

NAME: Chavan Mukul Manish

REG.NO: 20BIT0238

SUBJECT: CSE3502

FACULTY : SUMAYA THASEEN

## DIGITAL – ASSIGNMENT 4

1. Perform a credential harvesting using setoolkit by cloning any web template like google/facebook using your Kali IP. ( 4 marks)

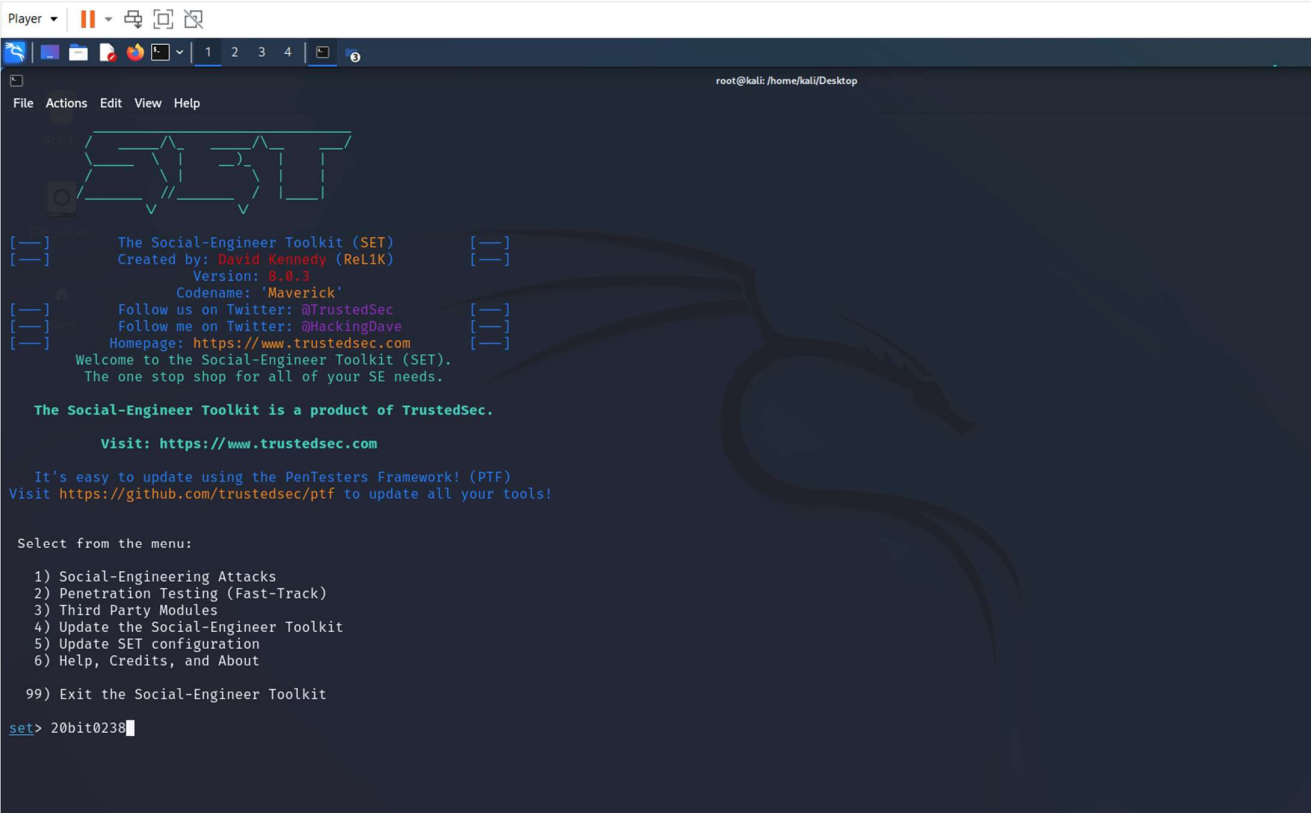
Give the snapshot of the following

☐ Kali IP in the browser

☐ Sniff the username as your registration number and password as your full name in the Kali Console

☐ Save the results in a .txt file and also in a google drive link

**Command : setoolkit**



```
Player ▾ | [Icons] | 1 2 3 4 | [Icons]
root@kali: /home/kali/Desktop
File Actions Edit View Help

  _____
 /  _  _  _  \
|  _|| _|| _||
|  _|| _|| _||
 \__|| _|| _||
  \_|| _|| _||

[—] The Social-Engineer Toolkit (SET) [—]
[—] Created by: David Kennedy (ReL1K) [—]
[—] Version: 8.0.3 [—]
[—] Codename: 'Maverick' [—]
[—] Follow us on Twitter: @TrustedSec [—]
[—] Follow me on Twitter: @HackingDave [—]
[—] Homepage: https://www.trustedsec.com [—]
Welcome to the Social-Engineer Toolkit (SET).
The one stop shop for all of your SE needs.

The Social-Engineer Toolkit is a product of TrustedSec.
Visit: https://www.trustedsec.com

It's easy to update using the PenTesters Framework! (PTF)
Visit https://github.com/trustedsec/ptf to update all your tools!

Select from the menu:

1) Social-Engineering Attacks
2) Penetration Testing (Fast-Track)
3) Third Party Modules
4) Update the Social-Engineer Toolkit
5) Update SET configuration
6) Help, Credits, and About

99) Exit the Social-Engineer Toolkit

set> 20bit0238
```



Player ▾ | [Icons] | 1 2 3 4 | [Icons]

```
root@kali: /home/kali/Desktop

File Actions Edit View Help
3) Infectious Media Generator
4) Create a Payload and Listener
5) Mass Mailer Attack
6) Arduino-Based Attack Vector
7) Wireless Access Point Attack Vector
8) QRCode Generator Attack Vector
9) Powershell Attack Vectors
10) Third Party Modules

99) Return back to the main menu.

set> 2

The Web Attack module is a unique way of utilizing multiple web-based attacks in order to compromise the intended victim.

The Java Applet Attack method will spoof a Java Certificate and deliver a metasploit based payload. Uses a customized java applet created by Thomas

The Metasploit Browser Exploit method will utilize select Metasploit browser exploits through an iframe and deliver a Metasploit payload.

The Credential Harvester method will utilize web cloning of a web- site that has a username and password field and harvest all the information posted

The TabNabbing method will wait for a user to move to a different tab, then refresh the page to something different.

The Web-Jacking Attack method was introduced by white_sheep, emgent. This method utilizes iframe replacements to make the highlighted URL link to a window pops up then is replaced with the malicious link. You can edit the link replacement settings in the set_config if its too slow/fast.

The Multi-Attack method will add a combination of attacks through the web attack menu. For example you can utilize the Java Applet, Metasploit Browser Exploit, and TabNabbing at once to see which is successful.

The HTA Attack method will allow you to clone a site and perform powershell injection through HTA files which can be used for Windows-based powershell attacks.

1) Java Applet Attack Method
2) Metasploit Browser Exploit Method
3) Credential Harvester Attack Method
4) Tabnabbing Attack Method
5) Web Jacking Attack Method
6) Multi-Attack Web Method
7) HTA Attack Method

99) Return to Main Menu

set:webattack>3
```

```
kali@kali: ~
(kali@kali)-[~]
$ 20BIT0238
```

```
Player ▾ | [Icons] | 1 2 3 4 | [Icons]

root@kali: /home/kali/Desktop

File Actions Edit View Help

The Credential Harvester method will utilize web cloning of a web- site that has a username and password field and harvest all the information posted to it.

The TabNabbing method will wait for a user to move to a different tab, then refresh the page to something different.

The Web-Jacking Attack method was introduced by white_sheep, emgent. This method utilizes iframe replacements to make the highlighted URL link to a different window pops up then is replaced with the malicious link. You can edit the link replacement settings in the set_config if its too slow/fast.

The Multi-Attack method will add a combination of attacks through the web attack menu. For example you can utilize the Java Applet, Metasploit Browser Exploit, etc. to see which is successful.

The HTA Attack method will allow you to clone a site and perform powershell injection through HTA files which can be used for Windows-based powershell attacks.

1) Java Applet Attack Method
2) Metasploit Browser Exploit Method
3) Credential Harvester Attack Method
4) Tabnabbing Attack Method
5) Web Jacking Attack Method
6) Multi-Attack Web Method
7) HTA Attack Method

99) Return to Main Menu

set:webattack>3

The first method will allow SET to import a list of pre-defined web applications that it can utilize within the attack.

The second method will completely clone a website of your choosing and allow you to utilize the attack vectors within the completely same web application you were attempting to clone.

The third method allows you to import your own website, note that you should only have an index.html when using the import website functionality.

1) Web Templates
2) Site Cloner
3) Custom Import

99) Return to Webattack Menu

set:webattack>1
```

```
Player ▾ | [Icons] | 1 2 3 4 | [Icons]

root@kali: /home/kali/Desktop

File Actions Edit View Help

— * IMPORTANT * READ THIS BEFORE ENTERING IN THE IP ADDRESS * IMPORTANT * —

The way that this works is by cloning a site and looking for form fields to rewrite. If the POST fields are not usual methods for posting forms this could fail. If it does, you can always save the HTML, rewrite the forms to be standard forms and use the "IMPORT" feature. Additionally, really important:

If you are using an EXTERNAL IP ADDRESS, you need to place the EXTERNAL IP address below, not your NAT address. Additionally, if you don't know basic networking concepts, and you have a private IP address, you will need to do port forwarding to your NAT IP address from your external IP address. A browser doesn't know how to communicate with a private IP address, so if you don't specify an external IP address if you are using this from an external perspective, it will not work. This isn't a SET issue this is how networking works.

set:webattack> IP address for the POST back in Harvester/Tabnabbing [192.168.42.130]:

**** Important Information ****

For templates, when a POST is initiated to harvest credentials, you will need a site for it to redirect.

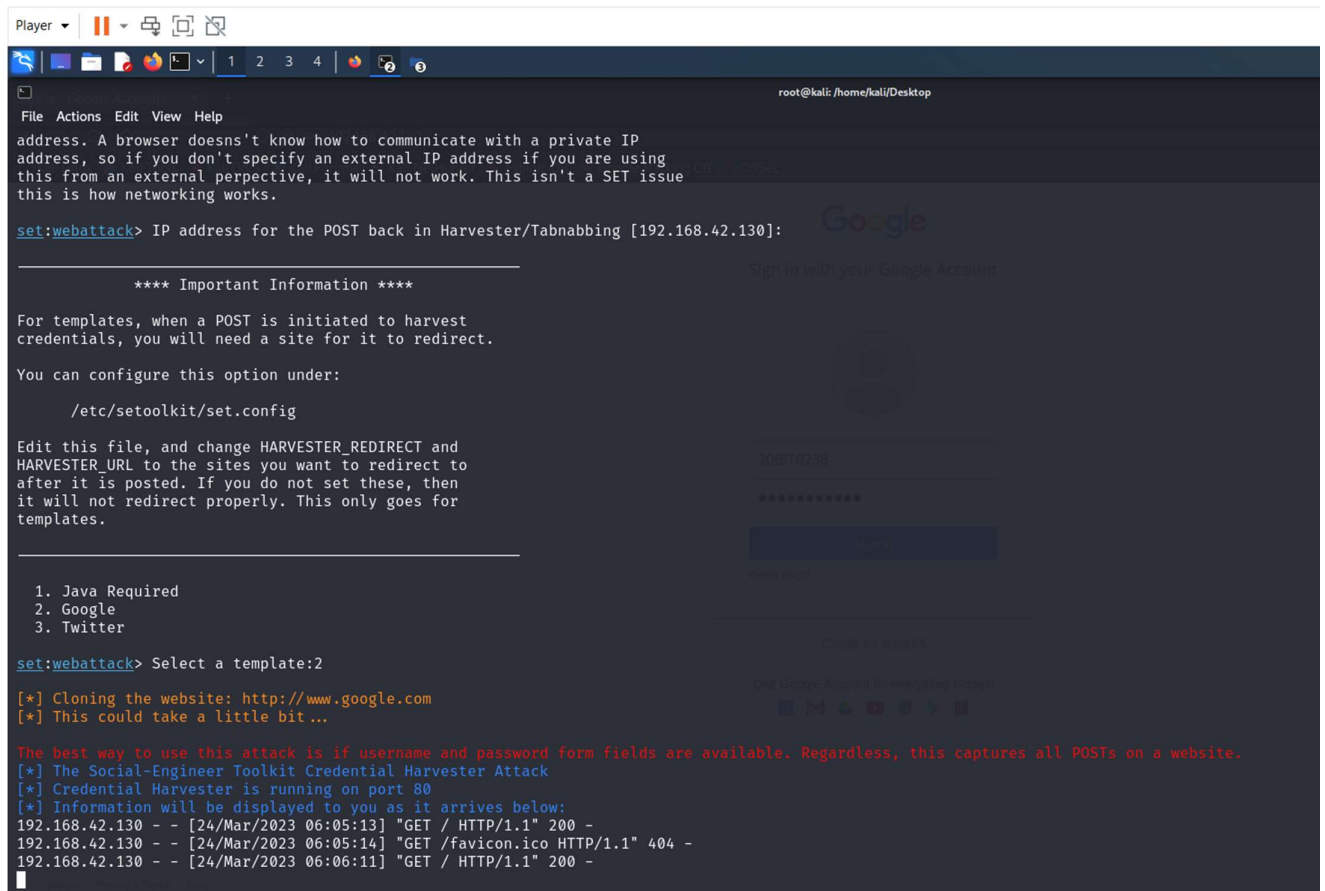
You can configure this option under:

/etc/setoolkit/set.config

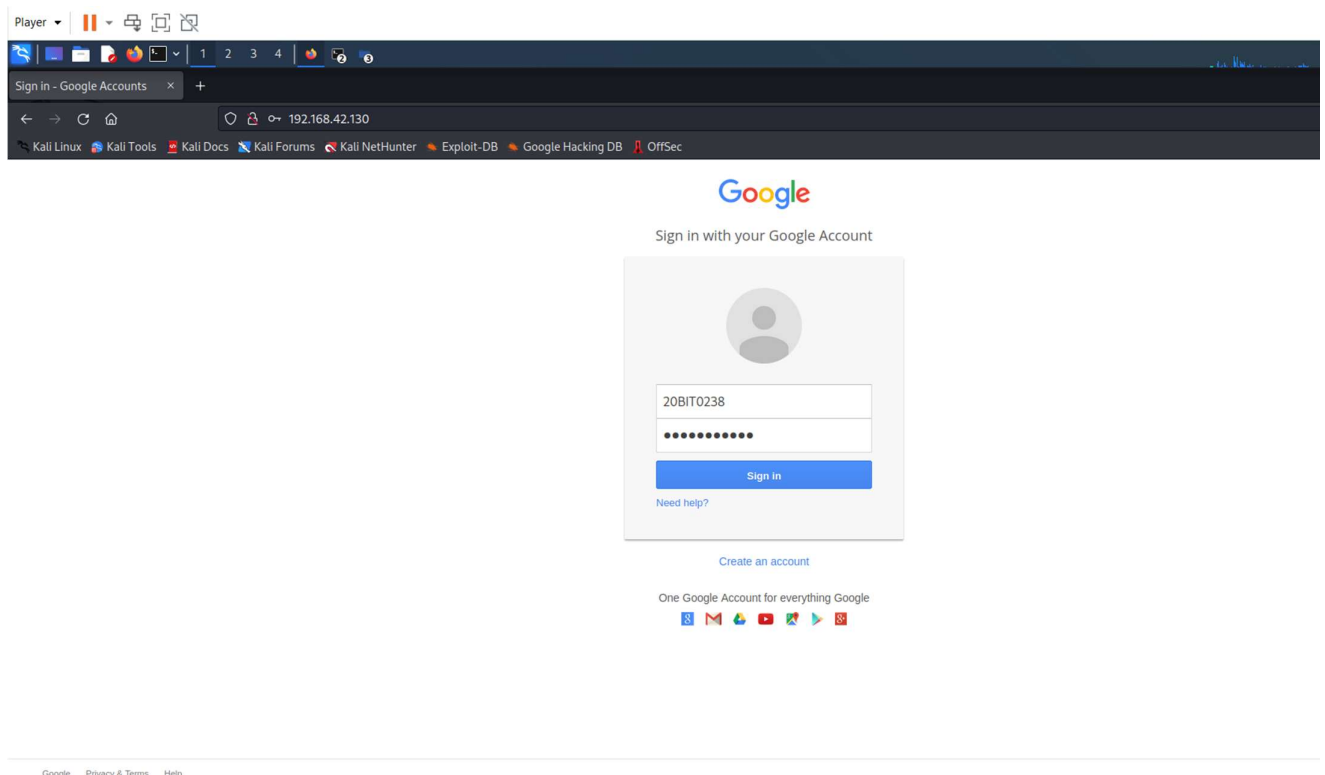
Edit this file, and change HARVESTER_REDIRECT and HARVESTER_URL to the sites you want to redirect to after it is posted. If you do not set these, then it will not redirect properly. This only goes for templates.

1. Java Required
2. Google
3. Twitter

set:webattack> Select a template:2
```



## VICTIM OPENING THE LINK AND ENTERING CREDENTIALS



## CREDENTIALS-CAPTURED SUCCESSFULLY

```
Player ▾ || 🔍 📄 🖨️ 🗑️
root@kali: /home/kali/Desktop
File Actions Edit View Help

1. Java Required
2. Google
3. Twitter

set:webattack> Select a template:2

[*] Cloning the website: http://www.google.com
[*] This could take a little bit...

The best way to use this attack is if username and password form fields are available. Regardless, this captures all POSTs on a website.
[*] The Social-Engineer Toolkit Credential Harvester Attack
[*] Credential Harvester is running on port 80
[*] Information will be displayed to you as it arrives below:
127.0.0.1 - - [24/Mar/2023 13:25:45] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [24/Mar/2023 13:25:46] "GET /favicon.ico HTTP/1.1" 404 -
[*] WE GOT A HIT! Printing the output:
PARAM: GALX=SjLCKfgaqoM
PARAM: continue=https://accounts.google.com/o/oauth2/auth?zt=ChRsWFBwd2JmV1hIcDhtUFdlldzBENhIfVWsxSTdNLW9MdThibW1TMFQzVUZFc1BBaURuWmLRsQ%E2%88%Auy4_qD7Hbfz38w8kxnaNouLcRiD3YTjX
PARAM: service=lso
PARAM: dsh=-7381887106725792428
PARAM: _utf8=a
PARAM: bgresponse=js_disabled
PARAM: pstMsg=1
PARAM: dnConn=
PARAM: checkConnection=
PARAM: checkedDomains=youtube
POSSIBLE USERNAME FIELD FOUND: Email=20BIT0238
POSSIBLE PASSWORD FIELD FOUND: Passwd=MUKUL
PARAM: signIn=Sign+in
PARAM: PersistentCookie=yes
[*] WHEN YOU'RE FINISHED, HIT CONTROL-C TO GENERATE A REPORT.

127.0.0.1 - - [24/Mar/2023 13:25:54] "POST /ServiceLoginAuth HTTP/1.1" 302 -
```

GOOGLE DRIVE LINK(setoolkit victim post details captured)

[https://drive.google.com/drive/folders/1v39kBkcZ81LjFIHG3iyKWUI\\_ZD42eG2J?usp=sharing](https://drive.google.com/drive/folders/1v39kBkcZ81LjFIHG3iyKWUI_ZD42eG2J?usp=sharing)



2. Perform a Web application scan using Nessus on metasploitable ip and identify the vulnerabilities. The login snapshot should be shared. Export the report in a pdf format and share it in the google drive. (Date of the scan should be 7-3-23). (6 marks).

```
Player
root@kali: /home/kali/Downloads

File Actions Edit View Help
AES_GCM : (KAT_Cipher) : Pass
AES_ECB_Decrypt : (KAT_Cipher) : Pass
RSA : (KAT_Signature) : RNG : (Continuous_RNG_Test) : Pass
Pass
ECDSA : (PCT_Signature) : Pass
ECDSA : (PCT_Signature) : Pass
DSA : (PCT_Signature) : Pass
TLS13_KDF_EXTRACT : (KAT_KDF) : Pass
TLS13_KDF_EXPAND : (KAT_KDF) : Pass
TLS12_PRF : (KAT_KDF) : Pass
PBKDF2 : (KAT_KDF) : Pass
SSHKDF : (KAT_KDF) : Pass
KHKDF : (KAT_KDF) : Pass
HKDF : (KAT_KDF) : Pass
SSKDF : (KAT_KDF) : Pass
X963KDF : (KAT_KDF) : Pass
X942KDF : (KAT_KDF) : Pass
HASH : (DRBG) : Pass
CTR : (DRBG) : Pass
HMAC : (DRBG) : Pass
DH : (KAT_KA) : Pass
ECDH : (KAT_KA) : Pass
RSA_Encrypt : (KAT_AsymmetricCipher) : Pass
RSA_Decrypt : (KAT_AsymmetricCipher) : Pass
RSA_Decrypt : (KAT_AsymmetricCipher) : Pass
INSTALL PASSED
Unpacking Nessus Scanner Core Components ...

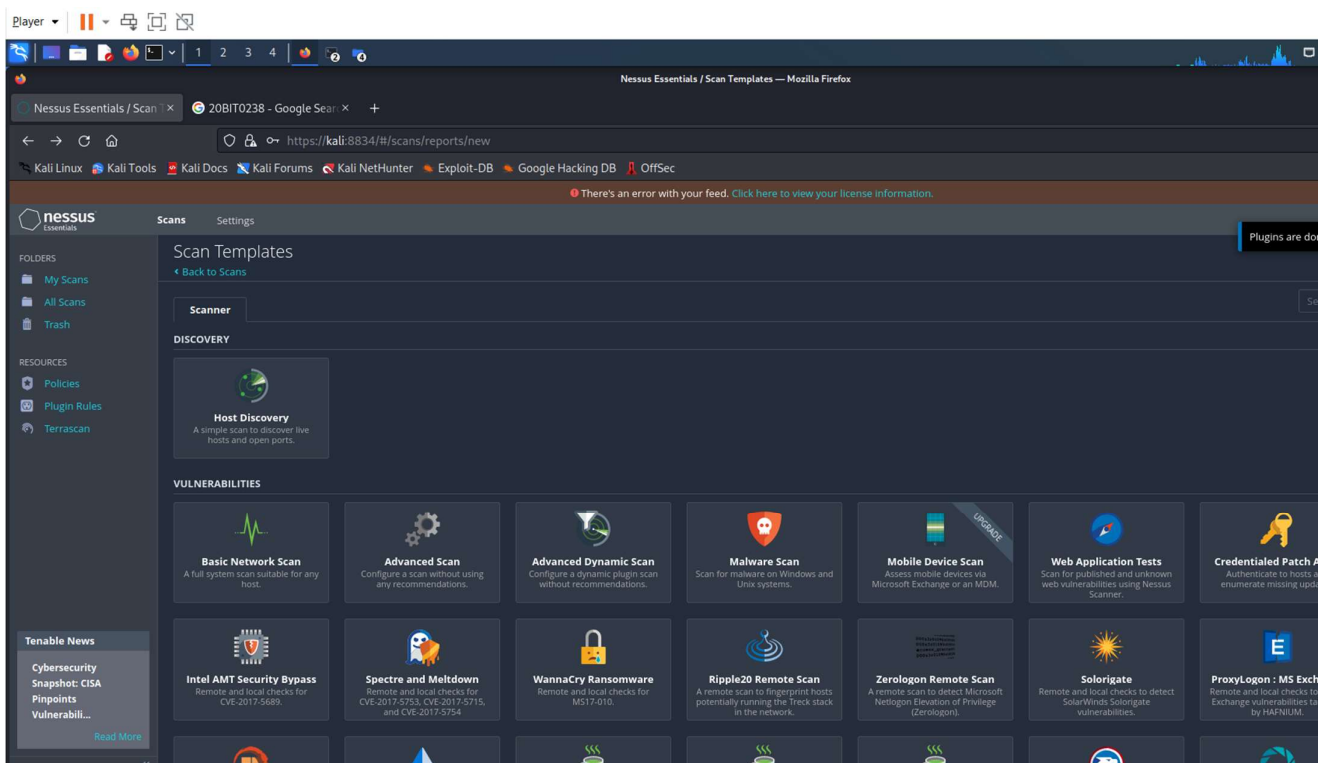
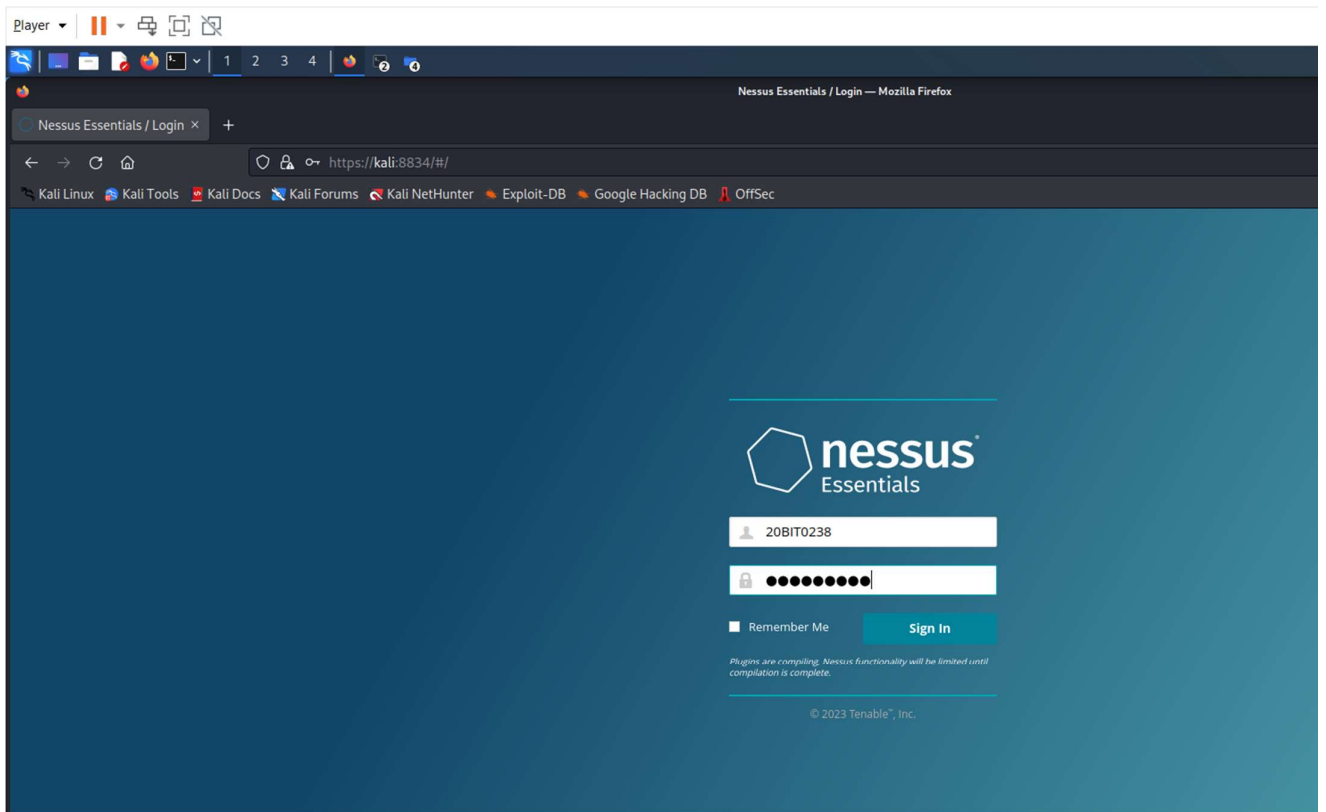
- You can start Nessus Scanner by typing /bin/systemctl start nessusd.service
- Then go to https://kali:8834/ to configure your scanner

(root@kali)-[/home/kali/Downloads]
# systemctl start nessusd.service

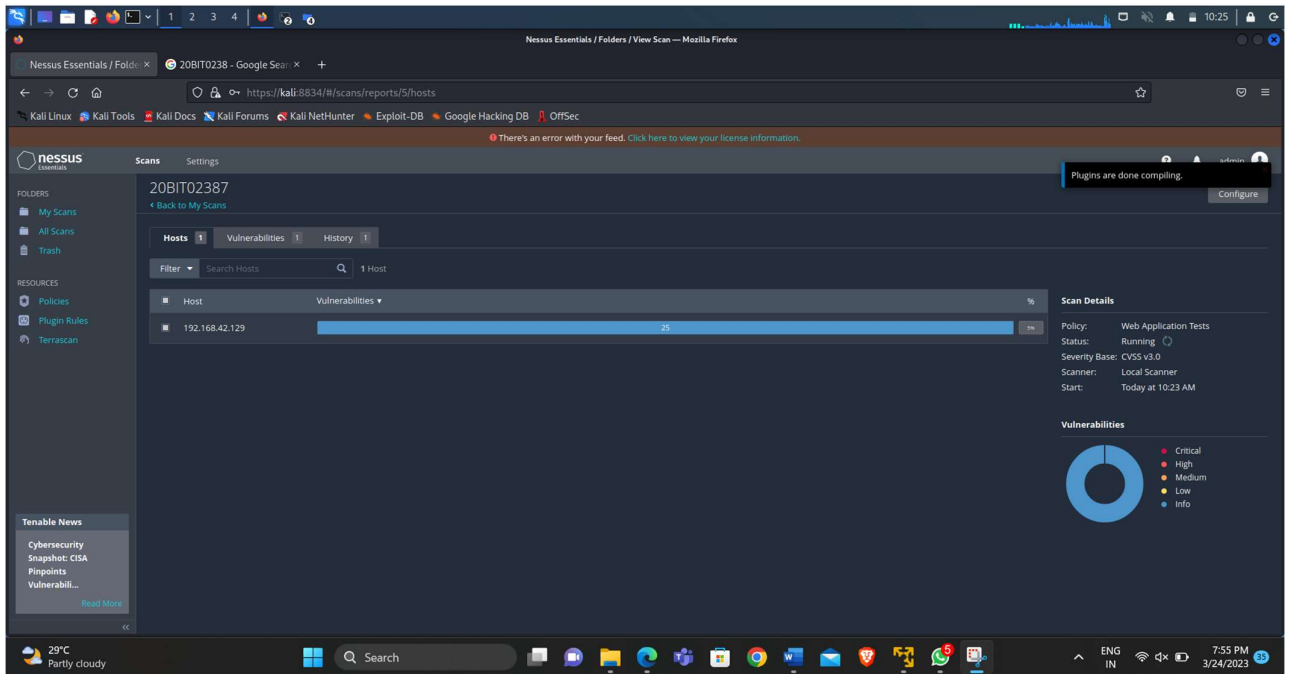
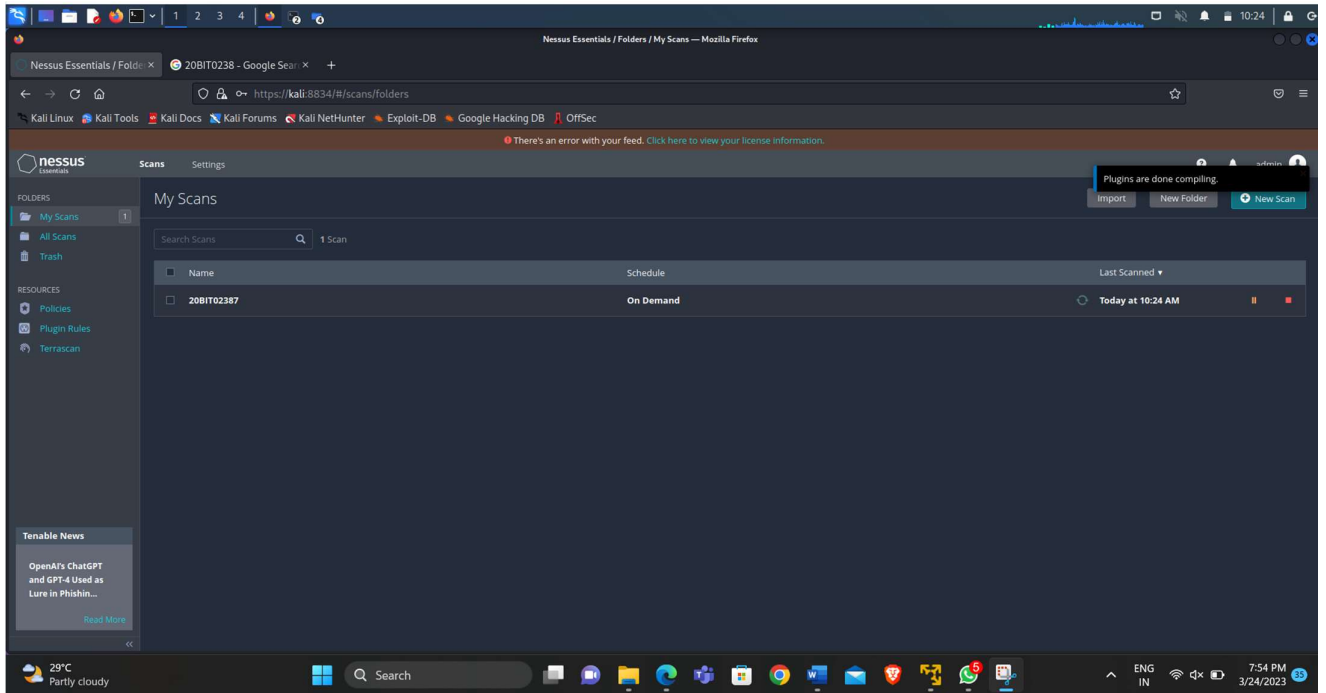
(root@kali)-[/home/kali/Downloads]
# systemctl status nessusd.service
● nessusd.service - The Nessus Vulnerability Scanner
   Loaded: loaded (/lib/systemd/system/nessusd.service; disabled; preset: disabled)
   Active: active (running) since Fri 2023-03-24 10:12:51 EDT; 10s ago
     Main PID: 8583 (nessus-service)
        Tasks: 18 (limit: 4615)
      Memory: 339.3M
         CPU: 13.194s
    CGroup: /system.slice/nessusd.service
            └─8583 /opt/nessus/sbin/nessus-service -q
              └─8584 nessusd -q

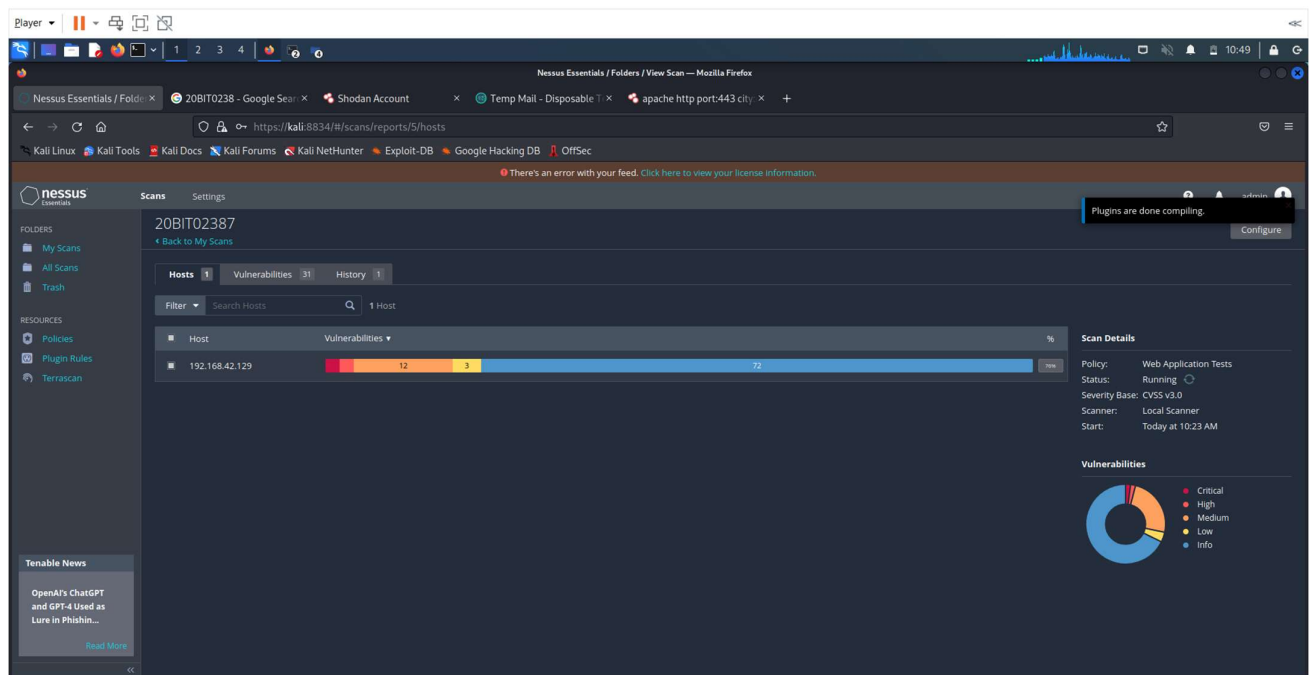
Mar 24 10:12:51 kali systemd[1]: Started The Nessus Vulnerability Scanner.

(root@kali)-[/home/kali/Downloads]
```

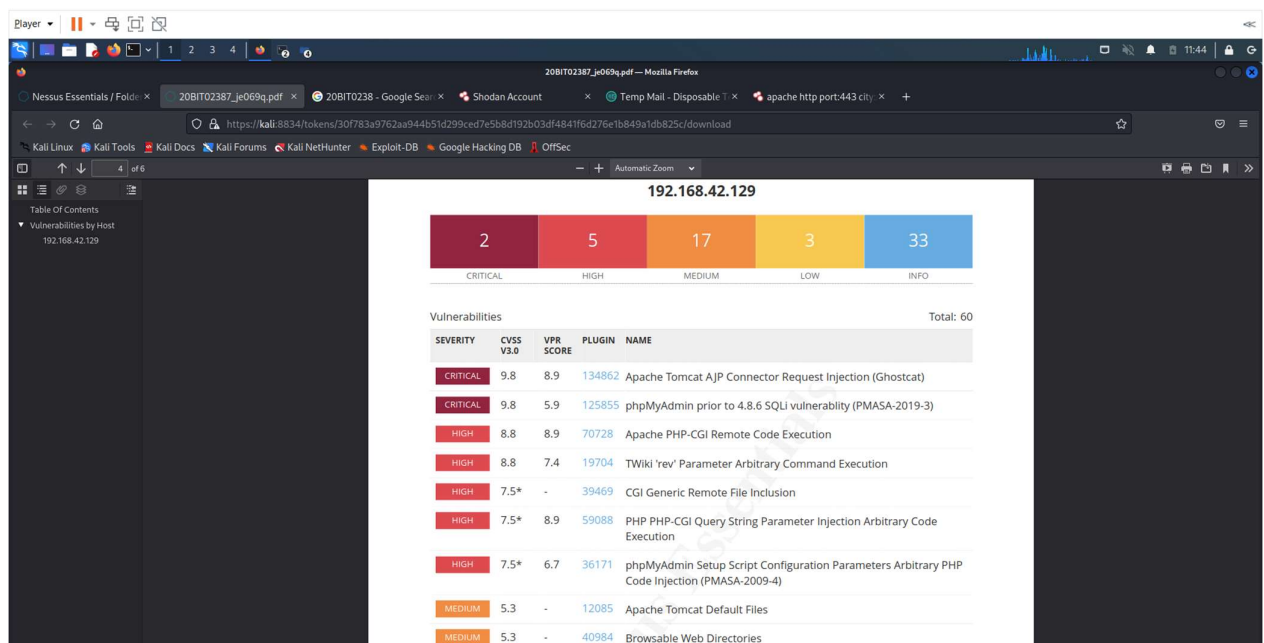








## SCAN-RESULTS

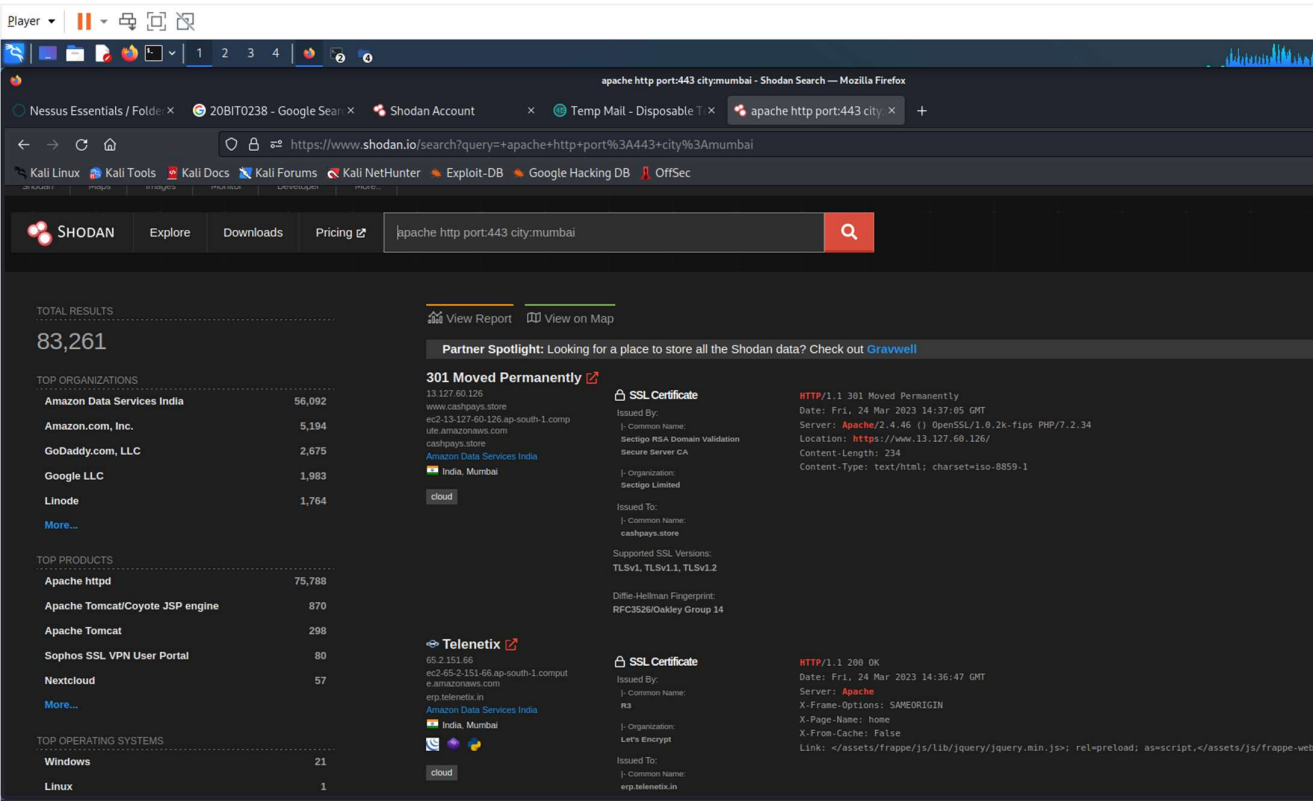
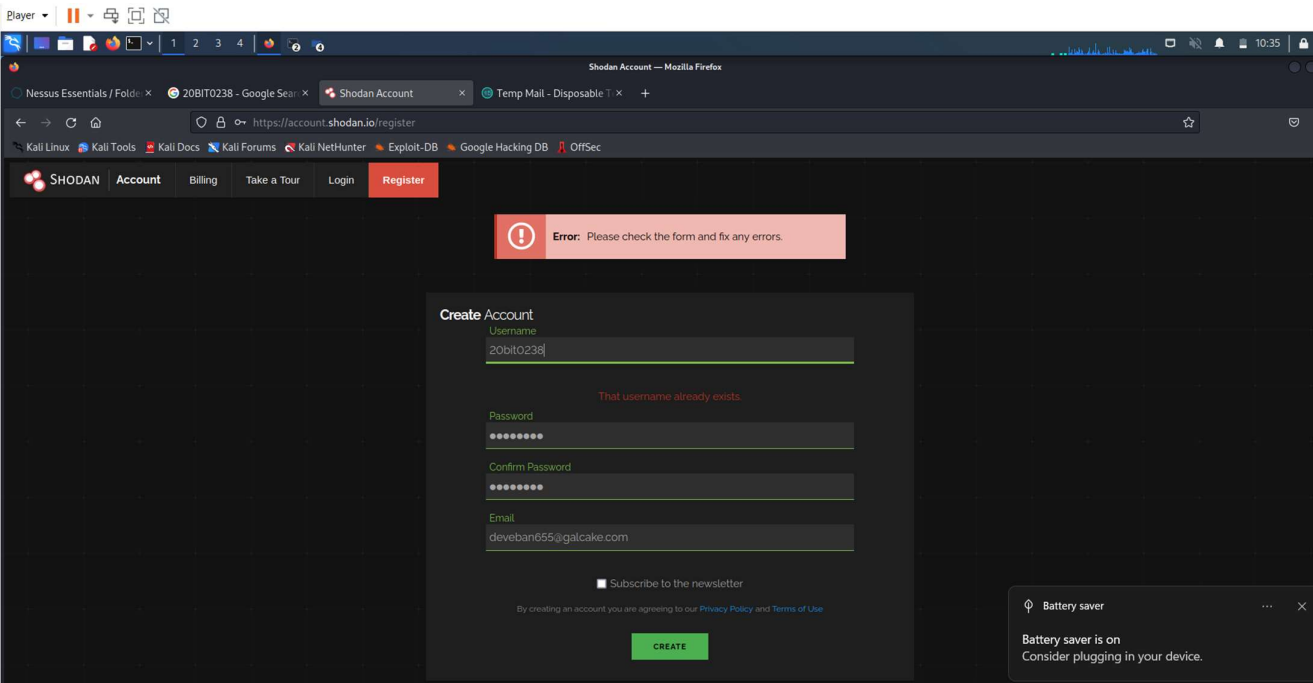


GOOGLE-DRIVE LINK (nessus scan results - exported pdf uploaded)

[https://drive.google.com/drive/folders/1v39kBkcZ81LjFIHG3iyKWUI\\_ZD42eG2J?usp=sharing](https://drive.google.com/drive/folders/1v39kBkcZ81LjFIHG3iyKWUI_ZD42eG2J?usp=sharing)

3. Perform a search on Shodan to identify the list of devices using Apache and http port:443 in your birth city. If your city is not listed, then select the nearest city. [3 marks]

command: apache http port:443 city:mumbai



4. Perform an image forensics on exif.tools to gather meta data about the photo wherein you are present and provide information about the place, geo coordinates, date of photo captured etc. [2 marks]

Image



EXIF / File Metadata Viewer x 20bit028 - Search x | +

← → ↻ 🏠 <https://exif.tools> A 🔍 📄 🌐 🕒 ❤️ 👤 ⋮

EXIF.tools Upload File  Get URL

## EXIF.tools

A multimedia file metadata tool

EXIF.tools runs [exiftool](#) to extract all metadata about an uploaded or internet-located object. Exif.tools is not associated with Phil Harvey (the creator of [exiftool](#)) but is here to be a simple web-wrapper for the tool for online use. Questions/comments can be sent to [me@luke.io](mailto:me@luke.io)

View File Metadata via Upload

DSC00658.JPG

View File Metadata and HTTP Headers via URL

Domain DNS and WHOIS

Metadat for DSC00658.JPG x 20bit28 - Search x | +  
https://exif.tools/upload.php

EXIF.tools Upload File http://scan.thisurl.pdf Get URL

DSC00658.JPG

### File Metadata


File Type: image/jpeg  
Error: 0  
Upload Size: 166730  
exiftool:

Name	Value
ExifTool Version Number	12.25
File Name	php20btG5
Directory	/tmp
File Size	163 KiB
File Modification Date/Time	2023:03:24 14:42:51+00:00
File Access Date/Time	2023:03:24 14:42:51+00:00
File Inode Change Date/Time	2023:03:24 14:42:51+00:00
File Permissions	-rw-----
File Type	JPEG
File Type Extension	jpg

Metadat for 20230319\_102740.jpg x 20bit28 - Search x | +  
https://exif.tools/upload.php

Create Date	2023:03:19 18:27:40.477
Date/Time Original	2023:03:19 18:27:40.477+04:00
Modify Date	2023:03:19 18:27:40.477+04:00
GPS Altitude	8 m Below Sea Level
GPS Latitude	25° 1' 11.94" N
GPS Longitude	55° 14' 42.04" E
Circle Of Confusion	0.006 mm
Field Of View	69.4 deg
Focal Length	5.4 mm (35 mm equivalent: 26.0 mm)
GPS Position	25° 1' 11.94" N, 55° 14' 42.04" E

[View larger map](#)



Hyperfocal Distance 2.60 m

Light Value 9.0

26°C Mostly cloudy  
Search  
ENG IN  
10:09 PM 3/24/2023