

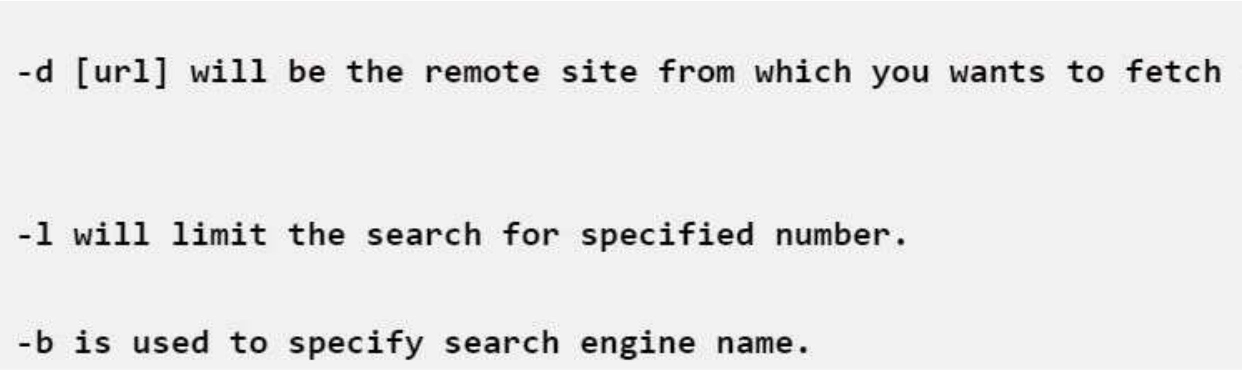
Advanced Overview
Enable Safe Checks: Yes
Network Timeout (In Seconds): 5

Port Scanner Overview
SYN: Yes
UDP: No
TCP: No
Port Scan Range: default

Exercise No 3: Information gathering using theHarvester

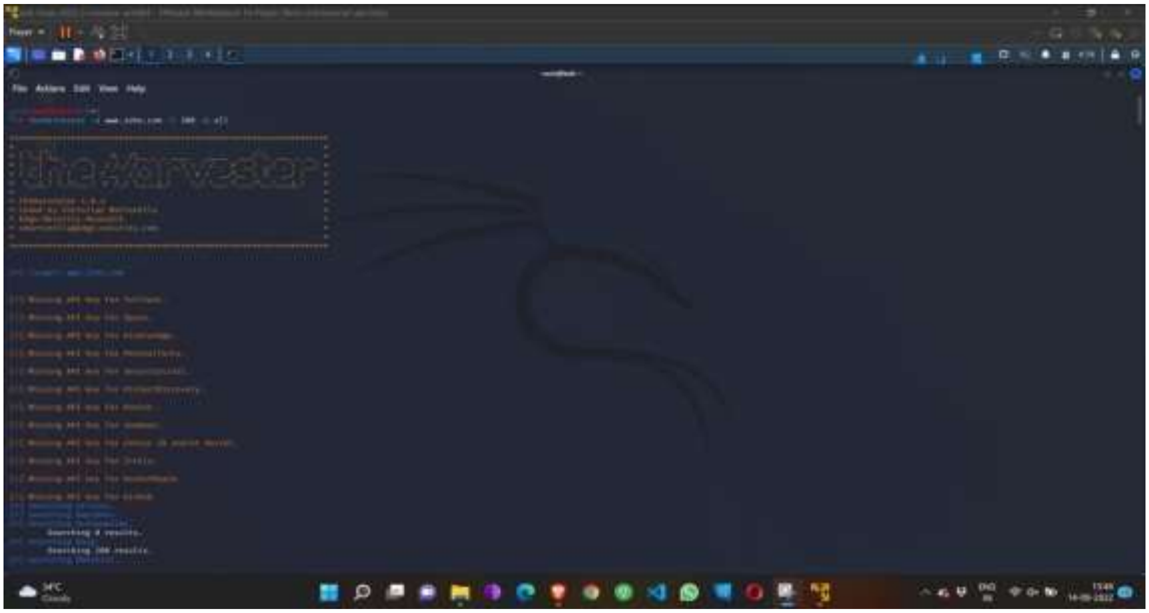
Aim: To demonstrate information gathering using theHarvester **Procedure:**

STEP 1: Open Terminal in the kali linux

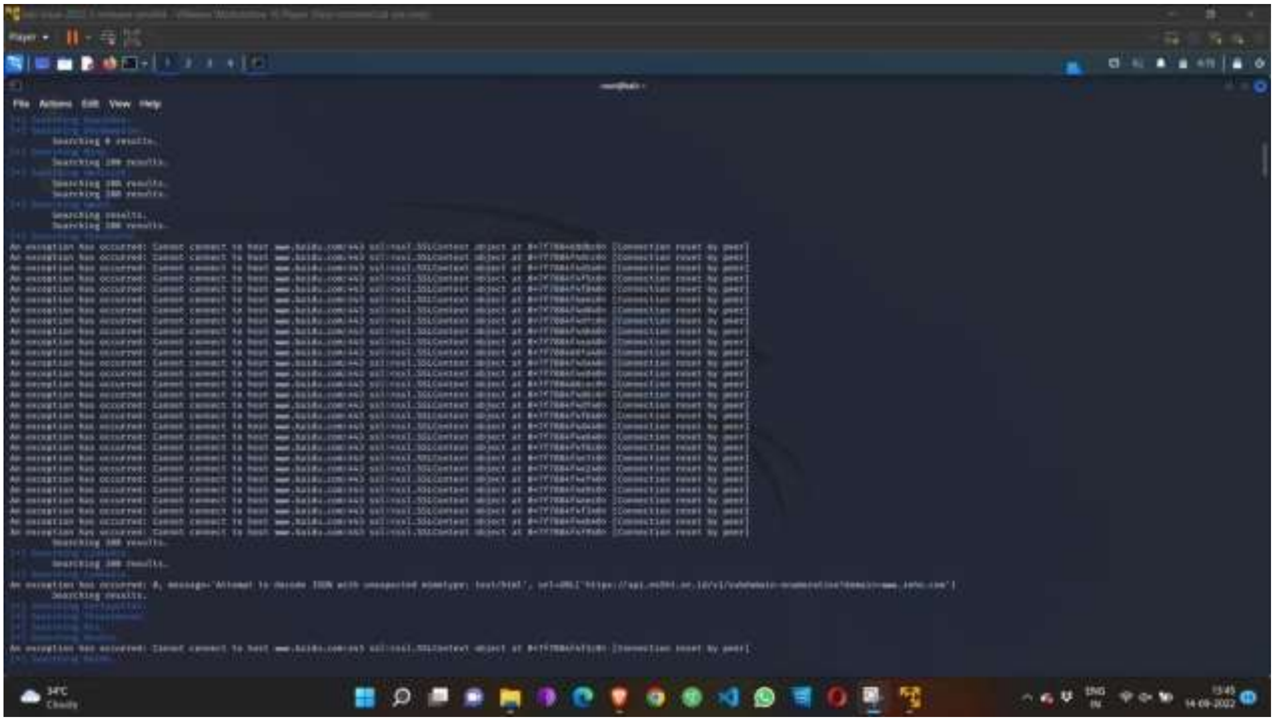


```
-d [url] will be the remote site from which you wants to fetch


-l will limit the search for specified number.

-b is used to specify search engine name.
```

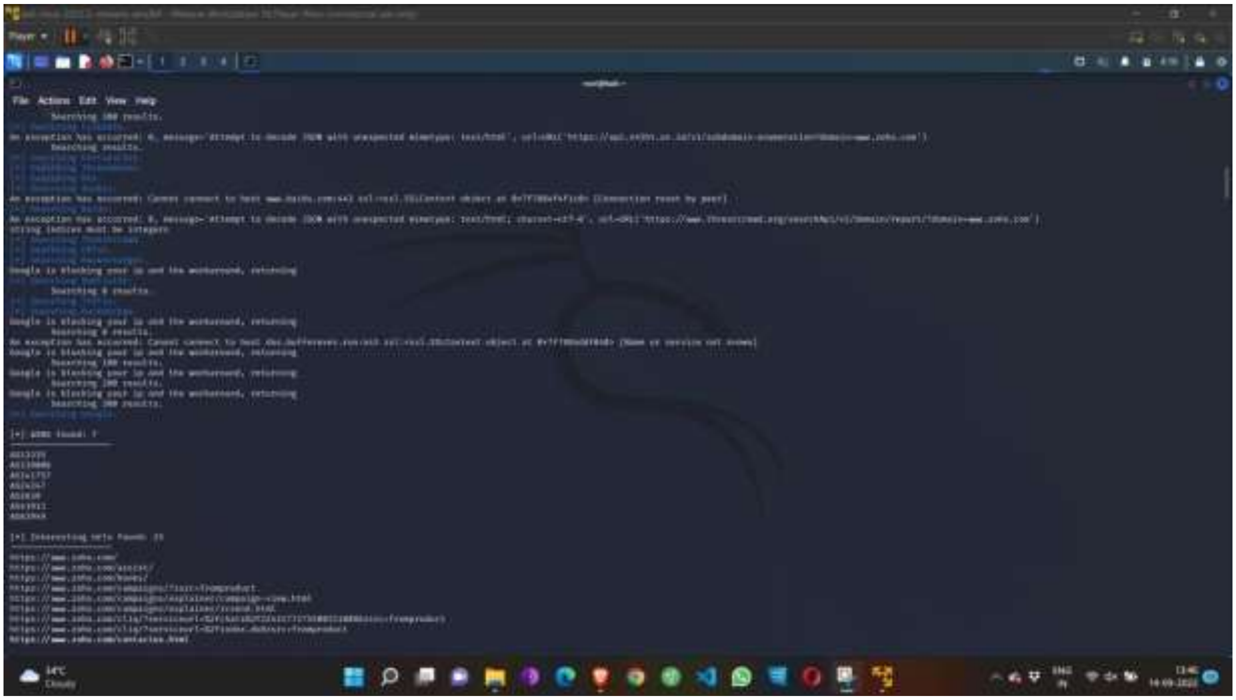
STEP 2: Run the following command



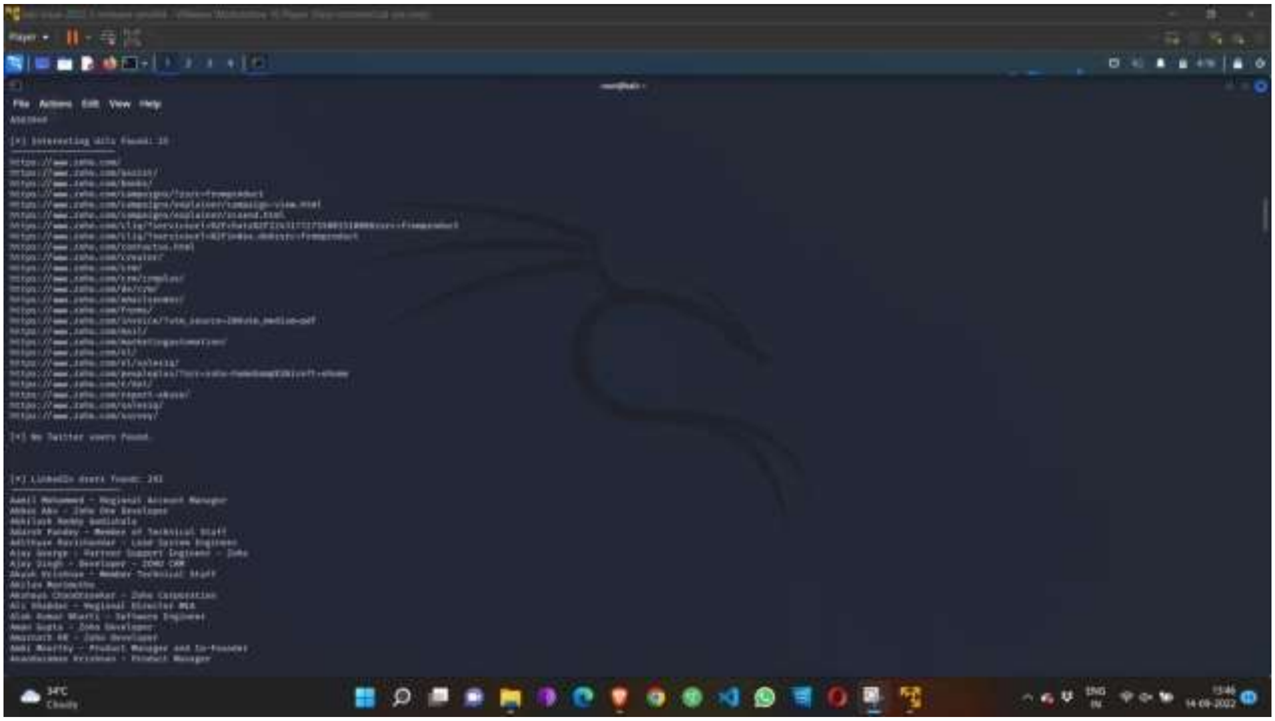
Command: theHarvester -d www.zoho.com -l 3



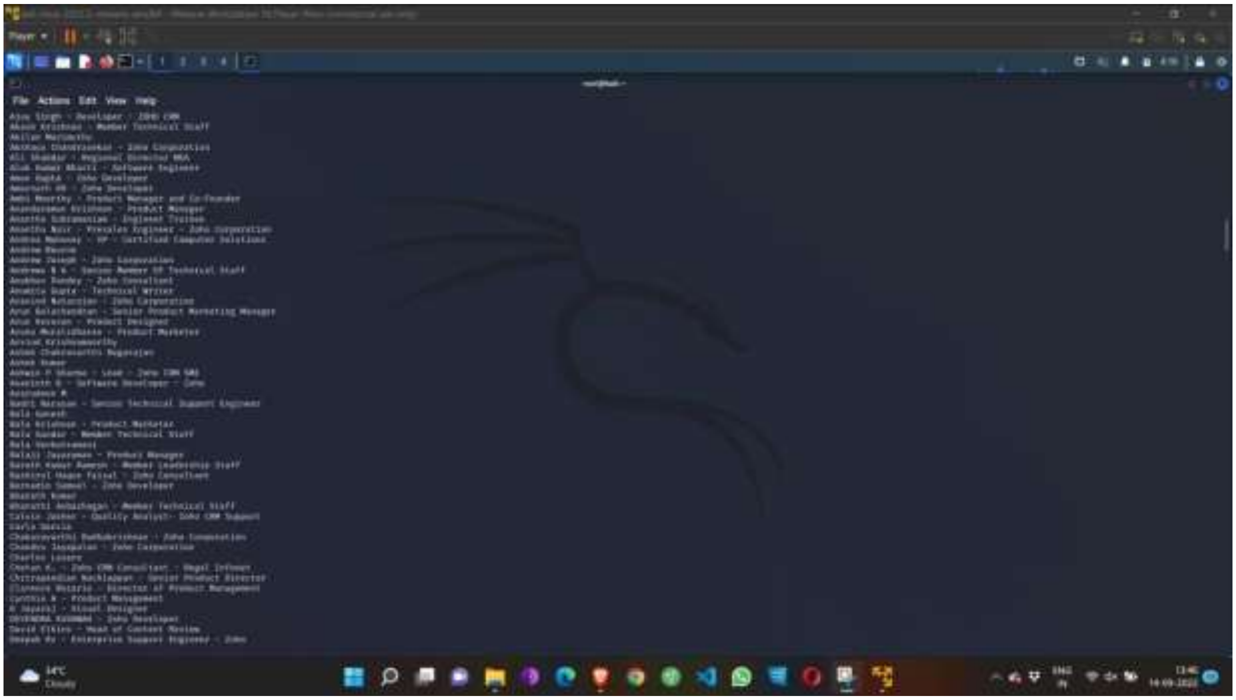
00 -b all



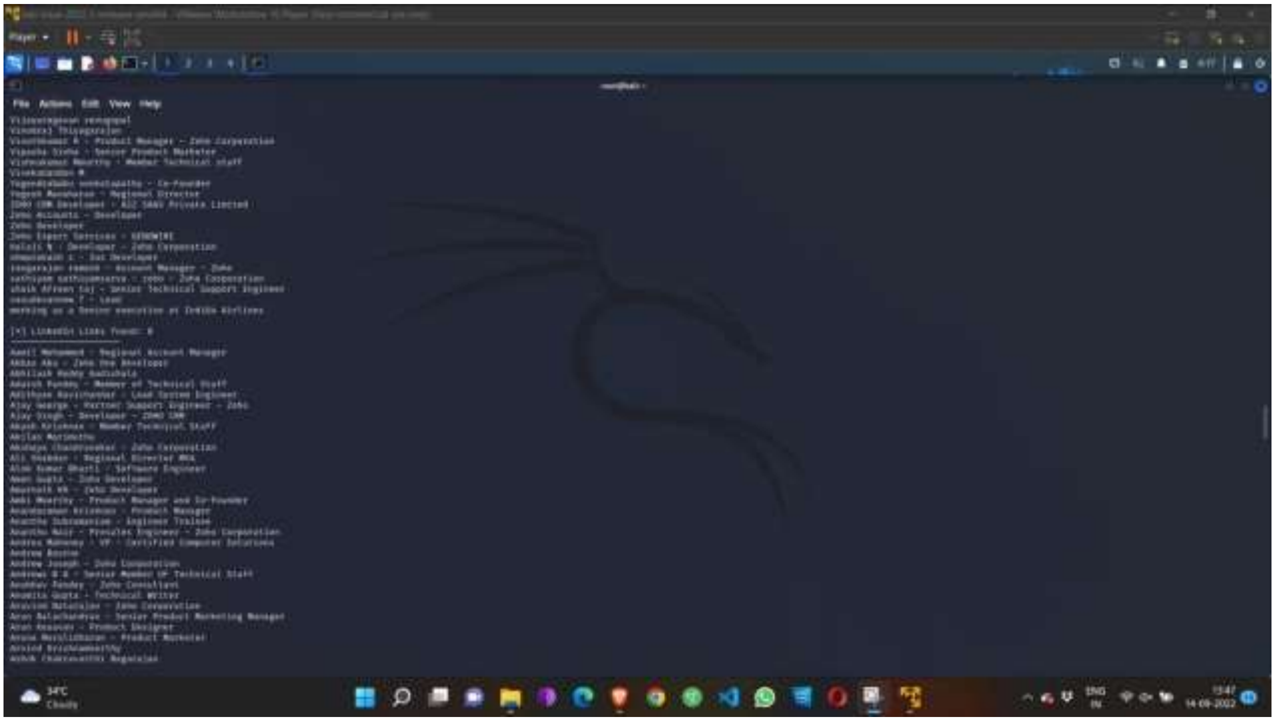
```
        Searching 100 results.
[*] Searching [illegible]
An exception has occurred: 0, message='Attempt to decode JSON with unexpected mimetype: text/html', url=URL('https://api.[illegible]/subdomain-enumeration?domain=www.zoho.com')
        Searching results.
[*] Searching [illegible]
[*] Searching [illegible]
[*] Searching [illegible]
[*] Searching [illegible]
An exception has occurred: Cannot connect to host www.baidu.com:443 ssl:<ssl.SSLContext object at [illegible]> [Connection reset by peer]
[*] Searching [illegible]
An exception has occurred: 0, message='Attempt to decode JSON with unexpected mimetype: text/html; charset=utf-8', url=URL('https://www.threatcrowd.org/searchApi/v2/domain/report/?domain=www.zoho.com')
string indices must be integers
[*] Searching [illegible]
[*] Searching [illegible]
[*] Searching [illegible]
Google is blocking your ip and the workaround, returning
[*] Searching [illegible]
        Searching 0 results.
[*] Searching [illegible]
[*] Searching [illegible]
Google is blocking your ip and the workaround, returning
        Searching 0 results.
An exception has occurred: Cannot connect to host dns.bufferover.run:443 ssl:<ssl.SSLContext object at [illegible]> [Name or service not known]
Google is blocking your ip and the workaround, returning
        Searching 100 results.
Google is blocking your ip and the workaround, returning
        Searching 200 results.
Google is blocking your ip and the workaround, returning
        Searching 300 results.
[*] Searching [illegible]

[*] ASNS found: 7
--------------------
AS13335
AS[illegible]
AS[illegible]
AS[illegible]
AS[illegible]
AS[illegible]
AS[illegible]

[*] Interesting Urls found: 25
--------------------
https://www.zoho.com/
https://www.zoho.com/assist/
https://www.zoho.com/books/
https://www.zoho.com/campaigns/?src=fromproduct
https://www.zoho.com/campaigns/explainer/campaign-view.html
https://www.zoho.com/campaigns/explainer/[illegible].html
https://www.zoho.com/clig/?serviceurl=%2F[illegible]src=fromproduct
https://www.zoho.com/clig/?serviceurl=%2Findex.do&src=fromproduct
https://www.zoho.com/contactus.html
```



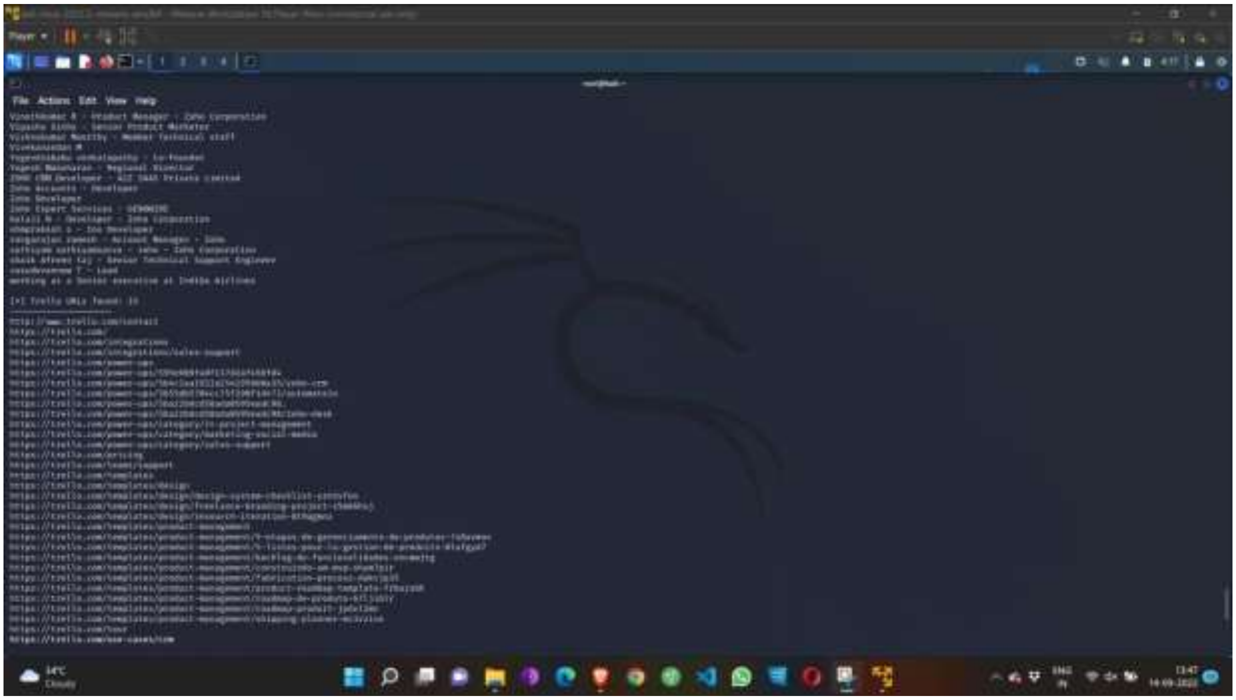
```
AS[illegible]

[*] Interesting Urls found: 25
--------------------
https://www.zoho.com/
https://www.zoho.com/assist/
https://www.zoho.com/books/
https://www.zoho.com/campaigns/?src=fromproduct
https://www.zoho.com/campaigns/explainer/campaign-view.html
https://www.zoho.com/campaigns/explainer/[illegible].html
https://www.zoho.com/clig/?serviceurl=%2F[illegible]src=fromproduct
https://www.zoho.com/clig/?serviceurl=%2Findex.do&src=fromproduct
https://www.zoho.com/contactus.html
https://www.zoho.com/creator/
https://www.zoho.com/crm/
https://www.zoho.com/crm/[illegible]/
https://www.zoho.com/de/crm/
https://www.zoho.com/[illegible]/
https://www.zoho.com/forms/
https://www.zoho.com/invoice/?utm_source=[illegible]&utm_medium=pdf
https://www.zoho.com/mail/
https://www.zoho.com/marketingautomation/
https://www.zoho.com/sl/
https://www.zoho.com/sl/[illegible]/
https://www.zoho.com/peopleplus/?src=zoho-[illegible]
https://www.zoho.com/[illegible]/
https://www.zoho.com/report-abuse/
https://www.zoho.com/salesiq/
https://www.zoho.com/survey/

[*] No Twitter users found.


[*] LinkedIn Users found: 261
--------------------
Aamil Mohammed - Regional Account Manager
Abbas Abu - Zoho One Developer
Akhilesh Reddy [illegible]
Adarsh Pandey - Member of Technical Staff
Adithyan [illegible] - Lead System Engineer
Ajay George - Partner Support Engineer - Zoho
Ajay Singh - Developer - ZOHO CRM
Akash [illegible] - Member Technical Staff
Akilan [illegible]
Akshaya Chandrasekar - Zoho Corporation
Ali Shabbar - Regional Director MEA
Alok Kumar Bharti - Software Engineer
Aman Gupta - Zoho Developer
Amarnath KR - Zoho Developer
Ambi Moorthy - Product Manager and Co-Founder
Anandaraman Krishnan - Product Manager
```



```
Ajay Singh - Developer - ZOHO CRM
Akash Krishnan - Member Technical Staff
Akilan Marimuthu
Akshaya Chandrasekar - Zoho Corporation
Ali Shabbir - Regional Director MEA
Alok Kumar Bharti - Software Engineer
Aman Gupta - Zoho Developer
Amarnath VR - Zoho Developer
Ambi Moorthy - Product Manager and Co-Founder
Anandaraman Krishnan - Product Manager
Anantha Subramanian - Engineer Trainee
Ananthu Nair - Presales Engineer - Zoho Corporation
Andrea Mahoney - VP - Certified Computer Solutions
Andrew Bourne
Andrew Joseph - Zoho Corporation
Andrews B X - Senior Member Of Technical Staff
Anubhav Pandey - Zoho Consultant
Anamika Gupta - Technical Writer
Aravind Natarajan - Zoho Corporation
Arun Balachandran - Senior Product Marketing Manager
Arun Kesavan - Product Designer
Aruna Muralidharan - Product Marketer
Arvind Krishnamoorthy
Ashok Chakravarthi Nagarajan
Ashok Kumar
Ashwin P Sharma - Lead - Zoho CRM SMB
Aswinth S - Software Developer - Zoho
Azarudeen M
Badri Narayan - Senior Technical Support Engineer
Bala Ganesh
Bala Krishnan - Product Marketer
Bala Sundar - Member Technical Staff
Bala Venkatraman
Balaji Jayaraman - Product Manager
Barath Kumar Ramesh - Member Leadership Staff
Barkitul Haque Faisal - Zoho Consultant
Bernadin Samuel - Zoho Developer
Bharath Kumar
Bharathi Anbazhagan - Member Technical Staff
Calvin Joshua - Quality Analyst- Zoho CRM Support
Carla Scalia
Chakravarthi Radhakrishnan - Zoho Corporation
Chandru Jayapalan - Zoho Corporation
Charles Lovern
Chetan K. - Zoho CRM Consultant - Hegel Infoware
Chitrapandian Nachiappan - Senior Product Director
Clarence Rozario - Director of Product Management
Cynthia R - Product Management
D Jayasri - Visual Designer
DEVENDRA KUSHWAH - Zoho Developer
David Elkins - Head of Content Review
Deepak Rs - Enterprise Support Engineer - Zoho
```



```
Vijayaragavan venugopal
Vinodraj Thiyagarajan
Vinothkumar R - Product Manager - Zoho Corporation
Vipasha Sinha - Senior Product Marketer
Vishnukumar Moorthy - Member Technical staff
Vivekanandan M
Yogendrababu venkatapathy - Co-Founder
Yogesh Manoharan - Regional Director
ZOHO CRM Developer - A2Z SAAS Private Limited
Zoho Accounts - Developer
Zoho Developer
Zoho Expert Services - GENOWIRE
balaji N - Developer - Zoho Corporation
dhamodaran s - Sas Developer
rangarajan ramesh - Account Manager - Zoho
sathiyam sathiyamoorthy - zoho - Zoho Corporation
shaik Afreen taj - Senior Technical Support Engineer
vasudevanrao T - Lead
working as a Senior executive at IndiGo Airlines

[*] LinkedIn Links Found: 0
__________________________
Aamil Mohammed - Regional Account Manager
Abbas Aku - Zoho One Developer
Abhilash Reddy Audichala
Adarsh Pandey - Member of Technical Staff
Adithyan Ravichandar - Lead System Engineer
Ajay George - Partner Support Engineer - Zoho
Ajay Singh - Developer - ZOHO CRM
Akash Krishnan - Member Technical Staff
Akilan Marimuthu
Akshaya Chandrasekar - Zoho Corporation
Ali Shabbir - Regional Director MEA
Alok Kumar Bharti - Software Engineer
Aman Gupta - Zoho Developer
Amarnath VR - Zoho Developer
Ambi Moorthy - Product Manager and Co-Founder
Anandaraman Krishnan - Product Manager
Anantha Subramanian - Engineer Trainee
Ananthu Nair - Presales Engineer - Zoho Corporation
Andrea Mahoney - VP - Certified Computer Solutions
Andrew Bourne
Andrew Joseph - Zoho Corporation
Andrews B X - Senior Member Of Technical Staff
Anubhav Pandey - Zoho Consultant
Anamika Gupta - Technical Writer
Aravind Natarajan - Zoho Corporation
Arun Balachandran - Senior Product Marketing Manager
Arun Kesavan - Product Designer
Aruna Muralidharan - Product Marketer
Arvind Krishnamoorthy
Ashok Chakravarthi Nagarajan
```

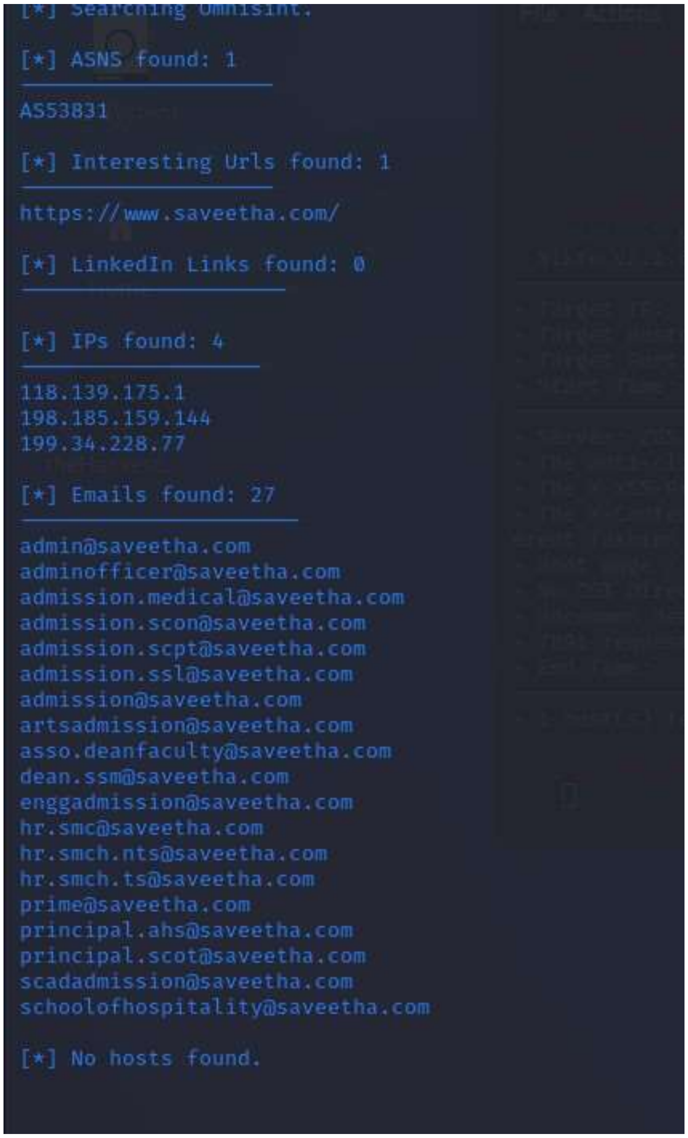


```
Vinothkumar R - Product Manager - Zoho Corporation
Vipasha Sinha - Senior Product Marketer
Vishnukumar Murthy - Member Technical staff
Vivekanandan M
Yugendrababu venkatapathy - Co-Founder
Yogesh Manoharan - Regional Director
ZOHO CRM Developer - AIZ SAAS Private Limited
Zoho Accounts - Developer
Zoho Developer
Zoho Expert Services - [illegible]
Balaji N - Developer - Zoho Corporation
[illegible] s - Zoo Developer
sargunalan ramesh - Account Manager - Zoho
sathiyam sathiyamoorthy - zoho - Zoho Corporation
shaik Afreen taj - Senior Technical Support Engineer
vasudevanram T - Lead
working at a Senior executive at IndiGo Airlines

[*] Trello URLs found: 33
--------------------
http://www.trello.com/contact
https://trello.com/
https://trello.com/integrations
https://trello.com/integrations/sales-support
https://trello.com/power-ups
https://trello.com/power-ups/[illegible]
https://trello.com/power-ups/[illegible]/zoho-crm
https://trello.com/power-ups/[illegible]/automatisch
https://trello.com/power-ups/[illegible]
https://trello.com/power-ups/[illegible]/zoho-desk
https://trello.com/power-ups/category/it-project-management
https://trello.com/power-ups/category/marketing-social-media
https://trello.com/power-ups/category/sales-support
https://trello.com/pricing
https://trello.com/teams/support
https://trello.com/templates
https://trello.com/templates/design
https://trello.com/templates/design/design-system-checklist-[illegible]
https://trello.com/templates/design/freelance-branding-project-[illegible]
https://trello.com/templates/design/research-iteration-[illegible]
https://trello.com/templates/product-management
https://trello.com/templates/product-management/5-etapas-de-gerenciamento-de-produtos-[illegible]
https://trello.com/templates/product-management/5-listes-pour-la-gestion-de-produits-[illegible]
https://trello.com/templates/product-management/backlog-de-funcionalidades-[illegible]
https://trello.com/templates/product-management/construindo-um-mvp-[illegible]
https://trello.com/templates/product-management/fabrication-process-[illegible]
https://trello.com/templates/product-management/product-roadmap-template-[illegible]
https://trello.com/templates/product-management/roadmap-de-produto-[illegible]
https://trello.com/templates/product-management/roadmap-produit-[illegible]
https://trello.com/templates/product-management/shipping-planner-[illegible]
https://trello.com/tour
https://trello.com/use-cases/crm
```

Step 4: run this command “**theHarvester -d www.zoho.com -l 300 -b all -f test” and** hit enter to export the result as html file and xml file

Step 5: now close the terminal and navigate the home folder and search for test file .

Out Put:



```
[*] Searching Omnisint.

[*] ASNS found: 1
--------------------
AS53831

[*] Interesting Urls found: 1
--------------------
https://www.saveetha.com/

[*] LinkedIn Links found: 0
---------------------


[*] IPs found: 4
-------------------
118.139.175.1
198.185.159.144
199.34.228.77

[*] Emails found: 27
----------------------
admin@saveetha.com
adminofficer@saveetha.com
admission.medical@saveetha.com
admission.scon@saveetha.com
admission.scpt@saveetha.com
admission.ssl@saveetha.com
admission@saveetha.com
artsadmission@saveetha.com
asso.deanfaculty@saveetha.com
dean.ssm@saveetha.com
enggadmission@saveetha.com
hr.smc@saveetha.com
hr.smch.nts@saveetha.com
hr.smch.ts@saveetha.com
prime@saveetha.com
principal.ahs@saveetha.com
principal.scot@saveetha.com
scadadmission@saveetha.com
schoolofhospitality@saveetha.com

[*] No hosts found.
```

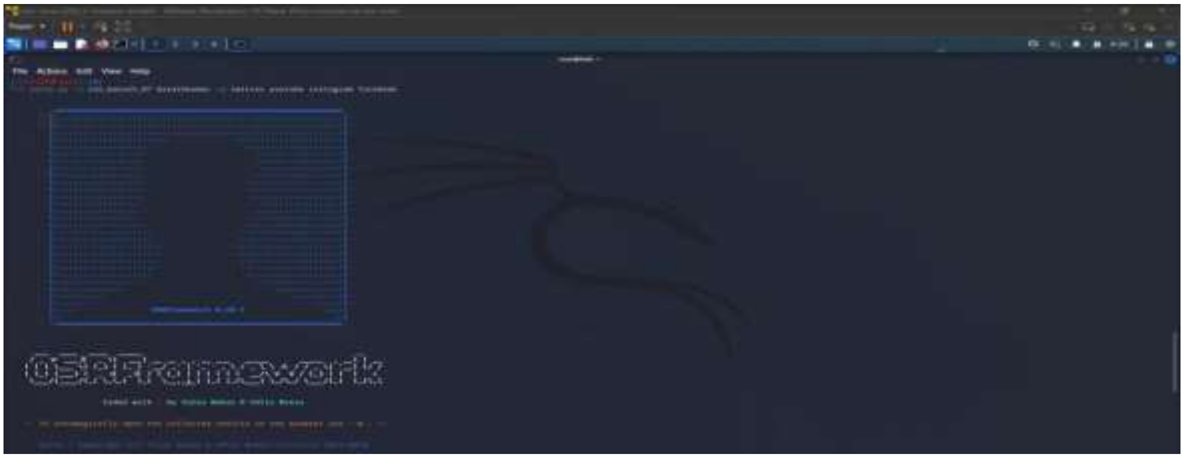
Exercise No 4- Open Source Intelligence Gathering Using OSRFramework

Aim: To Checks for the Existence of a Profile for given user details in different platforms
Procedure:

Step 1: Log into kali linux machine
Step 2: Launch a command line terminal by clicking on terminal icon from taskbar
Step 3: Usufy.py checks for the existence of a profile for given user details in different platforms

Command:

```
Usufy.py -n <Target username or profile name> -p twitter facebook youtube
```



If any error occurs Try this command: **Sudo apt-getupdate**

The usufy.py will search the user details in the mentioned platform and will provide you with the existence of the user

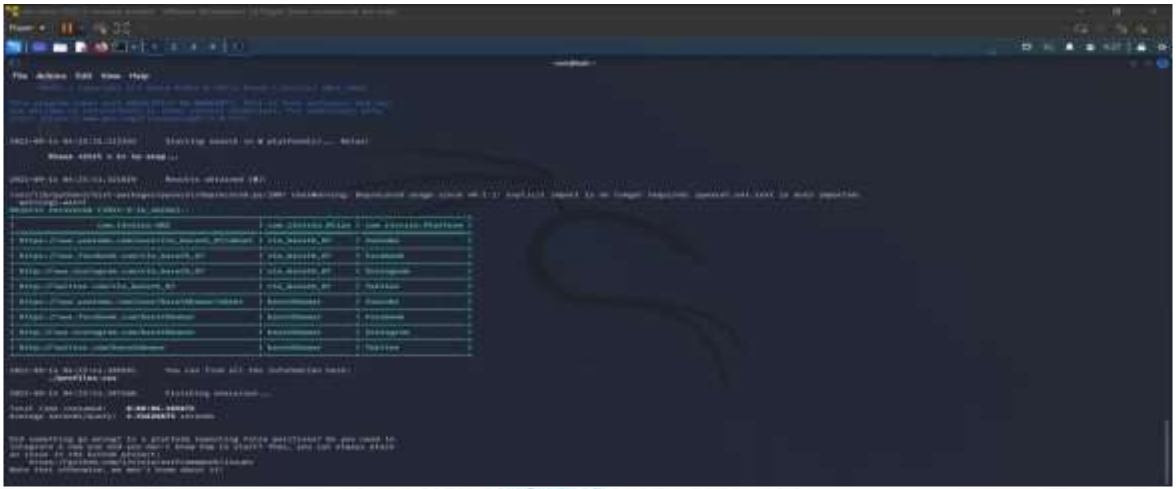
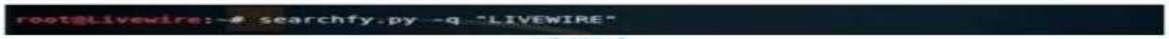


FIGURE. 8

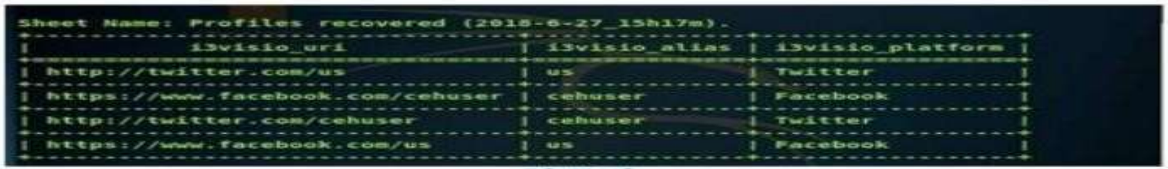
Step 5: Searchfy.py checks with the existing users of a page/handlers for given details in the all social networking platforms. Type searchfy.py -q <Page Name or Handler Name> and press Enter



```
root@Livewire:~# searchfy.py -q "LIVEWIRE"
```

FIGURE. 9

Step 6: It will put out all the details who are subscribed to target social networking pages that are provided.

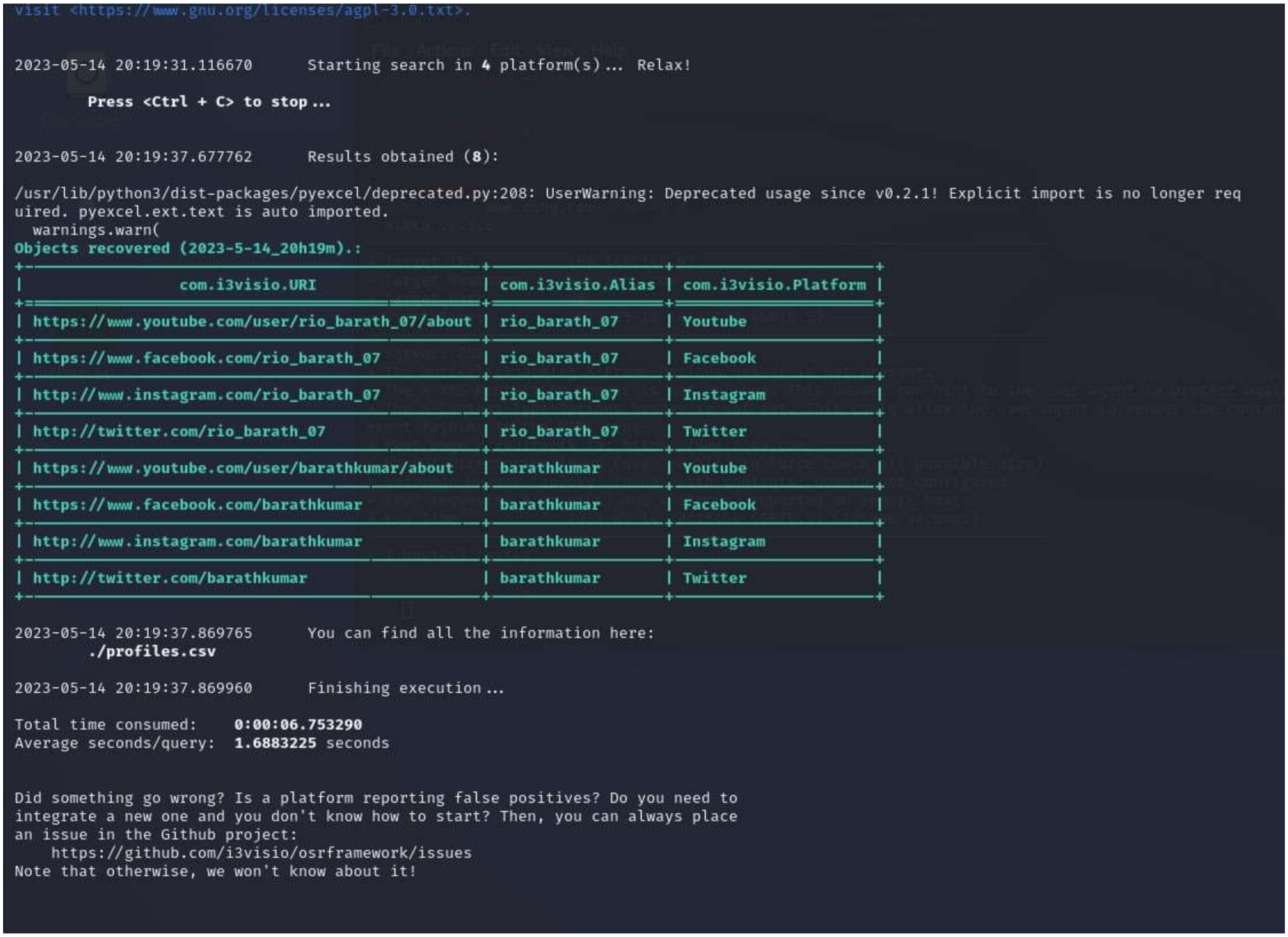


```
Sheet Name: Profiles recovered (2018-6-27_15h17m).
+------------------------------------+----------------+--------------------+
|            i3visio_uri             | i3visio_alias  | i3visio_platform   |
+====================================+================+====================+
| http://twitter.com/us              | us             | Twitter            |
+------------------------------------+----------------+--------------------+
| https://www.facebook.com/cehuser   | cehuser        | Facebook           |
+------------------------------------+----------------+--------------------+
| http://twitter.com/cehuser         | cehuser        | Twitter            |
+------------------------------------+----------------+--------------------+
| https://www.facebook.com/us        | us             | Facebook           |
+------------------------------------+----------------+--------------------+
```

FIGURE. 10

Collect and note the information disclosed about the target

Out Put:

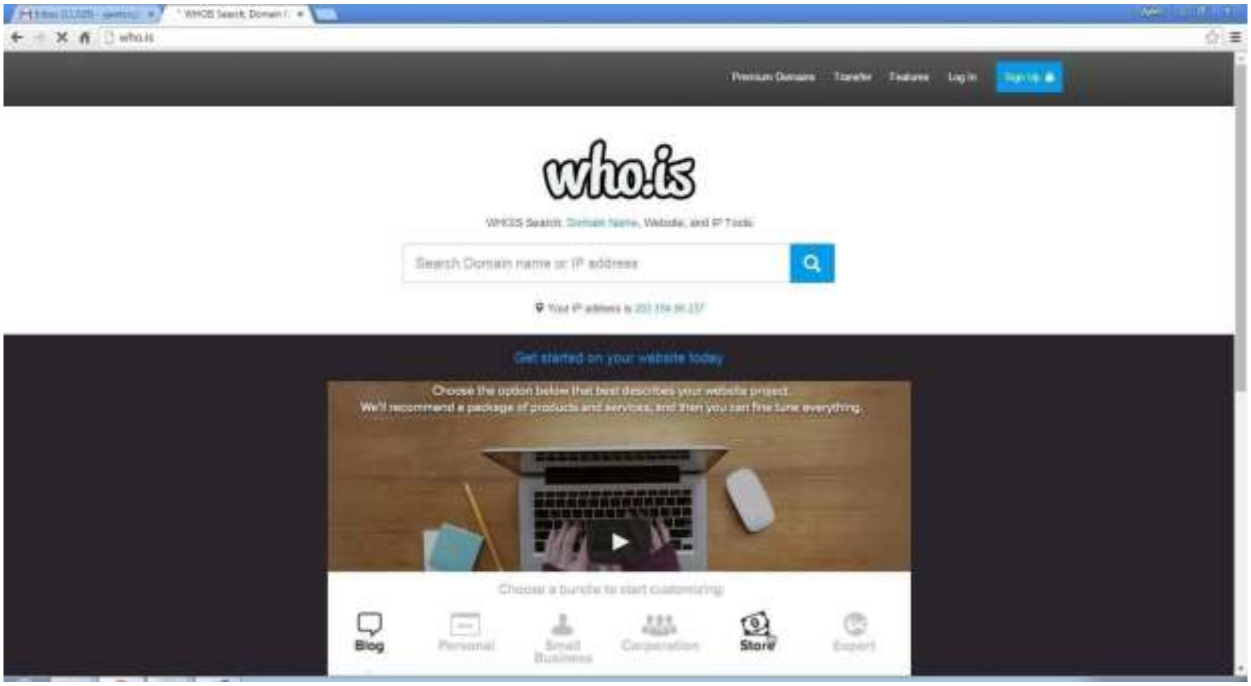


```
visit <https://www.gnu.org/licenses/agpl-3.0.txt>.


2023-05-14 20:19:31.116670      Starting search in 4 platform(s)... Relax!

        Press <Ctrl + C> to stop...


2023-05-14 20:19:37.677762      Results obtained (8):

/usr/lib/python3/dist-packages/pyexcel/deprecated.py:208: UserWarning: Deprecated usage since v0.2.1! Explicit import is no longer req
uired. pyexcel.ext.text is auto imported.
  warnings.warn(
Objects recovered (2023-5-14_20h19m).:
+--------------------------------------------------+-------------------+----------------------+
|                 com.i3visio.URI                  | com.i3visio.Alias | com.i3visio.Platform |
+==================================================+===================+======================+
| https://www.youtube.com/user/rio_barath_07/about | rio_barath_07     | Youtube              |
+--------------------------------------------------+-------------------+----------------------+
| https://www.facebook.com/rio_barath_07           | rio_barath_07     | Facebook             |
+--------------------------------------------------+-------------------+----------------------+
| http://www.instagram.com/rio_barath_07           | rio_barath_07     | Instagram            |
+--------------------------------------------------+-------------------+----------------------+
| http://twitter.com/rio_barath_07                 | rio_barath_07     | Twitter              |
+--------------------------------------------------+-------------------+----------------------+
| https://www.youtube.com/user/barathkumar/about   | barathkumar       | Youtube              |
+--------------------------------------------------+-------------------+----------------------+
| https://www.facebook.com/barathkumar             | barathkumar       | Facebook             |
+--------------------------------------------------+-------------------+----------------------+
| http://www.instagram.com/barathkumar             | barathkumar       | Instagram            |
+--------------------------------------------------+-------------------+----------------------+
| http://twitter.com/barathkumar                   | barathkumar       | Twitter              |
+--------------------------------------------------+-------------------+----------------------+

2023-05-14 20:19:37.869765      You can find all the information here:
        ./profiles.csv

2023-05-14 20:19:37.869960      Finishing execution...

Total time consumed:    0:00:06.753290
Average seconds/query:  1.6883225 seconds


Did something go wrong? Is a platform reporting false positives? Do you need to
integrate a new one and you don't know how to start? Then, you can always place
an issue in the Github project:
    https://github.com/i3visio/osrframework/issues
Note that otherwise, we won't know about it!
```

Exercise NO 5: Use Google and Whois for Reconnaisasance.

Aim: To find out the Whois, DNS Records and Diagonstics for particular website by using Whois search.
Procedure:

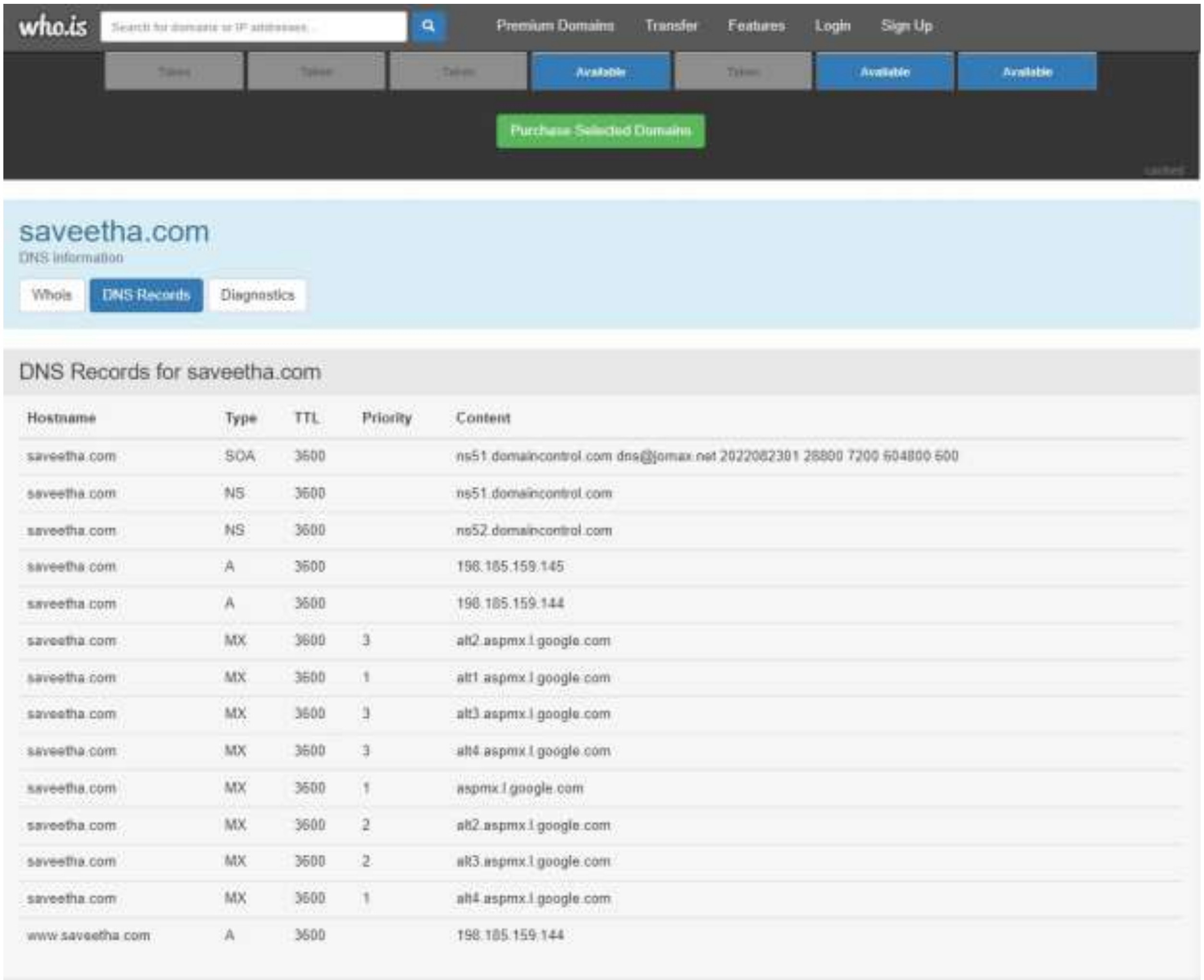
Step1: Open the WHO.is website



WHOIS Search, Domain I
who.is
Premium Domains
Transfer
Features
Log In
Sign Up
who.is
WHOIS Search, Domain Name, Website, and IP Tools
Search Domain name or IP address
Your IP address is
Get started on your website today
Choose a bundle to start customizing:
Blog
Personal
Small Business
Corporation
Store
Expert

Choose the option below that best describes your website project.
We'll recommend a package of products and services, and then you can fine tune everything.

Step 2: Enter the website name in search bar and hit the "Enter button". Step 3: Show you information about www.saveetha.com

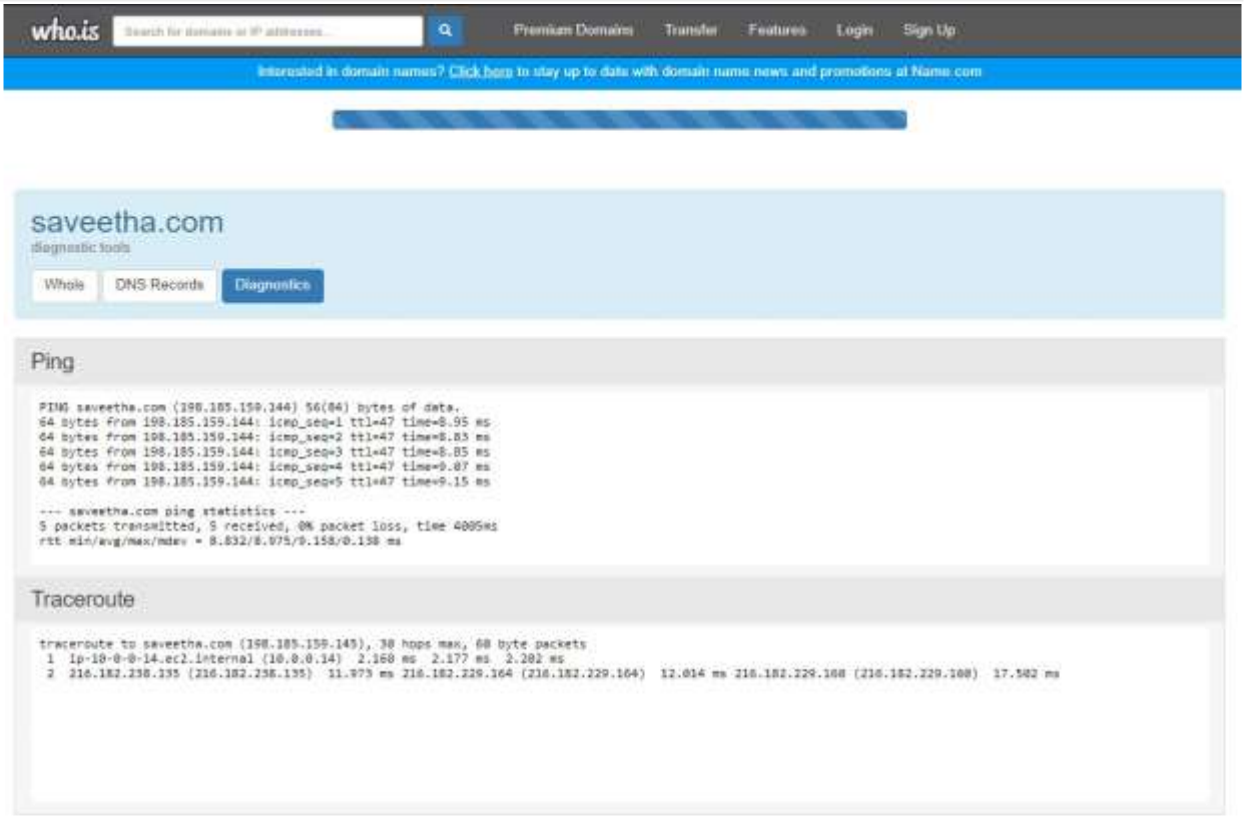


saveetha.com

DNS information

DNS Records for saveetha.com

Hostname	Type	TTL	Priority	Content
saveetha.com	SOA	3600		ns51.domaincontrol.com dns@jomax.net 2022082301 28800 7200 604800 600
saveetha.com	NS	3600		ns51.domaincontrol.com
saveetha.com	NS	3600		ns52.domaincontrol.com
saveetha.com	A	3600		198.185.159.145
saveetha.com	A	3600		198.185.159.144
saveetha.com	MX	3600	3	alt2.aspmx.l.google.com
saveetha.com	MX	3600	1	alt1.aspmx.l.google.com
saveetha.com	MX	3600	3	alt3.aspmx.l.google.com
saveetha.com	MX	3600	3	alt4.aspmx.l.google.com
saveetha.com	MX	3600	1	aspmx.l.google.com
saveetha.com	MX	3600	2	alt2.aspmx.l.google.com
saveetha.com	MX	3600	2	alt3.aspmx.l.google.com
saveetha.com	MX	3600	1	alt4.aspmx.l.google.com
www.saveetha.com	A	3600		198.185.159.144



Interested in domain names? Click here to stay up to date with domain name news and promotions at Name.com

saveetha.com

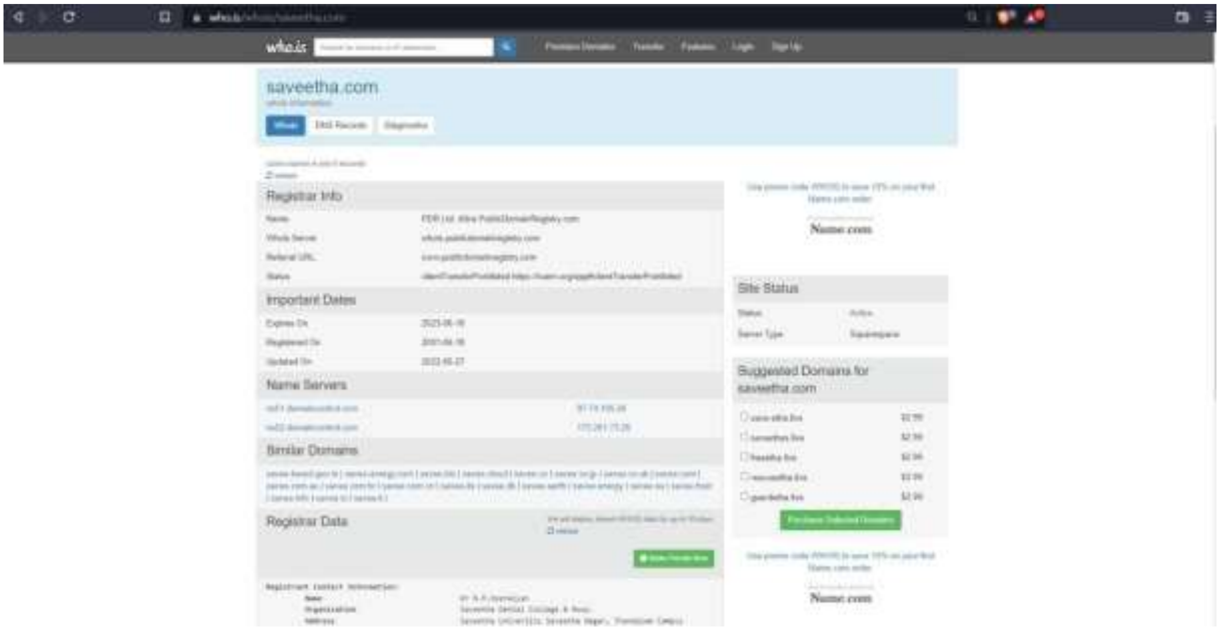
diagnostic tools

Ping

```
PING saveetha.com (198.185.159.144) 56(84) bytes of data.
64 bytes from 198.185.159.144: icmp_seq=1 ttl=47 time=8.95 ms
64 bytes from 198.185.159.144: icmp_seq=2 ttl=47 time=8.83 ms
64 bytes from 198.185.159.144: icmp_seq=3 ttl=47 time=8.85 ms
64 bytes from 198.185.159.144: icmp_seq=4 ttl=47 time=9.07 ms
64 bytes from 198.185.159.144: icmp_seq=5 ttl=47 time=9.15 ms

--- saveetha.com ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 8.832/8.975/9.158/0.138 ms
```

Traceroute

```
traceroute to saveetha.com (198.185.159.145), 30 hops max, 60 byte packets
 1  ip-10-0-0-14.ec2.internal (10.0.0.14)  2.168 ms  2.177 ms  2.202 ms
 2  216.182.238.135 (216.182.238.135)  11.973 ms 216.182.229.164 (216.182.229.164)  12.014 ms 216.182.229.108 (216.182.229.108)  17.582 ms
```



saveetha.com

Registrar Info

Name: PDR Ltd. d/b/a PublicDomainRegistry.com

Whois Server: whois.publicdomainregistry.com

Referral URL: www.publicdomainregistry.com

Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited

Important Dates

Expires On: 2023-06-18

Registered On: 2001-06-18

Updated On: 2022-05-27

Name Servers

ns51.domaincontrol.com [illegible]

ns52.domaincontrol.com [illegible]

Similar Domains

[illegible]

Registrar Data

Site Status

Status: Active

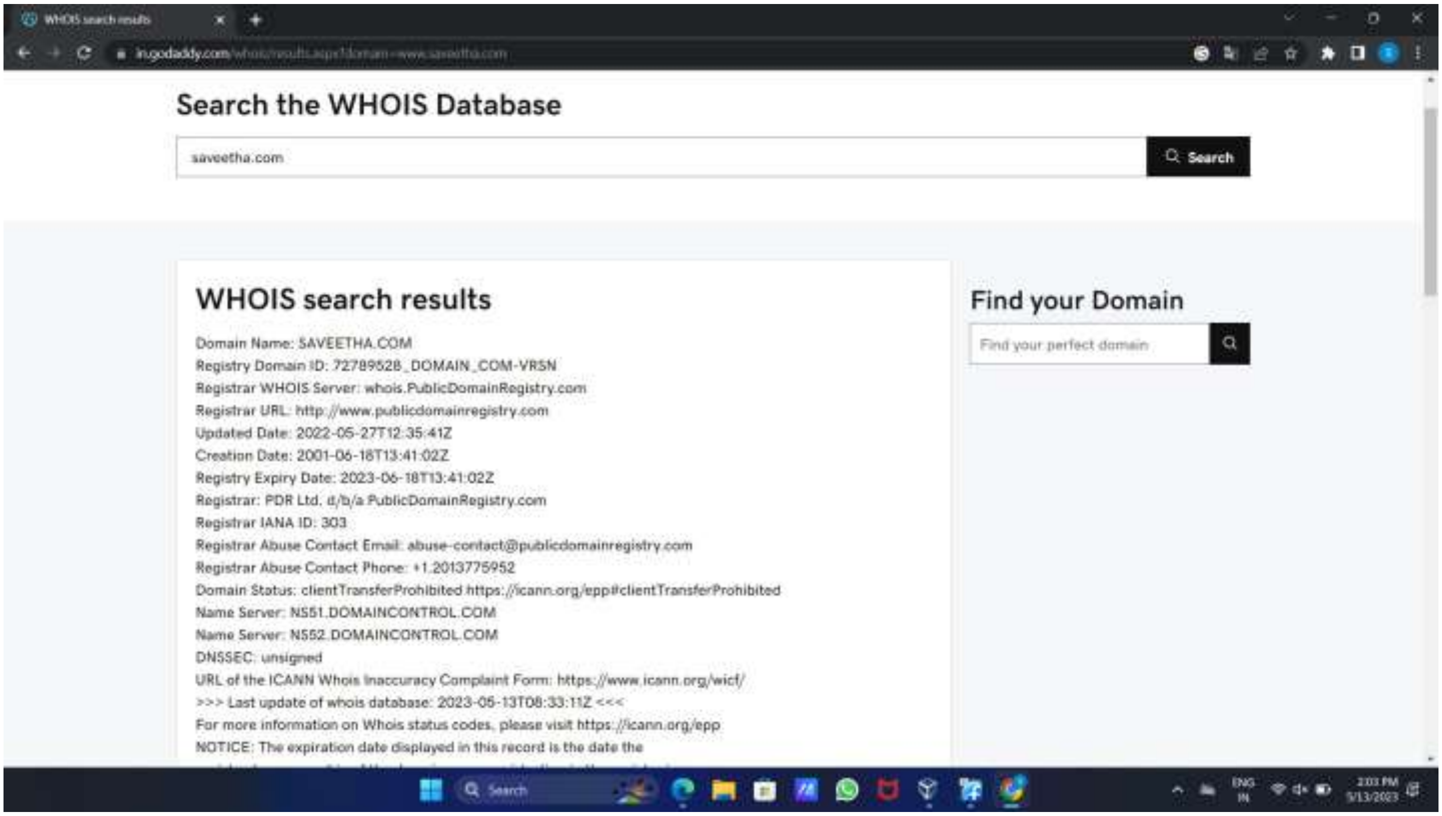
Server Type: [illegible]

Suggested Domains for saveetha.com

Registrant Contact Information:

[illegible]

Out Put:



Search the WHOIS Database

saveetha.com

WHOIS search results

Domain Name: SAVEETHA.COM
Registry Domain ID: 72789528_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.PublicDomainRegistry.com
Registrar URL: http://www.publicdomainregistry.com
Updated Date: 2022-05-27T12:35:41Z
Creation Date: 2001-06-18T13:41:02Z
Registry Expiry Date: 2023-06-18T13:41:02Z
Registrar: PDR Ltd. d/b/a PublicDomainRegistry.com
Registrar IANA ID: 303
Registrar Abuse Contact Email: abuse-contact@publicdomainregistry.com
Registrar Abuse Contact Phone: +1.2013775952
Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited
Name Server: NS51.DOMAINCONTROL.COM
Name Server: NS52.DOMAINCONTROL.COM
DNSSEC: unsigned
URL of the ICANN Whois Inaccuracy Complaint Form: https://www.icann.org/wicf/
>>> Last update of whois database: 2023-05-13T08:33:11Z <<<
For more information on Whois status codes, please visit https://icann.org/epp
NOTICE: The expiration date displayed in this record is the date the

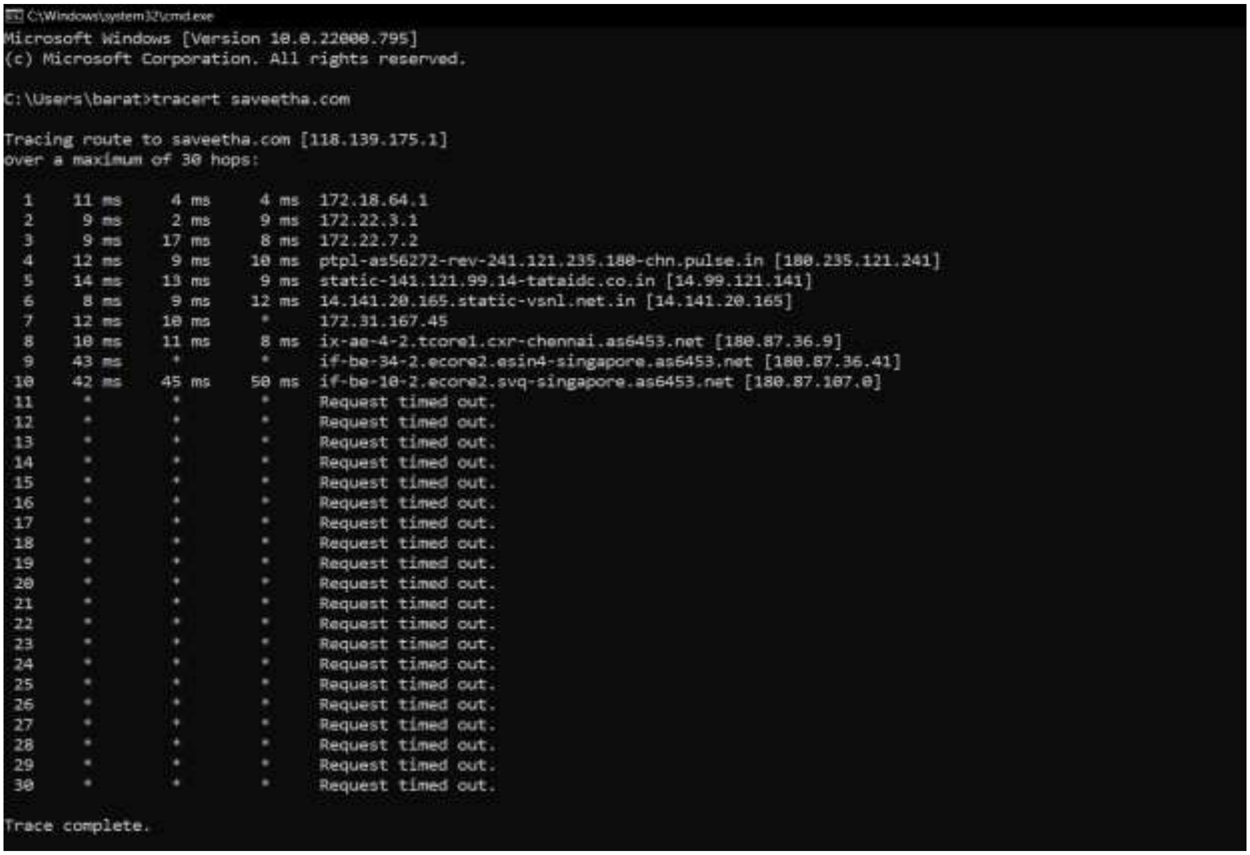
Find your Domain

Exercise No 6: TraceRoute, ping, ifconfig, ipconfig, netstat

Aim: Using TraceRoute, ping, ifconfig(LINUX), ipconfig(WINDOWS), and netstat Command.

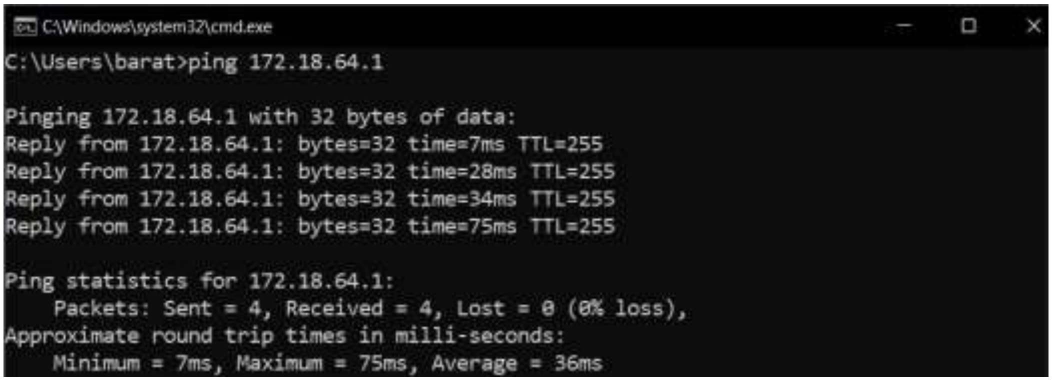
Procedure:

Step 1: open windows command prompt and Type tracert command and type tracert www.saveetha.com -> “Enter”



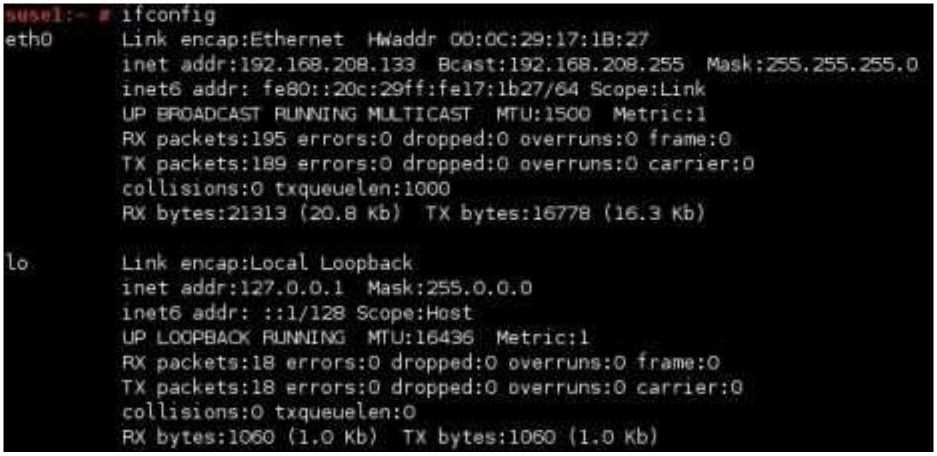
```
Microsoft Windows [Version 10.0.22000.795]
(c) Microsoft Corporation. All rights reserved.

C:\Users\barat>tracert saveetha.com

Tracing route to saveetha.com [118.139.175.1]
over a maximum of 30 hops:

  1    11 ms     4 ms     4 ms  172.18.64.1
  2     9 ms     2 ms     9 ms  172.22.3.1
  3     9 ms    17 ms     8 ms  172.22.7.2
  4    12 ms     9 ms    10 ms  ptpl-as56272-rev-241.121.235.180-chn.pulse.in [180.235.121.241]
  5    14 ms    13 ms     9 ms  static-141.121.99.14-tataidc.co.in [14.99.121.141]
  6     8 ms     9 ms    12 ms  14.141.20.165.static-vsnl.net.in [14.141.20.165]
  7    12 ms    10 ms     *     172.31.167.45
  8    10 ms    11 ms     8 ms  ix-ae-4-2.tcore1.cxr-chennai.as6453.net [180.87.36.9]
  9    43 ms     *        *     if-be-34-2.ecore2.esin4-singapore.as6453.net [180.87.36.41]
 10    42 ms    45 ms    50 ms  if-be-10-2.ecore2.svq-singapore.as6453.net [180.87.107.0]
 11     *        *        *     Request timed out.
 12     *        *        *     Request timed out.
 13     *        *        *     Request timed out.
 14     *        *        *     Request timed out.
 15     *        *        *     Request timed out.
 16     *        *        *     Request timed out.
 17     *        *        *     Request timed out.
 18     *        *        *     Request timed out.
 19     *        *        *     Request timed out.
 20     *        *        *     Request timed out.
 21     *        *        *     Request timed out.
 22     *        *        *     Request timed out.
 23     *        *        *     Request timed out.
 24     *        *        *     Request timed out.
 25     *        *        *     Request timed out.
 26     *        *        *     Request timed out.
 27     *        *        *     Request timed out.
 28     *        *        *     Request timed out.
 29     *        *        *     Request timed out.
 30     *        *        *     Request timed out.

Trace complete.
```

Step 2: Type ping command and type IP Address press “Enter”



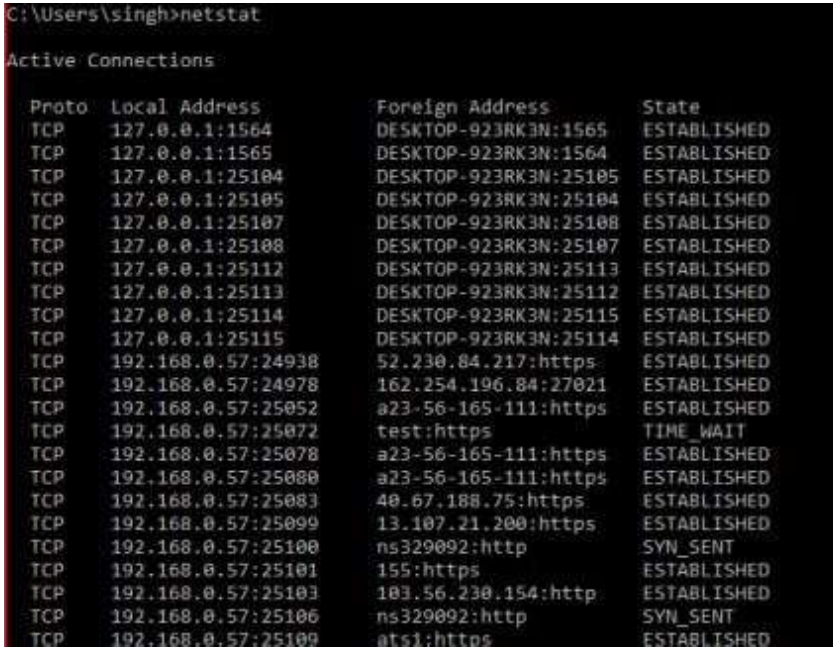
```
C:\Users\barat>ping 172.18.64.1

Pinging 172.18.64.1 with 32 bytes of data:
Reply from 172.18.64.1: bytes=32 time=7ms TTL=255
Reply from 172.18.64.1: bytes=32 time=28ms TTL=255
Reply from 172.18.64.1: bytes=32 time=34ms TTL=255
Reply from 172.18.64.1: bytes=32 time=75ms TTL=255

Ping statistics for 172.18.64.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 7ms, Maximum = 75ms, Average = 36ms
```

Step 3: Type ifconfig command



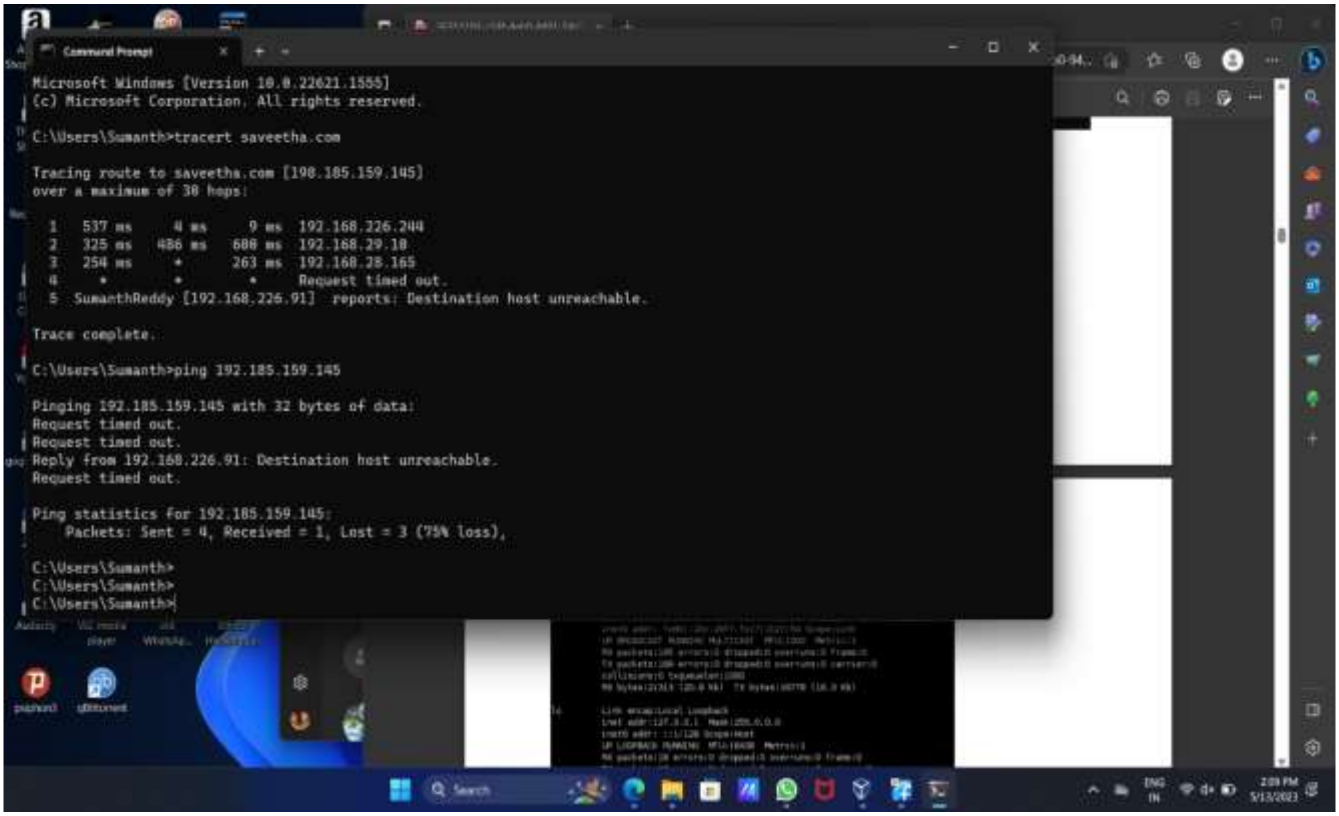
```
susel:~ # ifconfig
eth0      Link encap:Ethernet  HWaddr 00:0C:29:17:1B:27
          inet addr:192.168.208.133  Bcast:192.168.208.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe17:1b27/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:195 errors:0 dropped:0 overruns:0 frame:0
          TX packets:189 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:21313 (20.8 Kb)  TX bytes:16778 (16.3 Kb)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:18 errors:0 dropped:0 overruns:0 frame:0
          TX packets:18 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:1060 (1.0 Kb)  TX bytes:1060 (1.0 Kb)
```

Step 4: Type netstat c

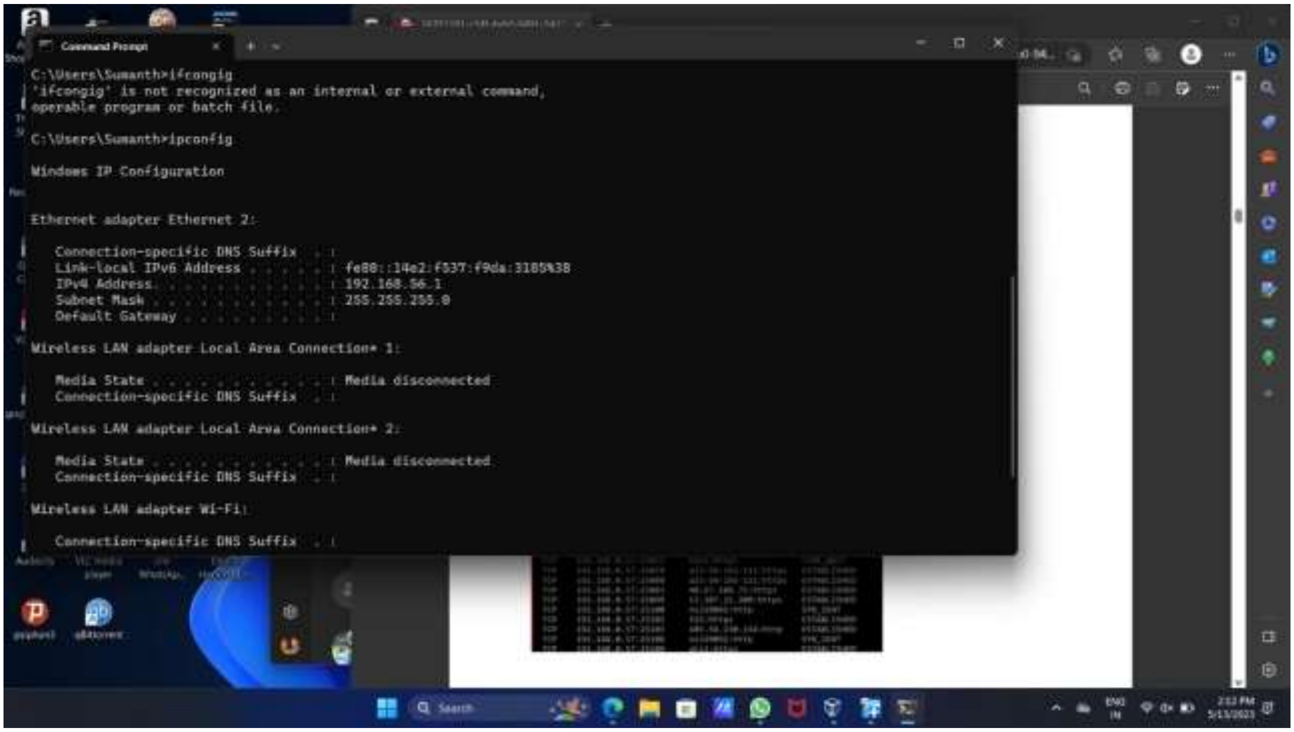


```
C:\Users\singh>netstat

Active Connections

  Proto  Local Address          Foreign Address        State
  TCP    127.0.0.1:1564         DESKTOP-923RK3N:1565   ESTABLISHED
  TCP    127.0.0.1:1565         DESKTOP-923RK3N:1564   ESTABLISHED
  TCP    127.0.0.1:25104        DESKTOP-923RK3N:25105  ESTABLISHED
  TCP    127.0.0.1:25105        DESKTOP-923RK3N:25104  ESTABLISHED
  TCP    127.0.0.1:25107        DESKTOP-923RK3N:25108  ESTABLISHED
  TCP    127.0.0.1:25108        DESKTOP-923RK3N:25107  ESTABLISHED
  TCP    127.0.0.1:25112        DESKTOP-923RK3N:25113  ESTABLISHED
  TCP    127.0.0.1:25113        DESKTOP-923RK3N:25112  ESTABLISHED
  TCP    127.0.0.1:25114        DESKTOP-923RK3N:25115  ESTABLISHED
  TCP    127.0.0.1:25115        DESKTOP-923RK3N:25114  ESTABLISHED
  TCP    192.168.0.57:24938     52.230.84.217:https    ESTABLISHED
  TCP    192.168.0.57:24978     162.254.196.84:27021   ESTABLISHED
  TCP    192.168.0.57:25052     a23-56-165-111:https   ESTABLISHED
  TCP    192.168.0.57:25072     test:https             TIME_WAIT
  TCP    192.168.0.57:25078     a23-56-165-111:https   ESTABLISHED
  TCP    192.168.0.57:25080     a23-56-165-111:https   ESTABLISHED
  TCP    192.168.0.57:25083     40.67.188.75:https     ESTABLISHED
  TCP    192.168.0.57:25099     13.107.21.200:https    ESTABLISHED
  TCP    192.168.0.57:25100     ns329092:http          SYN_SENT
  TCP    192.168.0.57:25101     155:https              ESTABLISHED
  TCP    192.168.0.57:25103     103.56.230.154:http    ESTABLISHED
  TCP    192.168.0.57:25106     ns329092:http          SYN_SENT
  TCP    192.168.0.57:25109     atsi:https             ESTABLISHED
```

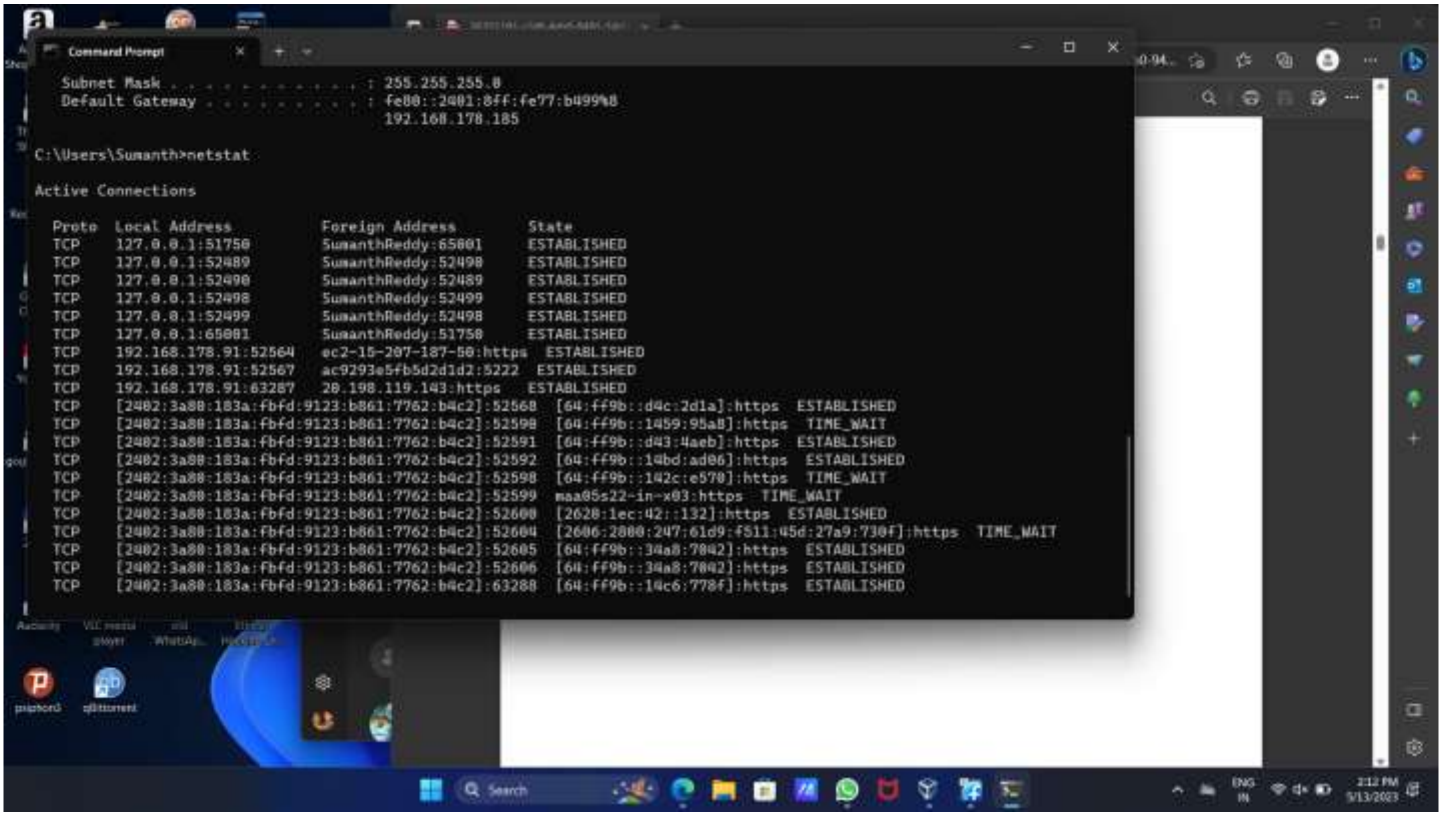
Out Put:



```
Microsoft Windows [Version 10.0.22621.1555]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Sumanth>tracert saveetha.com

Tracing route to saveetha.com [198.185.159.145]
over a maximum of 30 hops:

  1   537 ms     4 ms     9 ms  192.168.226.244
  2   325 ms   486 ms   608 ms  192.168.29.18
  3   254 ms     *      263 ms  192.168.28.165
  4     *        *        *     Request timed out.
  5  SumanthReddy [192.168.226.91]  reports: Destination host unreachable.

Trace complete.

C:\Users\Sumanth>ping 192.185.159.145

Pinging 192.185.159.145 with 32 bytes of data:
Request timed out.
Request timed out.
Reply from 192.168.226.91: Destination host unreachable.
Request timed out.

Ping statistics for 192.185.159.145:
    Packets: Sent = 4, Received = 1, Lost = 3 (75% loss),

C:\Users\Sumanth>
C:\Users\Sumanth>
C:\Users\Sumanth>
```



```
C:\Users\Sumanth>ifcongig
'ifcongig' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\Sumanth>ipconfig

Windows IP Configuration


Ethernet adapter Ethernet 2:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::14e2:f537:f9da:3185%38
   IPv4 Address. . . . . . . . . . . : 192.168.56.1
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . :

Wireless LAN adapter Local Area Connection* 1:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 2:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
```



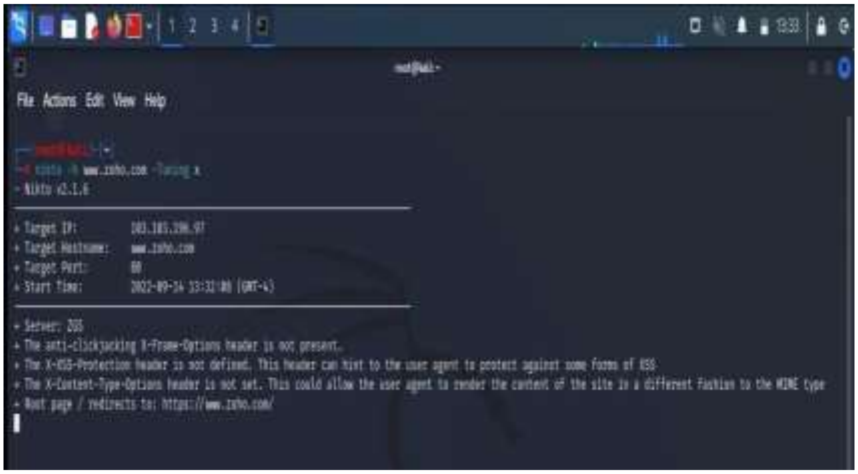
```
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . : fe80::2401:8ff:fe77:b499%8
                                       192.168.178.185

C:\Users\Sumanth>netstat

Active Connections

  Proto  Local Address          Foreign Address        State
  TCP    127.0.0.1:51750        SumanthReddy:65001     ESTABLISHED
  TCP    127.0.0.1:52489        SumanthReddy:52490     ESTABLISHED
  TCP    127.0.0.1:52490        SumanthReddy:52489     ESTABLISHED
  TCP    127.0.0.1:52498        SumanthReddy:52499     ESTABLISHED
  TCP    127.0.0.1:52499        SumanthReddy:52498     ESTABLISHED
  TCP    127.0.0.1:65001        SumanthReddy:51750     ESTABLISHED
  TCP    192.168.178.91:52564   ec2-15-207-187-50:https  ESTABLISHED
  TCP    192.168.178.91:52567   ac9293e5fb5d2d1d2:5222  ESTABLISHED
  TCP    192.168.178.91:63287   20.198.119.143:https   ESTABLISHED
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:52568  [64:ff9b::d4c:2d1a]:https  ESTABLISHED
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:52590  [64:ff9b::1459:95a8]:https  TIME_WAIT
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:52591  [64:ff9b::d43:4aeb]:https  ESTABLISHED
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:52592  [64:ff9b::14bd:ad06]:https  ESTABLISHED
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:52598  [64:ff9b::142c:e570]:https  TIME_WAIT
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:52599  maa05s22-in-x03:https  TIME_WAIT
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:52600  [2620:1ec:42::132]:https  ESTABLISHED
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:52604  [2606:2800:247:61d9:f511:45d:27a9:730f]:https  TIME_WAIT
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:52605  [64:ff9b::34a8:7042]:https  ESTABLISHED
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:52606  [64:ff9b::34a8:7042]:https  ESTABLISHED
  TCP    [2402:3a80:183a:fbfd:9123:b861:7762:b4c2]:63288  [64:ff9b::14c6:778f]:https  ESTABLISHED
```

Exercise No 7:VULNERABILITY ANALYSIS - CGI Scanning with Nikto

Aim:To perform vulnerability Analysis using CGI Scanning with Nikto

Procedure:

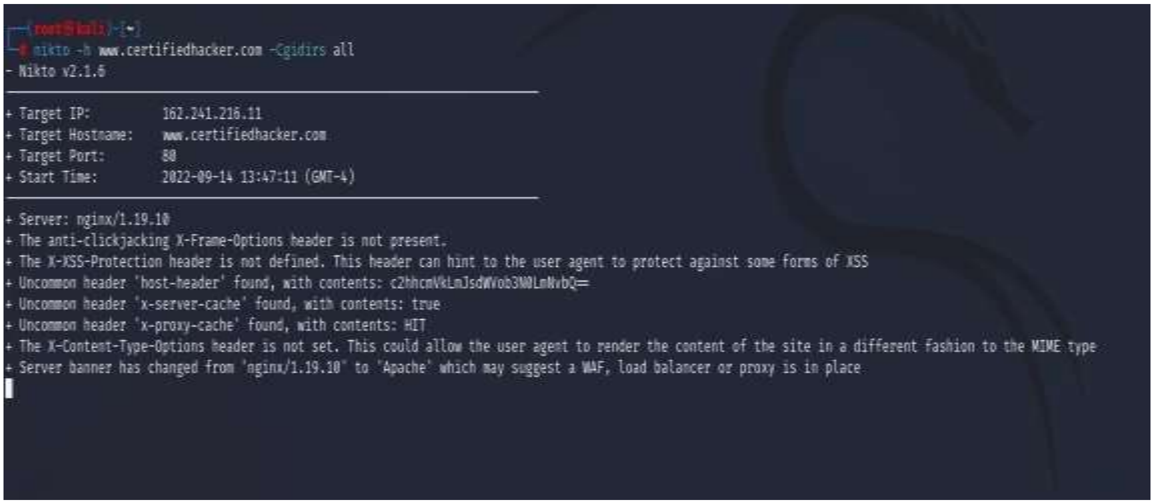
Step 1: open a terminal window and type nikto –H and press enter Step 2: Type nikto –h <website> Tuning x and press enter



```
┌──(root㉿kali)-[~]
└─# nikto -h www.zoho.com -Tuning x
- Nikto v2.1.6
---------------------------------------------------------------------------
+ Target IP:          103.185.196.97
+ Target Hostname:    www.zoho.com
+ Target Port:        80
+ Start Time:         2022-09-14 13:32:08 (GMT-4)
---------------------------------------------------------------------------
+ Server: ZGS
+ The anti-clickjacking X-Frame-Options header is not present.
+ The X-XSS-Protection header is not defined. This header can hint to the user agent to protect against some forms of XSS
+ The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to the MIME type
+ Root page / redirects to: https://www.zoho.com/
```

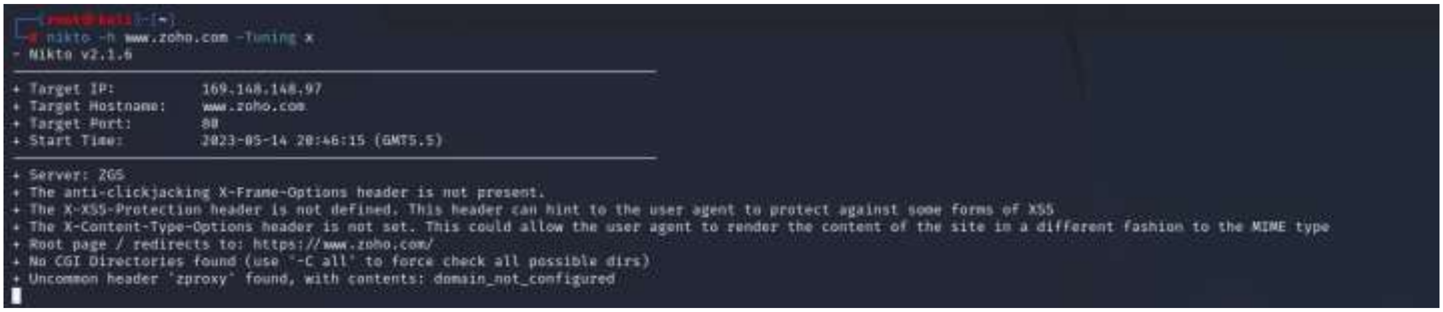
Step 3: Nikto starts web server scanning with all tuning options enabled.

Step4:In the terminal window type "nikto –h <website>-Cgidirs all"and hit enter

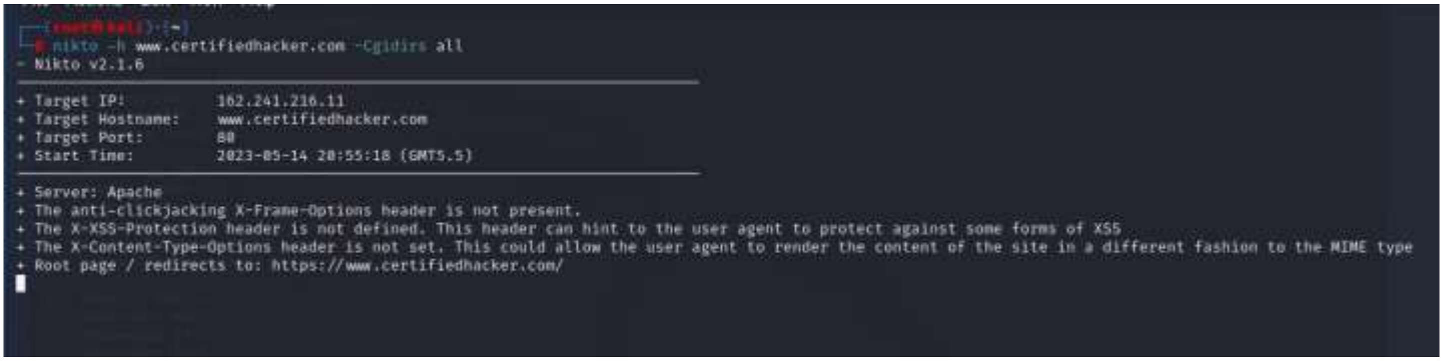


```
┌──(root㉿kali)-[~]
└─# nikto -h www.certifiedhacker.com -Cgidirs all
- Nikto v2.1.6
---------------------------------------------------------------------------
+ Target IP:          162.241.216.11
+ Target Hostname:    www.certifiedhacker.com
+ Target Port:        80
+ Start Time:         2022-09-14 13:47:11 (GMT-4)
---------------------------------------------------------------------------
+ Server: nginx/1.19.10
+ The anti-clickjacking X-Frame-Options header is not present.
+ The X-XSS-Protection header is not defined. This header can hint to the user agent to protect against some forms of XSS
+ Uncommon header 'host-header' found, with contents: c2hhcmVkLmJsdWVob3N0LmNvbQ==
+ Uncommon header 'x-server-cache' found, with contents: true
+ Uncommon header 'x-proxy-cache' found, with contents: HIT
+ The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to the MIME type
+ Server banner has changed from 'nginx/1.19.10' to 'Apache' which may suggest a WAF, load balancer or proxy is in place
```

Step 5. Nikto will scan the webserver as it looks vulnerable CGI directories. It scans the webserver and list out the directories **Out Put:**



```
┌──(root㉿kali)-[~]
└─# nikto -h www.zoho.com -Tuning x
- Nikto v2.1.6
---------------------------------------------------------------------------
+ Target IP:          169.148.148.97
+ Target Hostname:    www.zoho.com
+ Target Port:        80
+ Start Time:         2023-05-14 20:46:15 (GMT5.5)
---------------------------------------------------------------------------
+ Server: ZGS
+ The anti-clickjacking X-Frame-Options header is not present.
+ The X-XSS-Protection header is not defined. This header can hint to the user agent to protect against some forms of XSS
+ The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to the MIME type
+ Root page / redirects to: https://www.zoho.com/
+ No CGI Directories found (use '-C all' to force check all possible dirs)
+ Uncommon header 'zproxy' found, with contents: domain_not_configured
```



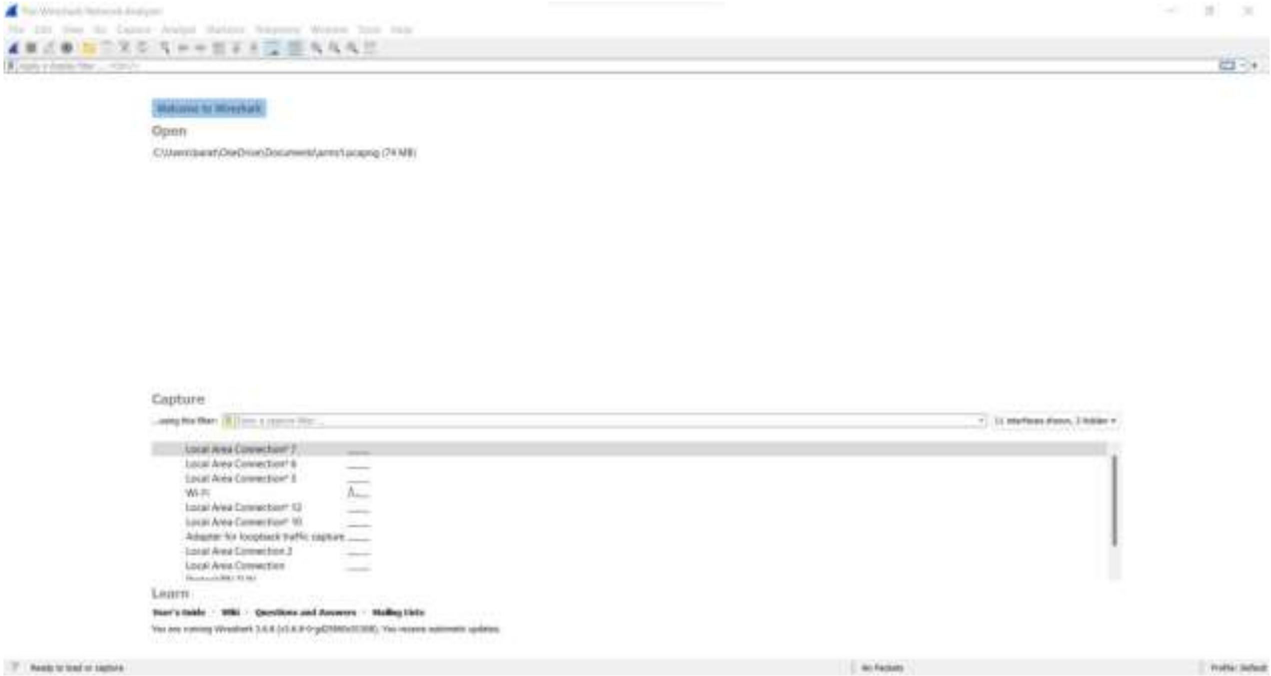
```
┌──(root㉿kali)-[~]
└─# nikto -h www.certifiedhacker.com -Cgidirs all
- Nikto v2.1.6
---------------------------------------------------------------------------
+ Target IP:          162.241.216.11
+ Target Hostname:    www.certifiedhacker.com
+ Target Port:        80
+ Start Time:         2023-05-14 20:55:18 (GMT5.5)
---------------------------------------------------------------------------
+ Server: Apache
+ The anti-clickjacking X-Frame-Options header is not present.
+ The X-XSS-Protection header is not defined. This header can hint to the user agent to protect against some forms of XSS
+ The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to the MIME type
+ Root page / redirects to: https://www.certifiedhacker.com/
```

Exercise No 8: WireShark sniffer

Aim: Use WireShark sniffer to capture network traffic and analyze.

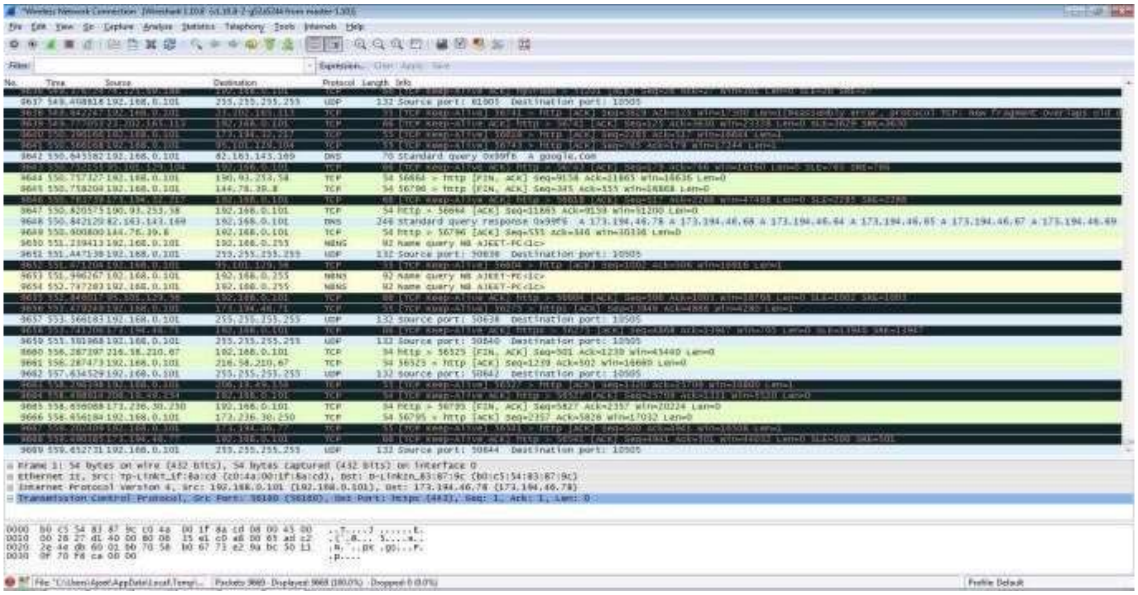
Procedure:

Step 1: Install and open WireShark .



Step 2: Go to Capture tab and select Interface option. Here Wifi connection is chosen

Step 3: The source, Destination and protocols of the packets in the Wifi network are displayed



*Wireless Network Connection [Wireshark 1.10.6 (v1.10.6-2-g52a5244 from master-1.10)]
File Edit View Go Capture Analyze Statistics Telephony Tools Internals Help
Filter:
Expression... Clear Apply Save

```
No.  Time       Source          Destination      Protocol Length Info
9636 [illegible]
9637 549.498818 192.168.0.101   255.255.255.255  UDP      132 Source port: 61905  Destination port: 10505
9638 549.842247 192.168.0.101   23.202.165.113   TCP       55 [TCP Keep-Alive] 56741 > http [ACK] Seq=3629 Ack=125 Win=17300 Len=1[Reassembly error, protocol TCP: New fragment overlaps old d
9639 549.[illegible] 23.202.165.113 192.168.0.101 TCP     66 [TCP Keep-Alive ACK] http > 56741 [ACK] Seq=125 Ack=3630 Win=23328 Len=0 SLE=3629 SRE=3630
9640 550.[illegible] 192.168.0.101 173.194.32.217 TCP      55 [TCP Keep-Alive] 56838 > http [ACK] Seq=2287 Ack=517 Win=16604 Len=1
9641 550.566668 192.168.0.101   95.101.129.104   TCP       55 [TCP Keep-Alive] 56743 > http [ACK] Seq=785 Ack=179 Win=17244 Len=1
9642 550.645582 192.168.0.101   82.163.143.169   DNS       70 Standard query 0x99f6  A google.com
9643 550.732151 95.101.129.104  192.168.0.101    TCP       66 [TCP Keep-Alive ACK] http > 56743 [ACK] Seq=179 Ack=786 Win=16160 Len=0 SLE=785 SRE=786
9644 550.757327 192.168.0.101   190.93.253.58    TCP       54 56664 > http [FIN, ACK] Seq=9158 Ack=11865 Win=16636 Len=0
9645 550.758204 192.168.0.101   144.76.39.8      TCP       54 56796 > http [FIN, ACK] Seq=345 Ack=555 Win=16868 Len=0
9646 550.783739 173.194.32.217  192.168.0.101    TCP       66 [TCP Keep-Alive ACK] http > 56838 [ACK] Seq=517 Ack=2288 Win=47488 Len=0 SLE=2285 SRE=2288
9647 550.820575 190.93.253.58   192.168.0.101    TCP       54 http > 56664 [ACK] Seq=11865 Ack=9159 Win=51200 Len=0
9648 550.842129 82.163.143.169  192.168.0.101    DNS      246 Standard query response 0x99f6  A 173.194.46.78 A 173.194.46.68 A 173.194.46.64 A 173.194.46.65 A 173.194.46.67 A 173.194.46.69
9649 550.900800 144.76.39.8     192.168.0.101    TCP       54 http > 56796 [ACK] Seq=555 Ack=346 Win=30336 Len=0
9650 551.239413 192.168.0.101   192.168.0.255    NBNS      92 Name query NB AJEET-PC<1c>
9651 551.447138 192.168.0.101   255.255.255.255  UDP      132 Source port: 50838  Destination port: 10505
9652 551.471204 192.168.0.101   95.101.129.56    TCP       55 [TCP Keep-Alive] 56604 > http [ACK] Seq=1002 Ack=506 Win=16016 Len=1
9653 551.996267 192.168.0.101   192.168.0.255    NBNS      92 Name query NB AJEET-PC<1c>
9654 552.747283 192.168.0.101   192.168.0.255    NBNS      92 Name query NB AJEET-PC<1c>
9655 552.848017 95.101.129.56   192.168.0.101    TCP       66 [TCP Keep-Alive ACK] http > 56604 [ACK] Seq=506 Ack=1003 Win=18768 Len=0 SLE=1002 SRE=1003
9656 553.479249 192.168.0.101   173.194.46.71    TCP       55 [TCP Keep-Alive] 56273 > https [ACK] Seq=13949 Ack=4868 Win=4280 Len=1
9657 553.566183 192.168.0.101   255.255.255.255  UDP      132 Source port: 50638  Destination port: 10505
9658 553.741206 173.194.46.71   192.168.0.101    TCP       66 [TCP Keep-Alive ACK] https > 56273 [ACK] Seq=4868 Ack=13967 Win=705 Len=0 SLE=13949 SRE=13967
9659 555.501968 192.168.0.101   255.255.255.255  UDP      132 Source port: 50840  Destination port: 10505
9660 556.287397 216.58.210.67   192.168.0.101    TCP       54 http > 56525 [FIN, ACK] Seq=501 Ack=1239 Win=43440 Len=0
9661 556.287473 192.168.0.101   216.58.210.67    TCP       54 56525 > http [ACK] Seq=1239 Ack=502 Win=16680 Len=0
9662 557.634529 192.168.0.101   255.255.255.255  UDP      132 Source port: 50642  Destination port: 10505
9663 558.[illegible] 192.168.0.101 206.[illegible]  TCP       55 [TCP Keep-Alive] 56527 > http [ACK] Seq=1320 Ack=25708 Win=16800 Len=1
9664 558.[illegible] 206.[illegible] 192.168.0.101  TCP       54 [TCP Keep-Alive ACK] http > 56527 [ACK] Seq=25708 Ack=1321 Win=5520 Len=0
9665 558.656088 173.236.30.230  192.168.0.101    TCP       54 http > 56795 [FIN, ACK] Seq=5827 Ack=2357 Win=20224 Len=0
9666 558.656184 192.168.0.101   173.236.30.230   TCP       54 56795 > http [ACK] Seq=2357 Ack=5828 Win=17032 Len=0
9667 558.702409 192.168.0.101   173.194.46.77    TCP       55 [TCP Keep-Alive] 56561 > http [ACK] Seq=500 Ack=4961 Win=16508 Len=1
9668 559.[illegible] 173.194.46.77 192.168.0.101  TCP       66 [TCP Keep-Alive ACK] http > 56561 [ACK] Seq=4961 Ack=501 Win=44032 Len=0 SLE=500 SRE=501
9669 559.652731 192.168.0.101   255.255.255.255  UDP      132 Source port: 50644  Destination port: 10505
```

```
⊞ Frame 1: 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface 0
⊞ Ethernet II, Src: Tp-LinkT_1f:8a:cd (c0:4a:00:1f:8a:cd), Dst: D-LinkIn_83:87:9c (b0:c5:54:83:87:9c)
⊞ Internet Protocol Version 4, Src: 192.168.0.101 (192.168.0.101), Dst: 173.194.46.78 (173.194.46.78)
⊟ Transmission Control Protocol, Src Port: 56180 (56180), Dst Port: https (443), Seq: 1, Ack: 1, Len: 0
```

```
0000  b0 c5 54 83 87 9c c0 4a  00 1f 8a cd 08 00 45 00   ..T....J ......E.
0010  00 28 27 d1 40 00 80 06  15 e1 c0 a8 00 65 ad c2   .('.@... 5....e..
0020  2e 4e db 60 01 bb 70 58  b0 67 73 e2 9a bc 50 11   .N.`..pX .gs...P.
0030  0f 70 f8 ca 00 00                                  .p....
```

File: "C:\Users\Ajeet\AppData\Local\Temp\...
Packets: 9669 · Displayed: 9669 (100.0%) · Dropped: 0 (0.0%)
Profile: Default

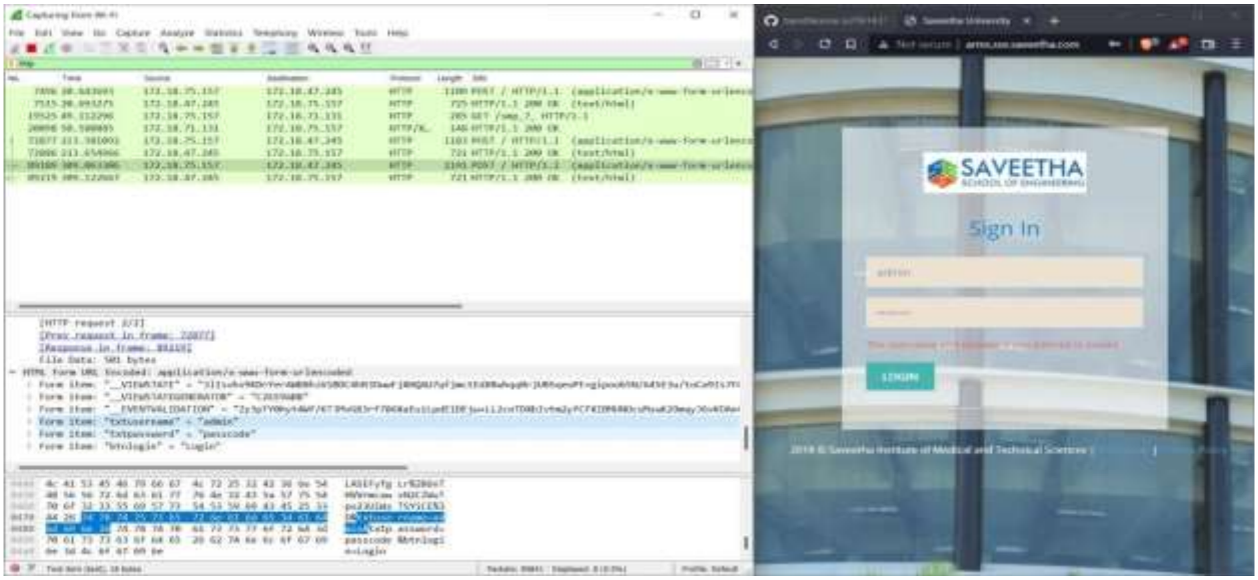
Step 4: Open a website in a new window and enter the user id and password. Register if needed.

Step 5:Enter the credentials and then sign in

Step 6: The wireshark tool will keep recording the packets.

Step 7: Select filter as http to make the search easier and click on apply.

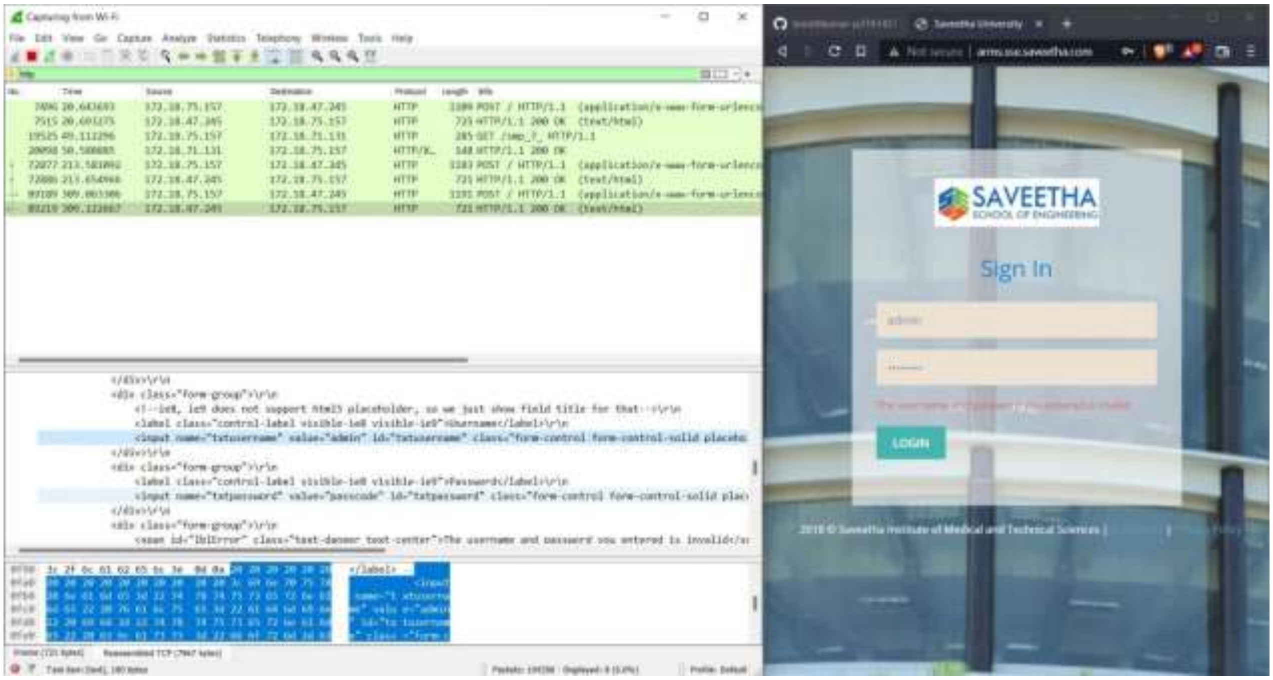
Step 9: Now stop the tool to stop recording



```
 7496 20.643693   172.18.75.157   172.18.47.245   HTTP      1100 POST / HTTP/1.1  (application/x-www-form-urlenc
 7515 20.693275   172.18.47.245   172.18.75.157   HTTP       725 HTTP/1.1 200 OK  (text/html)
19525 49.112296   172.18.75.157   172.18.71.131   HTTP       285 GET /smp_7_ HTTP/1.1
20098 50.588085   172.18.71.131   172.18.75.157   HTTP/X...  148 HTTP/1.1 200 OK
72077 213.581092  172.18.75.157   172.18.47.245   HTTP      1103 POST / HTTP/1.1  (application/x-www-form-urlenc
72086 213.654966  172.18.47.245   172.18.75.157   HTTP       721 HTTP/1.1 200 OK  (text/html)
89109 309.063306  172.18.75.157   172.18.47.245   HTTP      1191 POST / HTTP/1.1  (application/x-www-form-urlenc
89219 309.122667  172.18.47.245   172.18.75.157   HTTP       721 HTTP/1.1 200 OK  (text/html)
```

```
    [HTTP request 2/2]
    [Prev request in frame: 72077]
    [Response in frame: 89219]
    File Data: 501 bytes
- HTML Form URL Encoded: application/x-www-form-urlencoded
  > Form item: "__VIEWSTATE" = "[illegible]
  > Form item: "__VIEWSTATEGENERATOR" = "C2EE9ABB"
  > Form item: "__EVENTVALIDATION" = "[illegible]
  > Form item: "txtusername" = "admin"
  > Form item: "txtpassword" = "passcode"
  > Form item: "btnlogin" = "Login"
```

Capturing from Wi-Fi
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
SAVEETHA
SCHOOL OF ENGINEERING
Sign In
admin
LOGIN



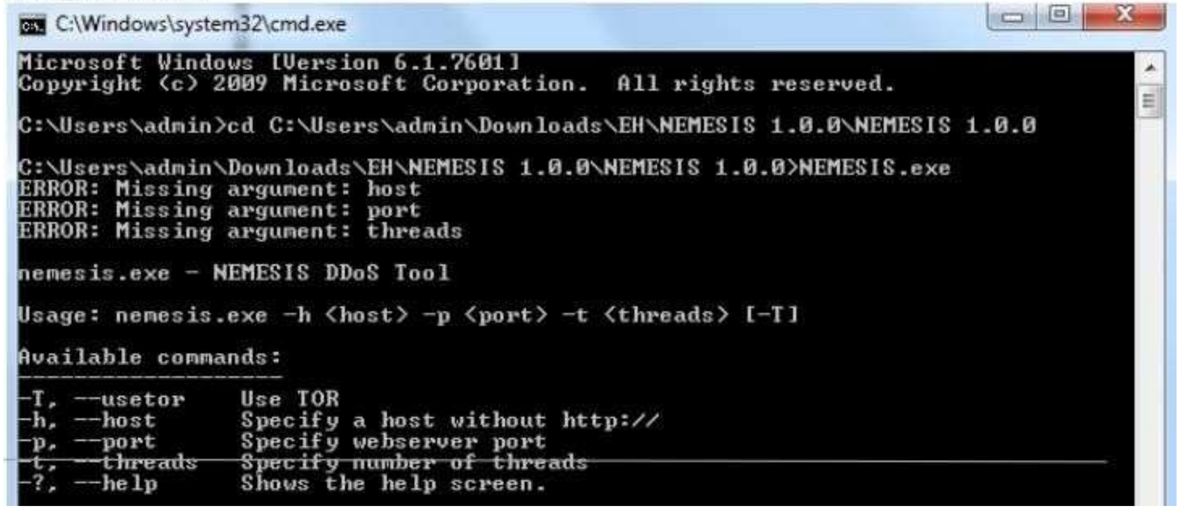
```
            </div>\r\n
            <div class="form-group">\r\n
                <!--ie8, ie9 does not support html5 placeholder, so we just show field title for that-->\r\n
                <label class="control-label visible-ie8 visible-ie9">Username</label>\r\n
                <input name="txtusername" value="admin" id="txtusername" class="form-control form-control-solid placeho
            </div>\r\n
            <div class="form-group">\r\n
                <label class="control-label visible-ie8 visible-ie9">Password</label>\r\n
                <input name="txtpassword" value="passcode" id="txtpassword" class="form-control form-control-solid plac
            </div>\r\n
            <div class="form-group">\r\n
                <span id="lblError" class="text-danger text-center">The username and password you entered is invalid</s
```

Capturing from Wi-Fi
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
SAVEETHA
SCHOOL OF ENGINEERING
Sign In
admin
LOGIN

Step 10: Find the post methods for username and passwords

Step 11: U will see the email- id and password that you used to log in.

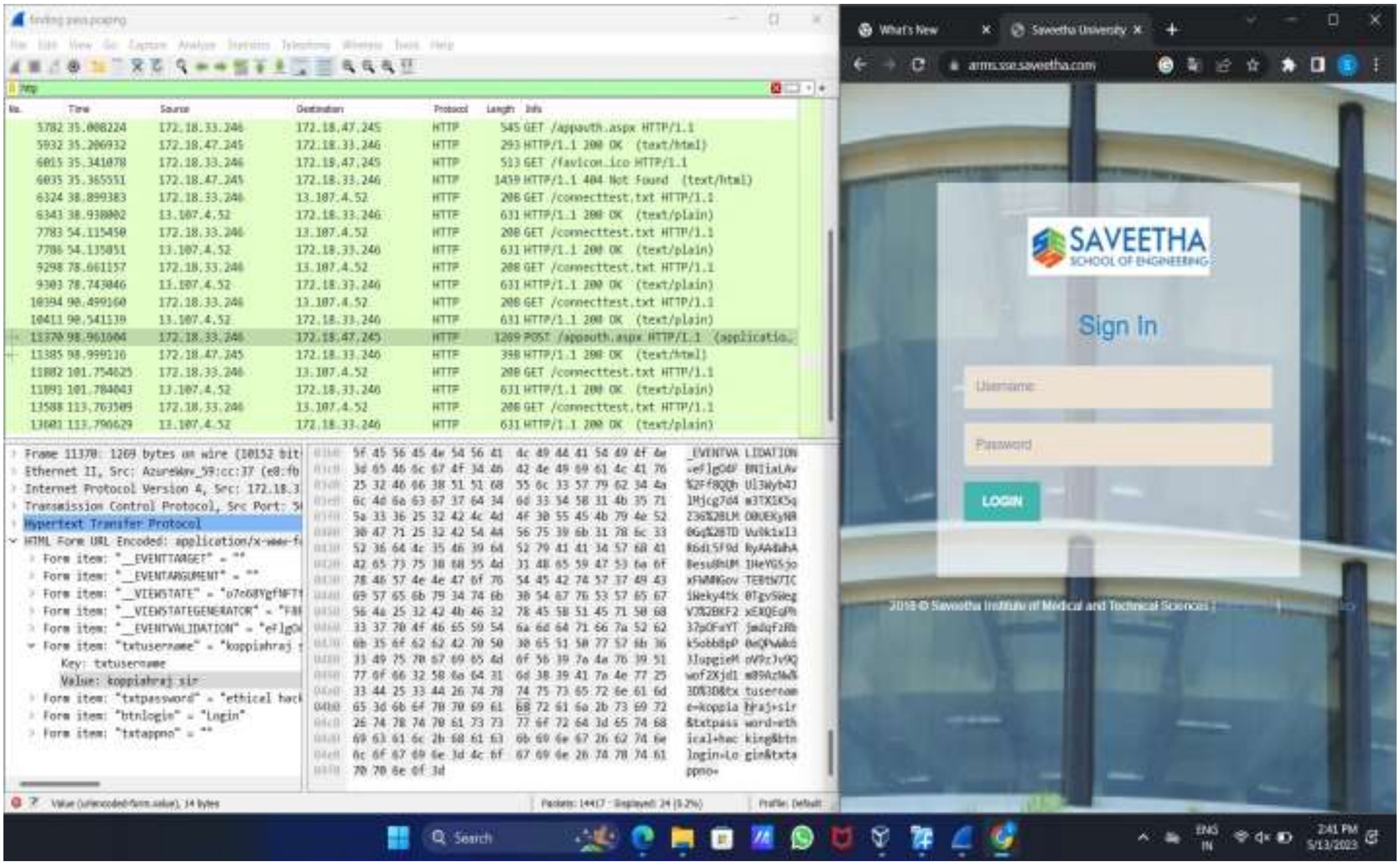
DOS
Using NEMESIS



C:\Windows\system32\cmd.exe

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\admin>cd C:\Users\admin\Downloads\EH\NEMESIS 1.0.0\NEMESIS 1.0.0

C:\Users\admin\Downloads\EH\NEMESIS 1.0.0\NEMESIS 1.0.0>NEMESIS.exe
ERROR: Missing argument: host
ERROR: Missing argument: port
ERROR: Missing argument: threads

nemesis.exe - NEMESIS DDoS Tool

Usage: nemesis.exe -h <host> -p <port> -t <threads> [-T]

Available commands:
-------------------

-T, --usetor    Use TOR
-h, --host      Specify a host without http://
-p, --port      Specify webserver port
-t, --threads   Specify number of threads
-?, --help      Shows the help screen.
```

Out Put:



finding pass.pcapng

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

http

```
No.   Time        Source          Destination     Protocol Length Info
 5782 35.008224   172.18.33.246   172.18.47.245   HTTP      545 GET /appauth.aspx HTTP/1.1
 5932 35.206932   172.18.47.245   172.18.33.246   HTTP      293 HTTP/1.1 200 OK  (text/html)
 6015 35.341078   172.18.33.246   172.18.47.245   HTTP      513 GET /favicon.ico HTTP/1.1
 6035 35.365551   172.18.47.245   172.18.33.246   HTTP     1459 HTTP/1.1 404 Not Found  (text/html)
 6324 38.899383   172.18.33.246   13.107.4.52     HTTP      208 GET /connecttest.txt HTTP/1.1
 6343 38.938002   13.107.4.52     172.18.33.246   HTTP      631 HTTP/1.1 200 OK  (text/plain)
 7783 54.115450   172.18.33.246   13.107.4.52     HTTP      208 GET /connecttest.txt HTTP/1.1
 7786 54.135051   13.107.4.52     172.18.33.246   HTTP      631 HTTP/1.1 200 OK  (text/plain)
 9298 78.661157   172.18.33.246   13.107.4.52     HTTP      208 GET /connecttest.txt HTTP/1.1
 9303 78.743046   13.107.4.52     172.18.33.246   HTTP      631 HTTP/1.1 200 OK  (text/plain)
10394 90.499160   172.18.33.246   13.107.4.52     HTTP      208 GET /connecttest.txt HTTP/1.1
10411 90.541139   13.107.4.52     172.18.33.246   HTTP      631 HTTP/1.1 200 OK  (text/plain)
11370 98.961604   172.18.33.246   172.18.47.245   HTTP     1269 POST /appauth.aspx HTTP/1.1  (applicatio…
11385 98.999116   172.18.47.245   172.18.33.246   HTTP      398 HTTP/1.1 200 OK  (text/html)
11882 101.754625  172.18.33.246   13.107.4.52     HTTP      208 GET /connecttest.txt HTTP/1.1
11891 101.784043  13.107.4.52     172.18.33.246   HTTP      631 HTTP/1.1 200 OK  (text/plain)
13588 113.763509  172.18.33.246   13.107.4.52     HTTP      208 GET /connecttest.txt HTTP/1.1
13601 113.790629  13.107.4.52     172.18.33.246   HTTP      631 HTTP/1.1 200 OK  (text/plain)
```

```
> Frame 11370: 1269 bytes on wire (10152 bit
> Ethernet II, Src: AzureWav_59:cc:37 (e8:fb
> Internet Protocol Version 4, Src: 172.18.3
> Transmission Control Protocol, Src Port: 5
> Hypertext Transfer Protocol
v HTML Form URL Encoded: application/x-www-f
  > Form item: "__EVENTTARGET" = ""
  > Form item: "__EVENTARGUMENT" = ""
  > Form item: "__VIEWSTATE" = "o7e68YgfNFT
  > Form item: "__VIEWSTATEGENERATOR" = "F8
  > Form item: "__EVENTVALIDATION" = "eFlgO
  v Form item: "txtusername" = "koppiahraj s
      Key: txtusername
      Value: koppiahraj sir
  > Form item: "txtpassword" = "ethical hack
  > Form item: "btnlogin" = "Login"
  > Form item: "txtappno" = ""
```

```
03b0  5f 45 56 45 4e 54 56 41  4c 49 44 41 54 49 4f 4e   _EVENTVA LIDATION
03c0  3d 65 46 6c 67 4f 34 46  42 4e 49 69 61 4c 41 76   =eFlgO4F BNIiaLAv
03d0  25 32 46 66 38 51 51 68  55 6c 33 57 79 62 34 4a   %2Ff8QQh Ul3Wyb4J
03e0  6c 4d 6a 63 67 37 64 34  6d 33 54 58 31 4b 35 71   lMjcg7d4 m3TX1K5q
03f0  5a 33 36 25 32 42 4c 4d  4f 30 55 45 4b 79 4e 52   Z36%2BLM O0UEKyNR
0400  30 47 71 25 32 42 54 44  56 75 39 6b 31 78 6c 33   0Gq%2BTD Vu9k1xl3
0410  52 36 64 4c 35 46 39 64  52 79 41 41 34 57 68 41   R6dL5F9d RyAA4WhA
0420  42 65 73 75 38 68 55 4d  31 48 65 59 47 53 6a 6f   Besu8hUM 1HeYGSjo
0430  78 46 57 4e 4e 47 6f 76  54 45 42 74 57 37 49 43   xFWNNGov TEBtW7IC
0440  69 57 65 6b 79 34 74 6b  30 54 67 76 53 57 65 67   iWeky4tk 0TgvSWeg
0450  56 4a 25 32 42 4b 46 32  78 45 58 51 45 71 50 68   VJ%2BKF2 xEXQEqPh
0460  33 37 70 4f 46 65 59 54  6a 6d 64 71 66 7a 52 62   37pOFeYT jmdqfzRb
0470  6b 35 6f 62 62 42 70 50  30 65 51 50 77 57 6b 36   k5obbBpP 0eQPwWk6
0480  33 49 75 70 67 69 65 4d  6f 56 39 7a 4e 76 39 51   3IupgieM oV9zNv9Q
0490  77 6f 66 32 58 6a 64 31  6d 38 39 41 7a 4e 77 25   wof2Xjd1 m89AzNw%
04a0  33 44 25 33 44 26 74 78  74 75 73 65 72 6e 61 6d   3D%3D&tx tusernam
04b0  65 3d 6b 6f 70 70 69 61  68 72 61 6a 2b 73 69 72   e=koppia hraj+sir
04c0  26 74 78 74 70 61 73 73  77 6f 72 64 3d 65 74 68   &txtpass word=eth
04d0  69 63 61 6c 2b 68 61 63  6b 69 6e 67 26 62 74 6e   ical+hac king&btn
04e0  6c 6f 67 69 6e 3d 4c 6f  67 69 6e 26 74 78 74 61   login=Lo gin&txta
04f0  70 70 6e 6f 3d                                     ppno=
```

Value (urlencoded-form.value), 14 bytes | Packets: 14417 · Displayed: 24 (0.2%) | Profile: Default

Ex. No.9– ENUMERATION - Enumerating information from windows and Samba Host Using Enum4linux

Requirements:

- Kali linux running as an attacker machine
- Windows 7 running as virtual machine
- Admin privileges

Procedure:

1.Start the kali linux machine and open a terminal window

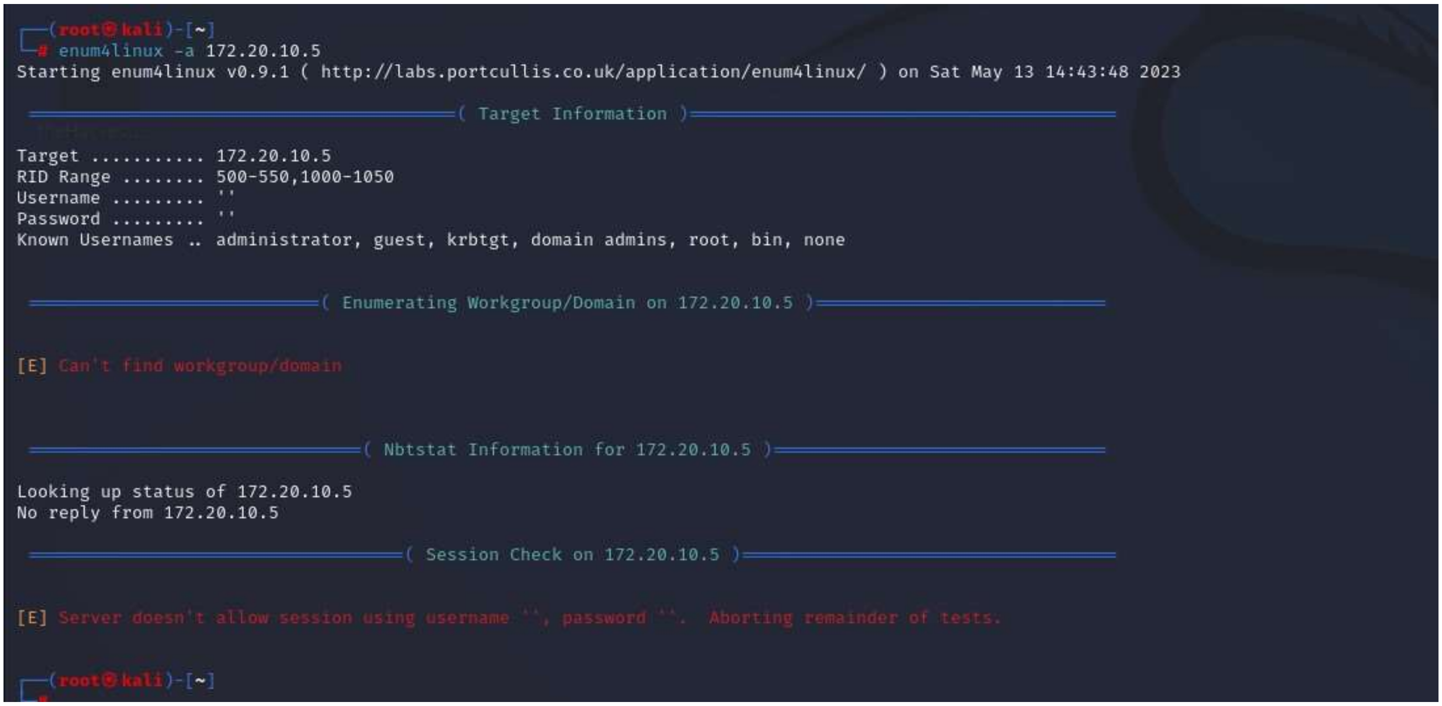
2.Type “sudo apt-get update” command

3.Now type enum4linux-h and hit enter to get help options With the help options conduct the enumeration on target machine

4.In the terminal window type enum4linux -u -p -U and hit enter to run this tool using the user list options

5.Enum4linux starts enumerating the workgroups/domain names first and display the results

6.To enumerate all the information Use this command enum4linux -a



```
┌──(root㉿kali)-[~]
└─# enum4linux -a 172.20.10.5
Starting enum4linux v0.9.1 ( http://labs.portcullis.co.uk/application/enum4linux/ ) on Sat May 13 14:43:48 2023

 =========================================( Target Information )=========================================

Target ........... 172.20.10.5
RID Range ........ 500-550,1000-1050
Username ......... ''
Password ......... ''
Known Usernames .. administrator, guest, krbtgt, domain admins, root, bin, none


 ============================( Enumerating Workgroup/Domain on 172.20.10.5 )============================


[E] Can't find workgroup/domain



 ================================( Nbtstat Information for 172.20.10.5 )================================

Looking up status of 172.20.10.5
No reply from 172.20.10.5

 ====================================( Session Check on 172.20.10.5 )====================================


[E] Server doesn't allow session using username '', password ''.  Aborting remainder of tests.


┌──(root㉿kali)-[~]
└─#
```

EX.NO: 10 **DATE: BATCH FILE EXECUTION**

AIM: To create a Windows batch file.

PROCEDURE:

Step 1 : Open a text file, such as a Notepad or WordPad document

Step 2 : Add your commands, starting **with @echo [off],** followed by, each in a new line, **title [title of your batch script], echo [first line],** and **pause.**

Step 3 : Save your file with the file extension **BAT,** for example, **test.bat.**

Step 4 : To run your batch file, **double-click the BAT file** you just created.

Step 5 : To edit your batch file**, right-click the BAT file** and select **Edit**.

And here's the corresponding command window for the example above:

1.Create a New Text Document

A batch file simplifies repeatable computer tasks using the Windows command prompt.

Below is an example of a batch file responsible for displaying some text in your command prompt.

Create a new BAT file by right-clicking an empty space within a directory and selecting **New, then Text Document**.

1.CODE:

Double-click this **New Text Document** to open your default text editor. Copy and paste the following code into your text entry.

```
>> @echo off
>> echo hello
 >> Pause
>> echo This is new
 >> echo this is second one
>> pause
```

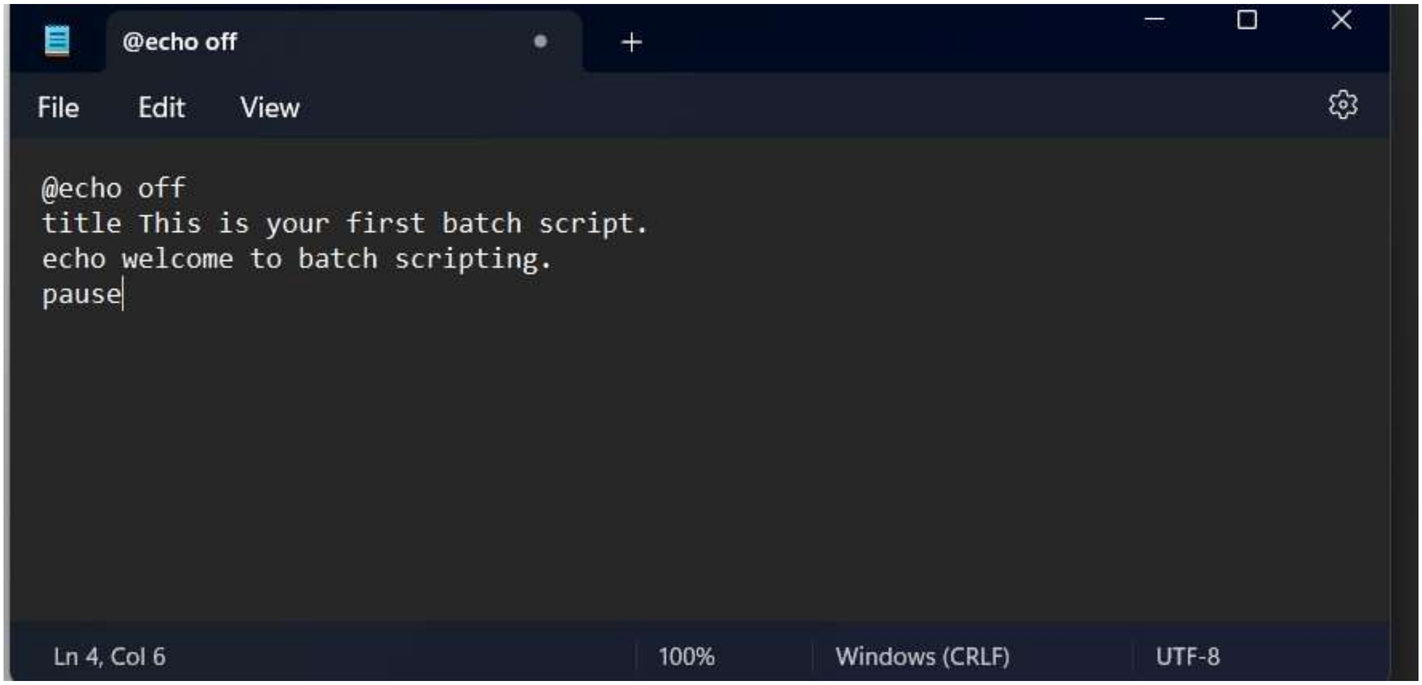
1. TO SAVE a BAT File

The above script echoes back the text "Welcome to batch scripting!" Save your file by heading to **File > Save As,** and then name your file what you'd like. End your file name with the added **BAT** extension, for example **test.bat,** and click **OK**. This will finalize the batch process. Now, double-click on your newly created batch file to activate it.

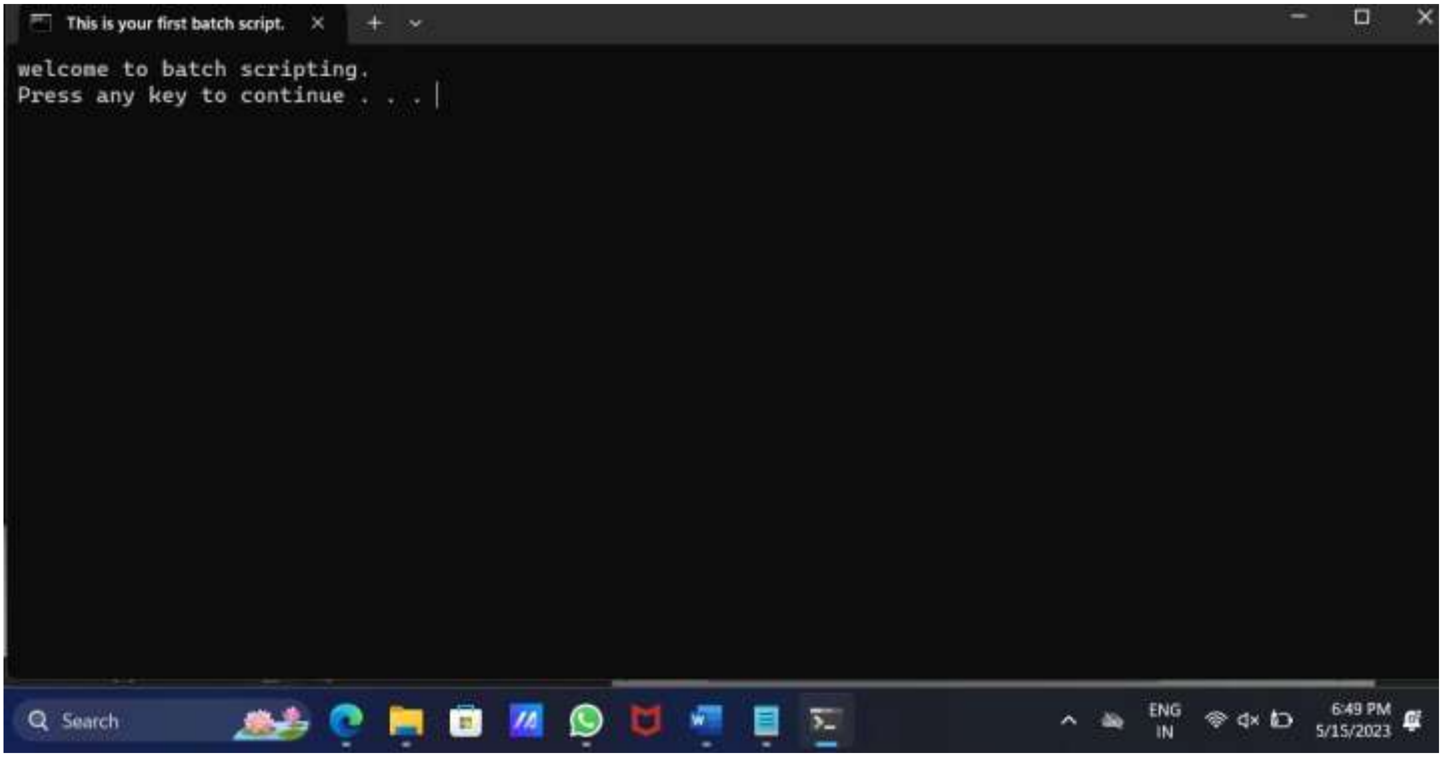
2.To RUN as BAT File

Once you'd saved your file, all you need to do is **double-click your BAT file**. Instantly, your web pages will open. If you'd like, you can place this file on your desktop. This will allow you to access all of your favorite websites at once.

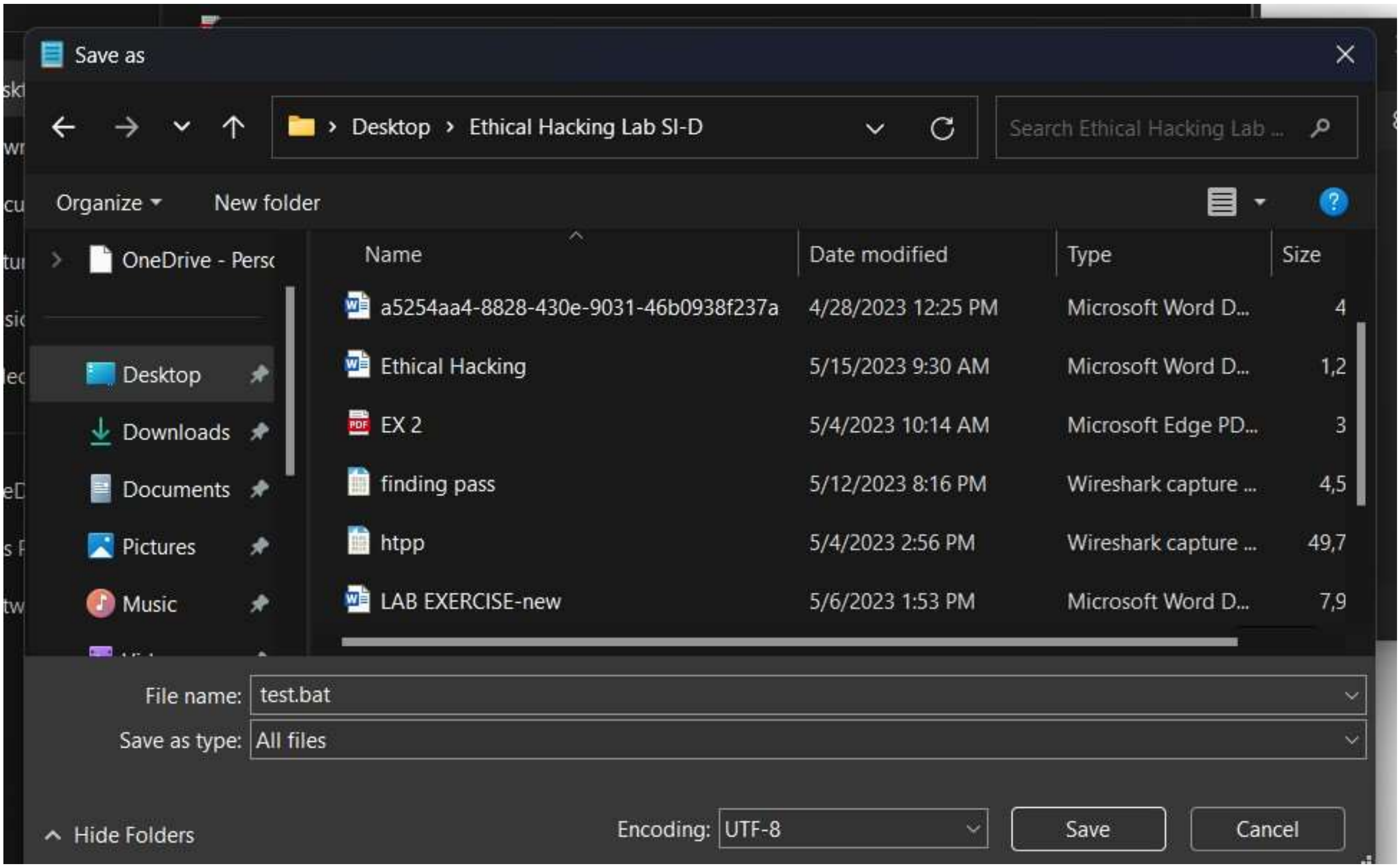
OUT PUT:



```
@echo off
title This is your first batch script.
echo welcome to batch scripting.
pause
```



```
welcome to batch scripting.
Press any key to continue . . .
```



Name	Date modified	Type	Size
a5254aa4-8828-430e-9031-46b0938f237a	4/28/2023 12:25 PM	Microsoft Word D...	4
Ethical Hacking	5/15/2023 9:30 AM	Microsoft Word D...	1,2
EX 2	5/4/2023 10:14 AM	Microsoft Edge PD...	3
finding pass	5/12/2023 8:16 PM	Wireshark capture ...	4,5
htpp	5/4/2023 2:56 PM	Wireshark capture ...	49,7
LAB EXERCISE-new	5/6/2023 1:53 PM	Microsoft Word D...	7,9

File name: test.bat

Save as type: All files

Encoding: UTF-8

RESULT:

Thus the Creation and execution of BATCH FILE was successfully completed.