

VERZEO INTERNSHIP MAJOR PROJECT

CYBER SECURITY

CS- MAJOR- APRIL

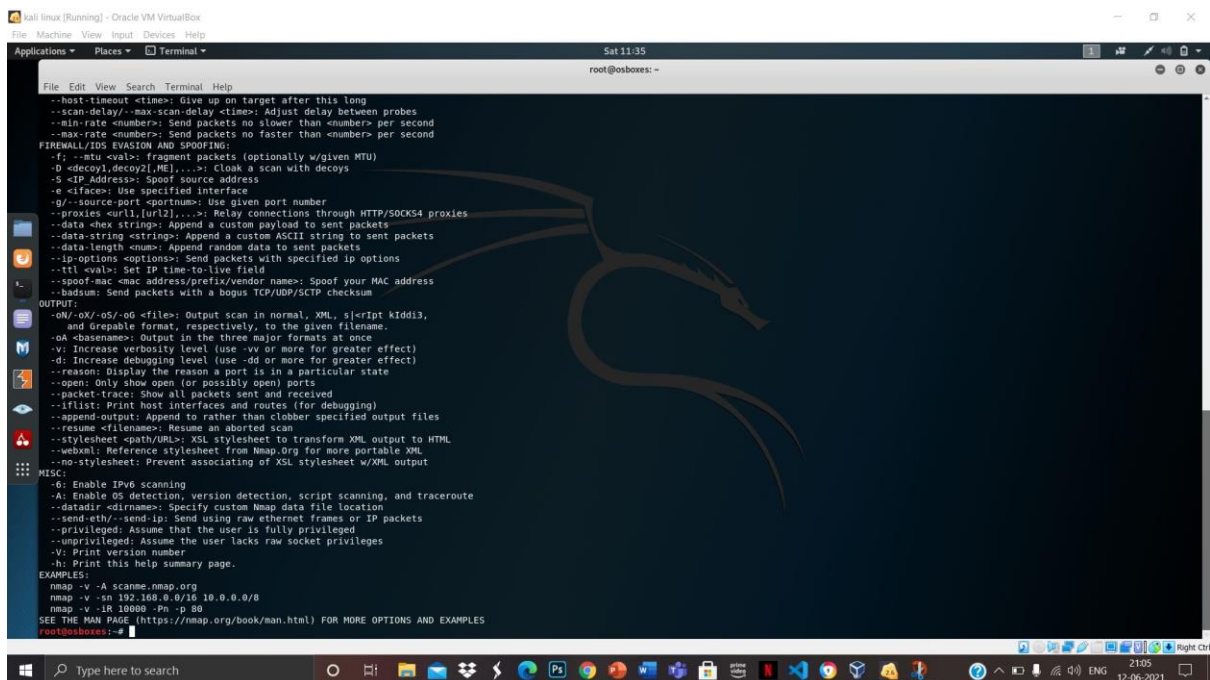
APRIL BATCH

SUBMITTED BY

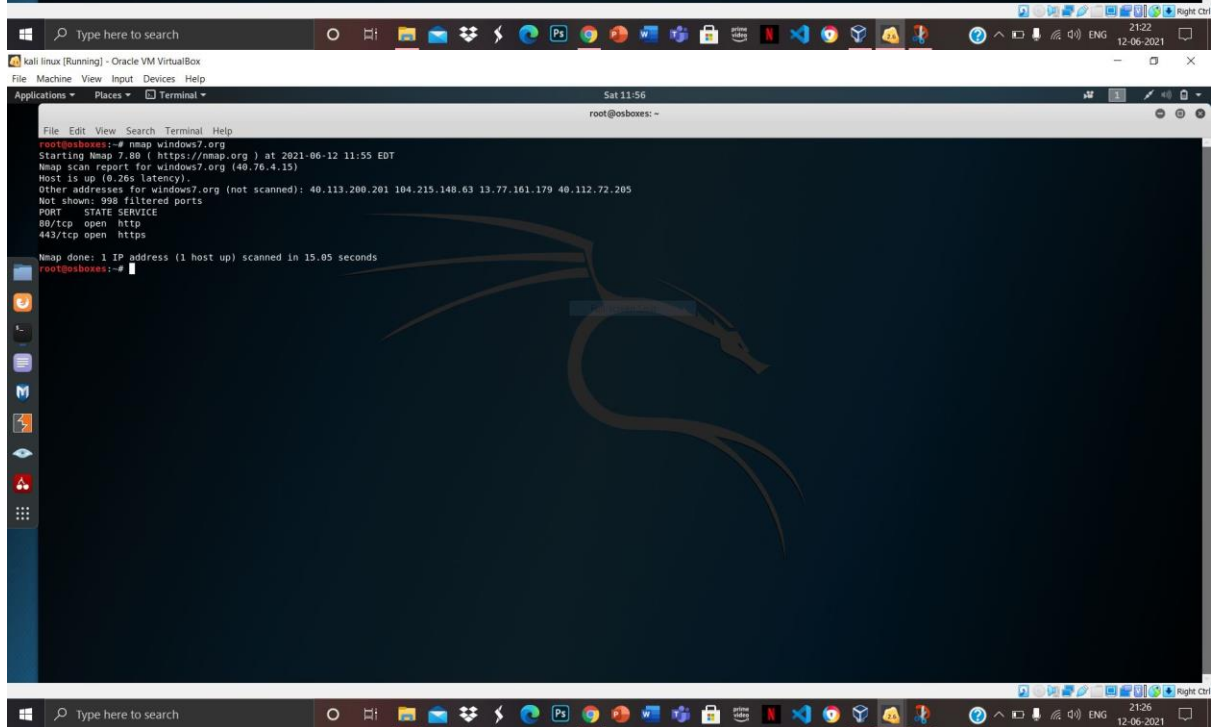
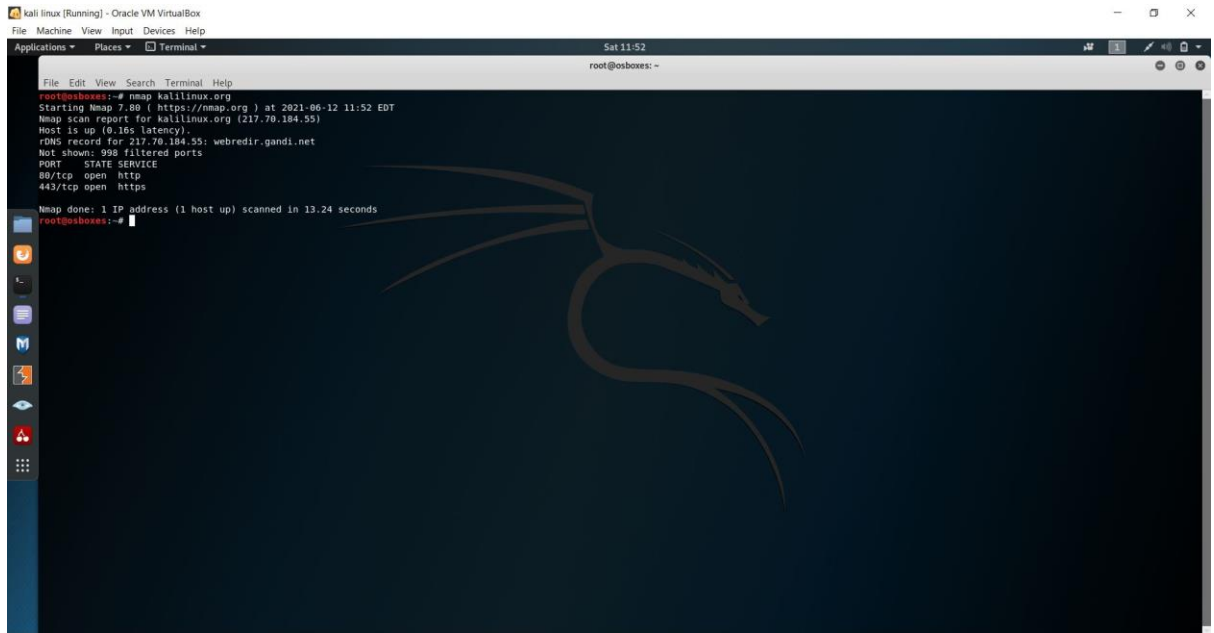
K. RAJA DEEPAK

MAJOR PROJECT

1.PERFORM SCANNING MODULE BY USING NMAP TOOL AND SCAN KALI LINUX AND WINDOWS 7.



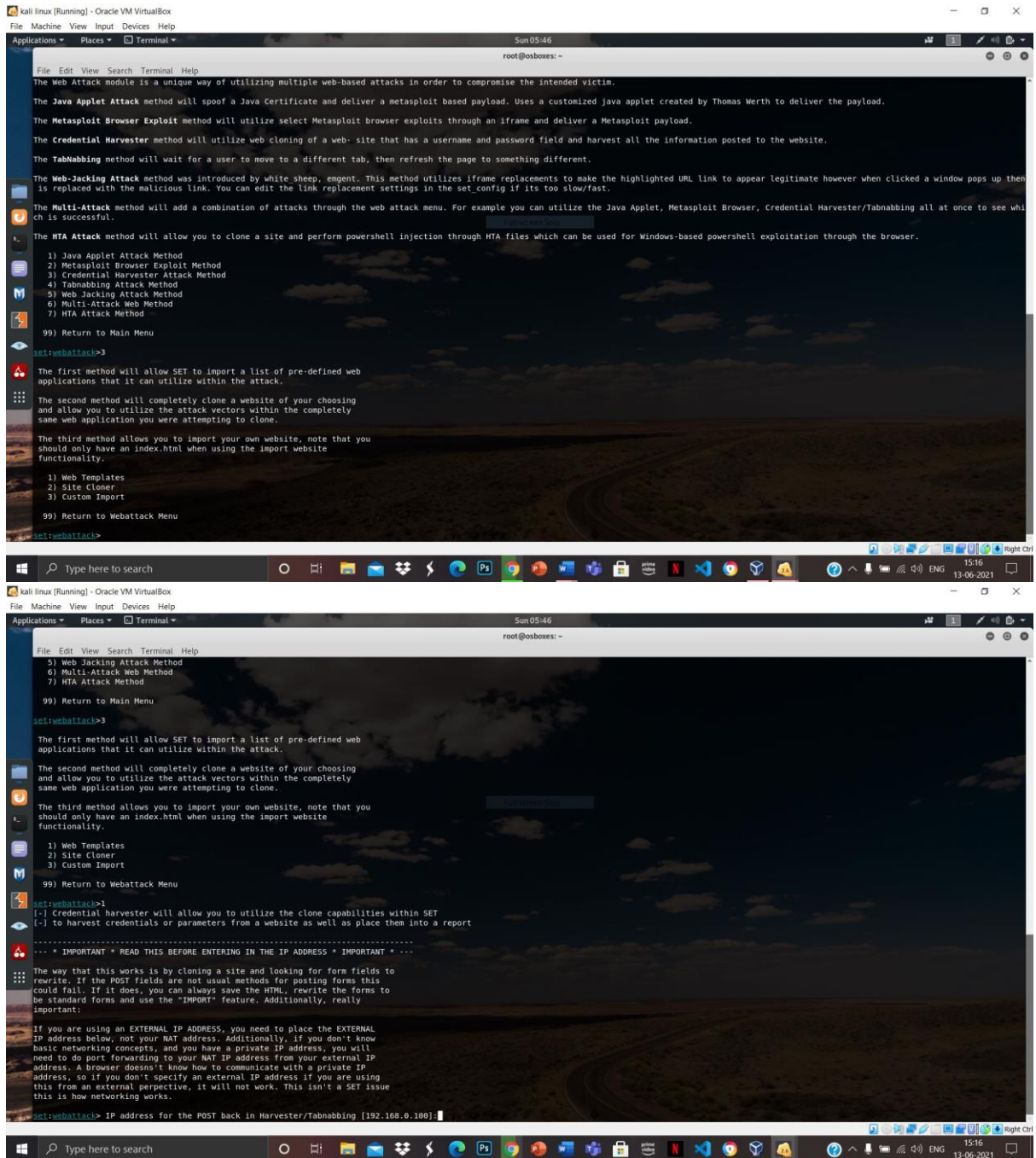
```
--host-timeout <time>: Give up on target after this long
--scan-delay/-<max-scan-delay> <time>: Adjust delay between probes
--min-rate <number>: Send packets no slower than <number> per second
--max-rate <number>: Send packets no faster than <number> per second
FIREWALL/IDS EVASION AND SPOOFING:
  -f: --mtu <val>: Fragment packets (optionally w/given MTU)
  -D <decoy1,decoy2[,ME],...>: Cloak a scan with decoys
  -S <IP Address>: Spoof source address
  -e <iface>: Use specified interface
  -g/--source-port <portnum>: Use given port number
  --proxies <url1[,url2],...>: Relay connections through HTTP/SOCKS4 proxies
  --data <hex string>: Append a custom payload to sent packets
  --data-string <string>: Append a custom ASCII string to sent packets
  --data-length <num>: Append random data to sent packets
  --ip-options <options>: Send packets with specified IP options
  --ttl <val>: Set IP time-to-live field
  --spoof-mac <mac address/prefix/vendor name>: Spoof your MAC address
  --badsum: Send packets with a bogus TCP/UDP/SCTP checksum
OUTPUT:
  -oN/-oX/-oS/-oG <file>: Output scan in normal, XML, s<ript kiddi3,
  and Greppable format, respectively, to the given filename.
  -oA <basename>: Output in the three major formats at once
  -v: Increase verbosity level (use -vv or more for greater effect)
  -d: Increase debugging level (use -dd or more for greater effect)
  --reason: Display the reason a port is in a particular state
  --open: Only show open (or possibly open) ports
  --packet-trace: Show all packets sent and received
  --iflist: Print host interfaces and routes (for debugging)
  --append-output: Append to rather than clobber specified output files
  --resume <filename>: Resume an aborted scan
  --stylesheet <path/URL>: XSL stylesheet to transform XML output to HTML
  --webxml: Reference stylesheet from Nmap.org for more portable XML
  --no-stylesheet: Prevent associating of XSL stylesheet w/XML output
MISC:
  -6: Enable IPv6 scanning
  -A: Enable OS detection, version detection, script scanning, and traceroute
  --datadir <dirname>: Specify custom Nmap data file location
  --send-eth/--send-ip: Send using raw ethernet frames or IP packets
  --privileged: Assume that the user is fully privileged
  --unprivileged: Assume the user lacks raw socket privileges
  -V: Print version number
  -h: Print this help summary page.
EXAMPLES:
  nmap -v -A scanme.nmap.org
  nmap -v -sn 192.168.0.0/16 10.0.0.0/8
  nmap -v -IR 10000 -Pa -p 80
SEE THE MAN PAGE (https://nmap.org/book/man.html) FOR MORE OPTIONS AND EXAMPLES
root@osboxes:~#
```

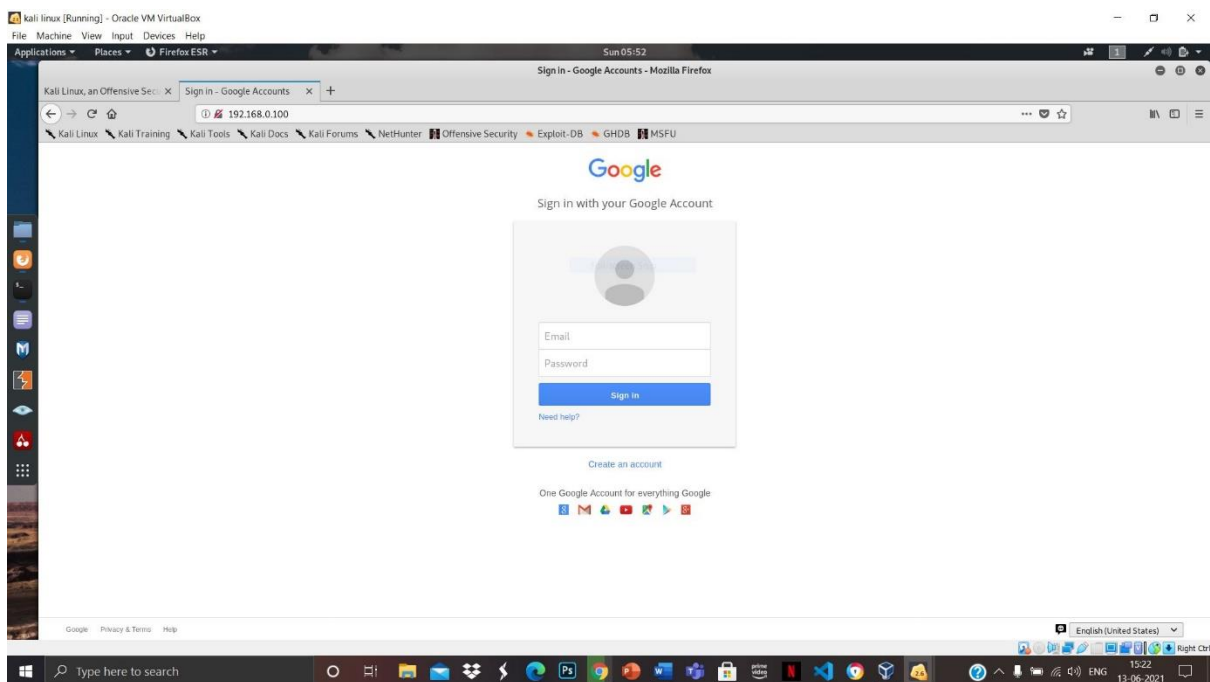
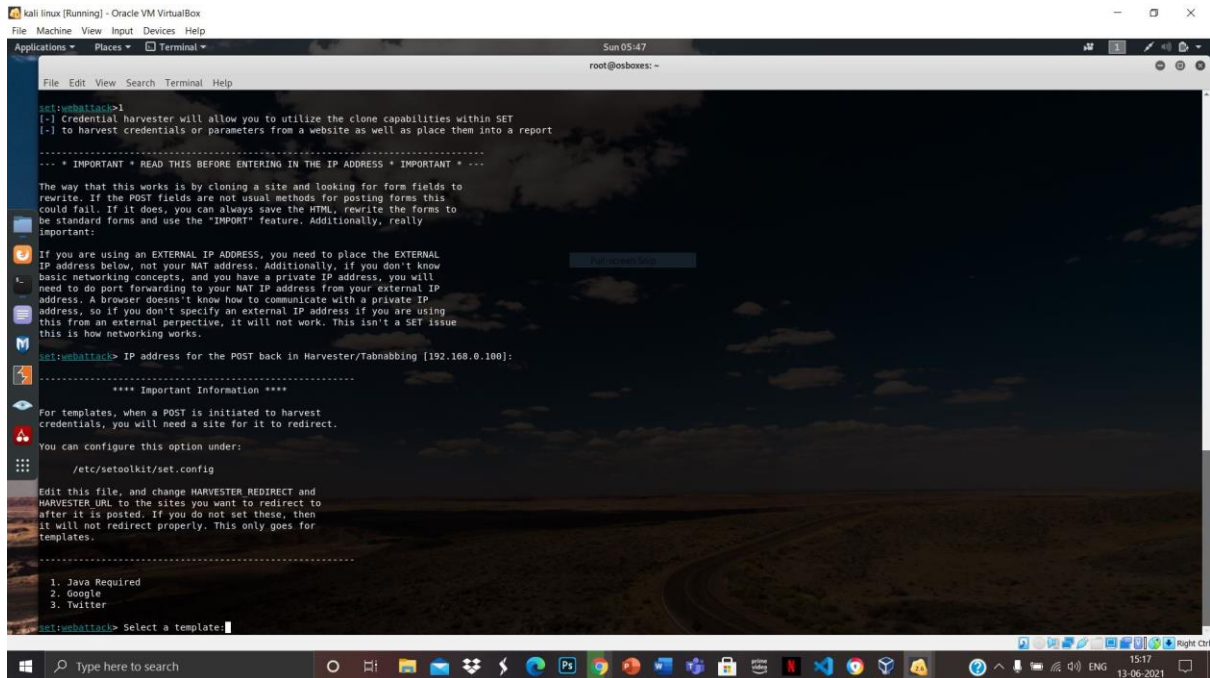


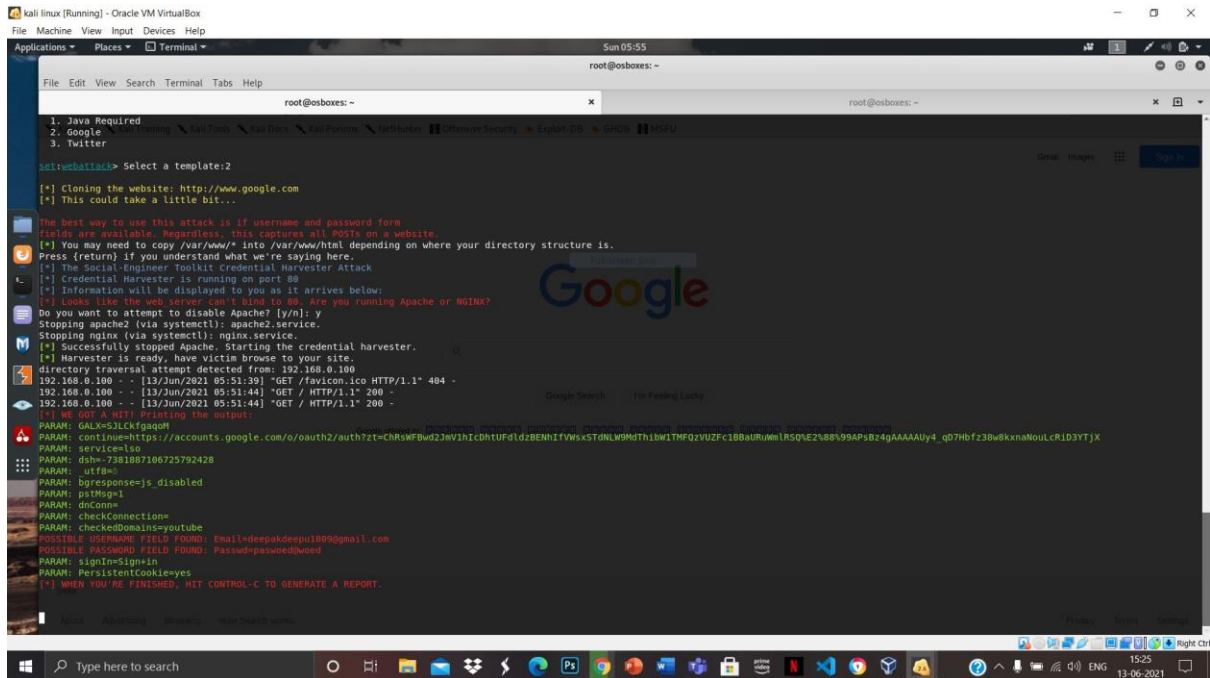
The image displays two sequential screenshots of a Kali Linux terminal window running the Social-Engineer Toolkit (SET). The terminal window is titled "Kali Linux [Running] - Oracle VM VirtualBox" and shows the user "root@osboxes: ~" on "Sun 05-04".

First Screenshot: The terminal shows the SET main menu. At the top, it displays the SET logo and version information: "The Social-Engineer Toolkit (SET) Created by: David Kennedy (ReL1K) Version: 0.0.1 Codename: 'Naverick - BETA'". It also provides social media links for Twitter (@TrustedSec, @HackingDave) and a homepage (https://www.trustedsec.com). The menu lists 10 options, including "Spear-Phishing Attack Vectors", "Website Attack Vectors", "Infectious Media Generator", "Create a Payload and Listener", "Mass Mailer Attack", "Arduino-Based Attack Vector", "Wireless Access Point Attack Vector", "QRCode Generator Attack Vector", "Powershell Attack Vectors", and "Third Party Modules".

Second Screenshot: The terminal shows the "Web Attack" module selected. It displays a list of attack methods: "Java Applet Attack Method", "Metasploit Browser Exploit Method", "Credential Harvester Attack Method", "Tabnabbing Attack Method", "Web Jacking Attack Method", "Multi-Attack Web Method", and "HTA Attack Method". The terminal also shows the user input "set> 2" and the output "The Web Attack module is a unique way of utilizing multiple web-based attacks in order to compromise the intended victim."



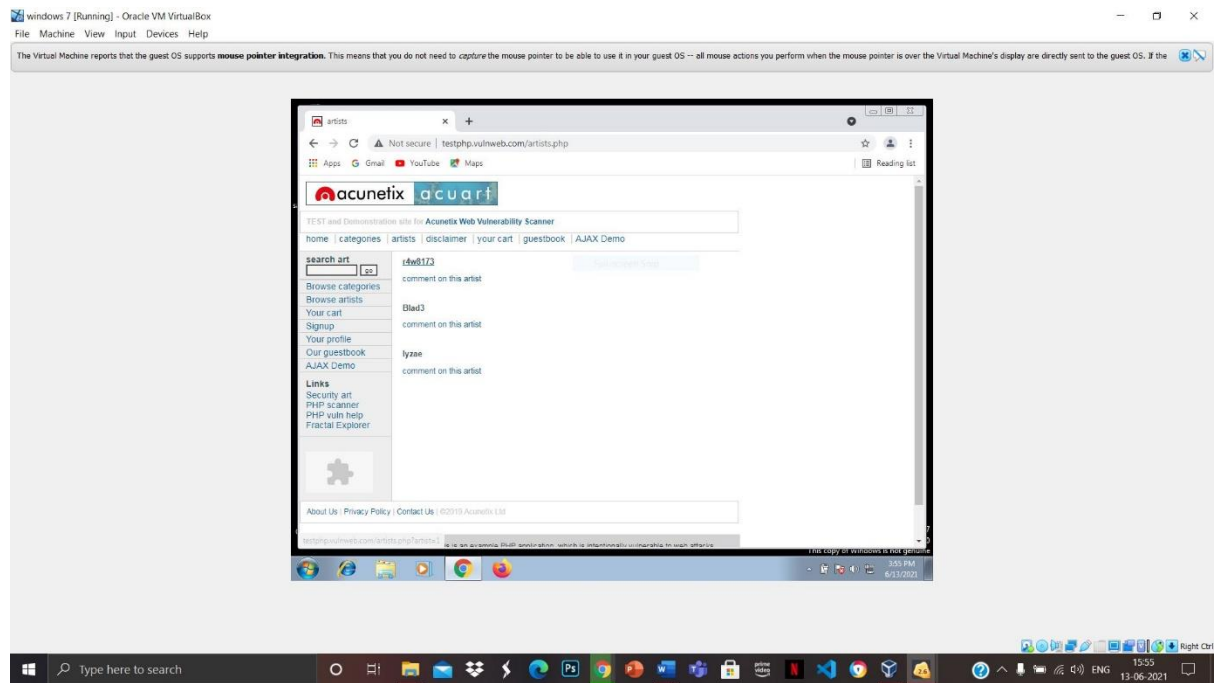


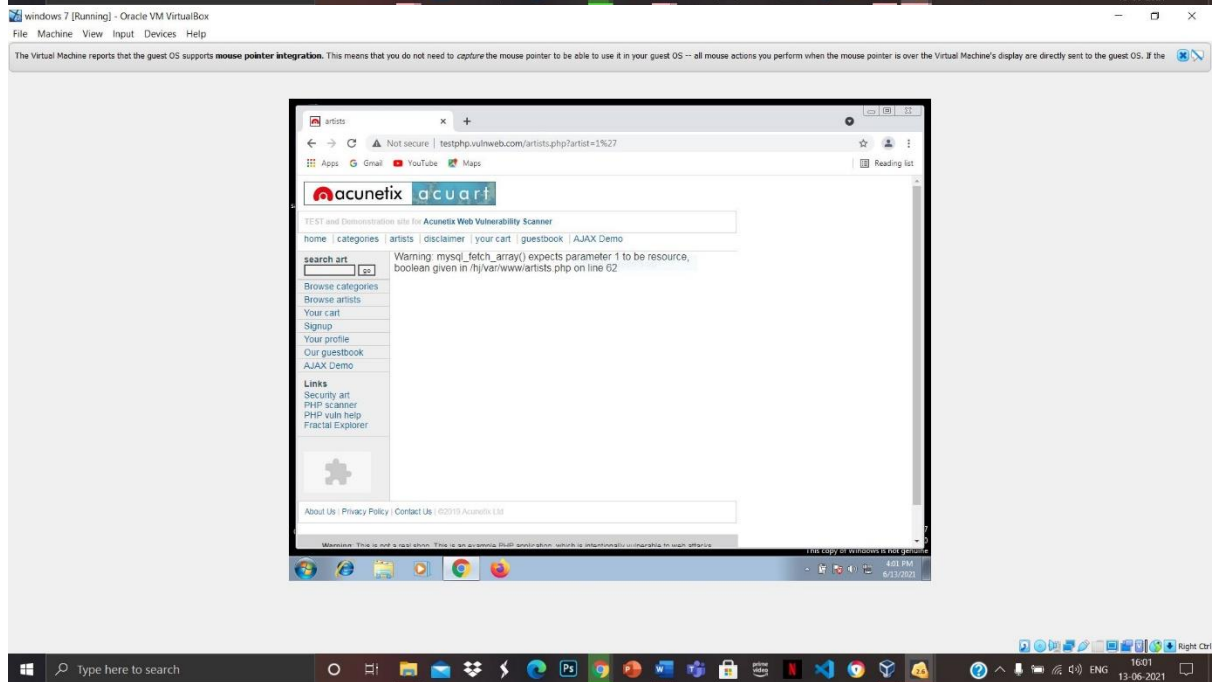
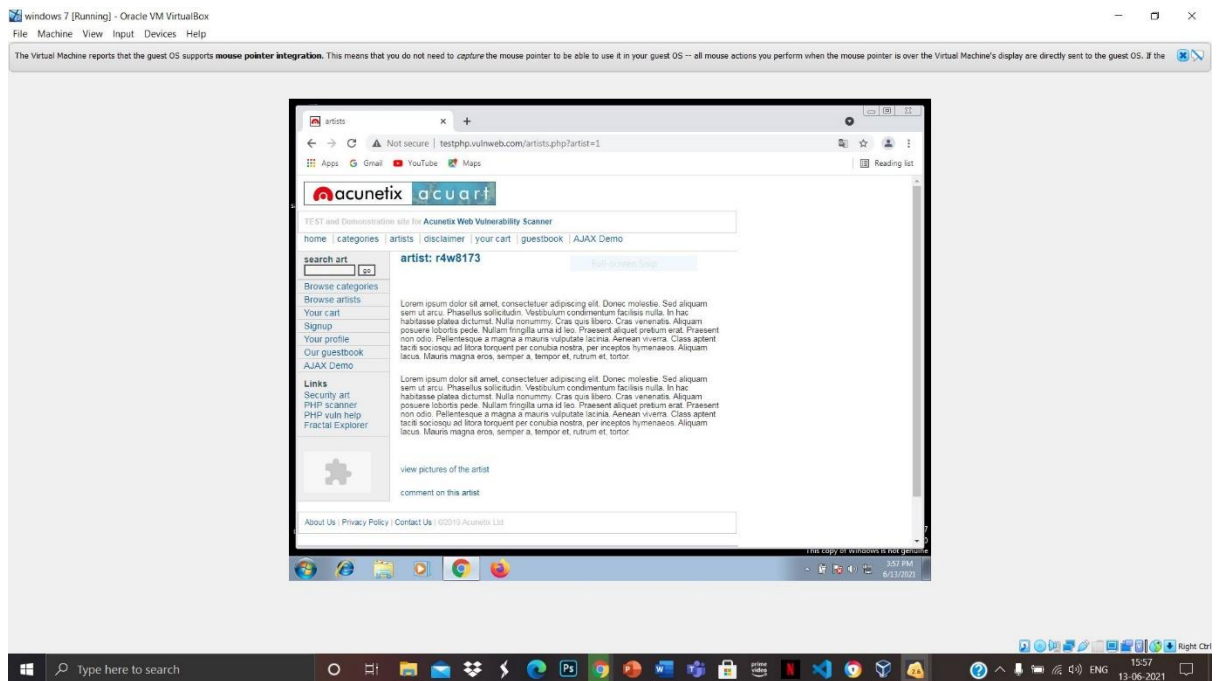


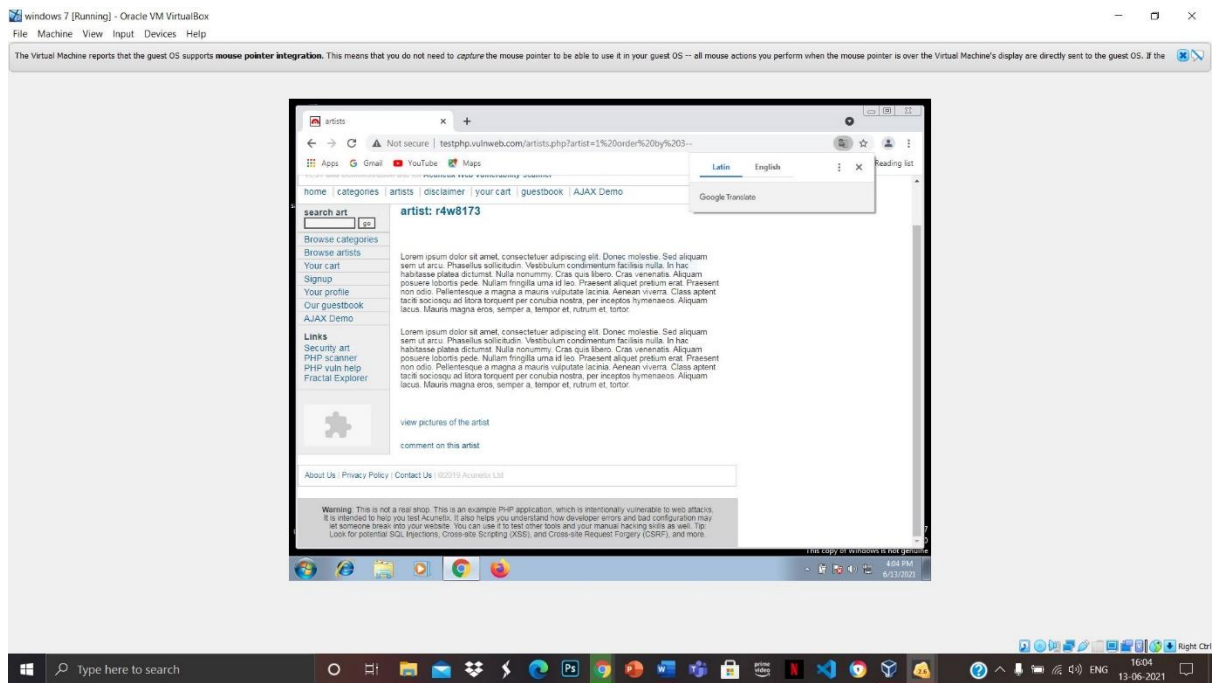
SOLUTIONS TO AVOID FAKE GMAIL

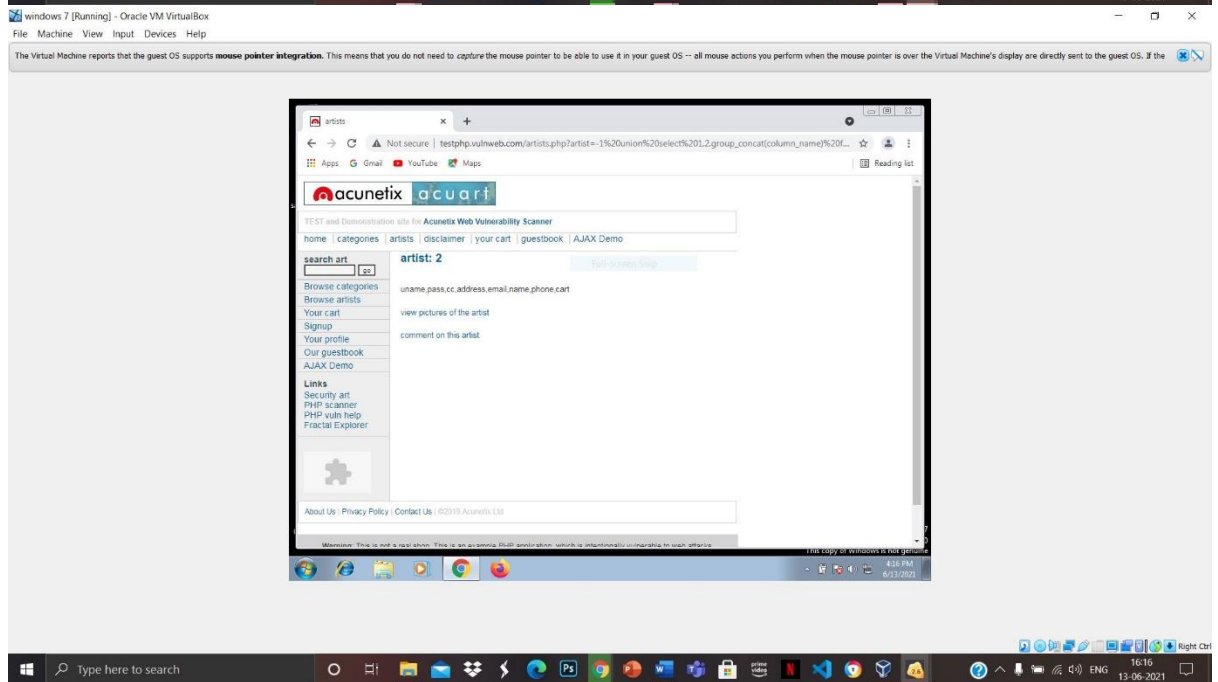
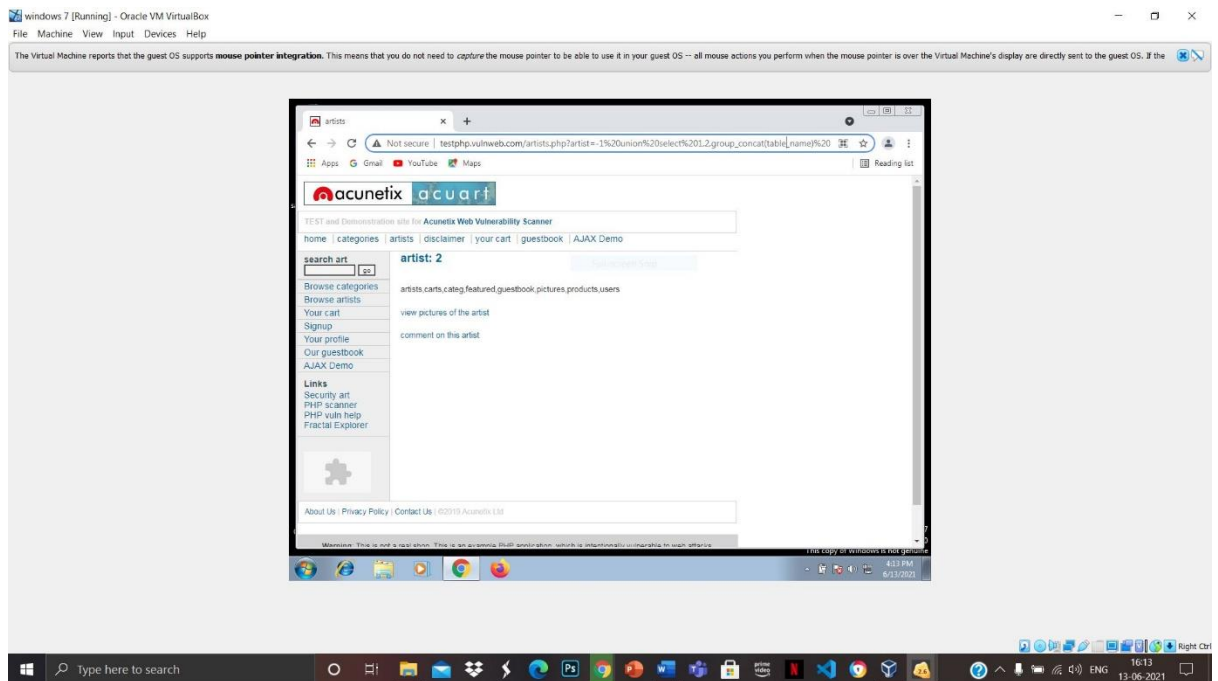
1. Visit <https://support.google.com/mail/contact/abuse?hl=en>.
2. Provide the email address on which you have received the spam email.
3. Share complete Gmail address of the person who has sent you the email.
4. Provide email headers of the message.

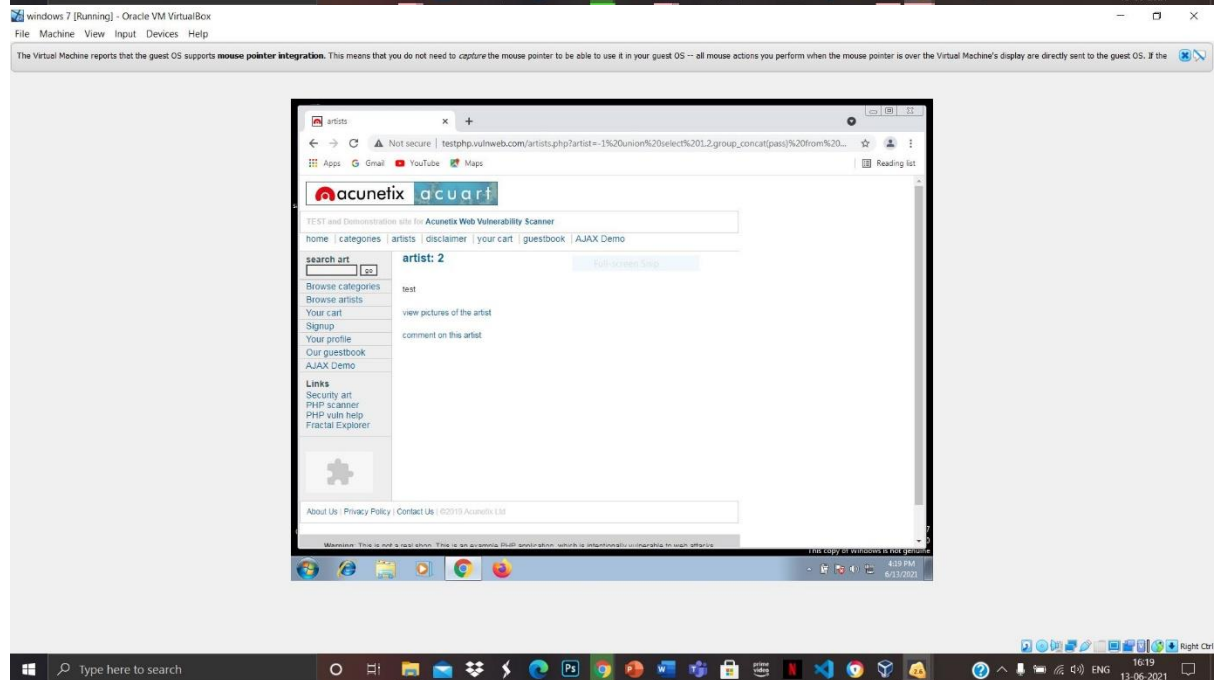
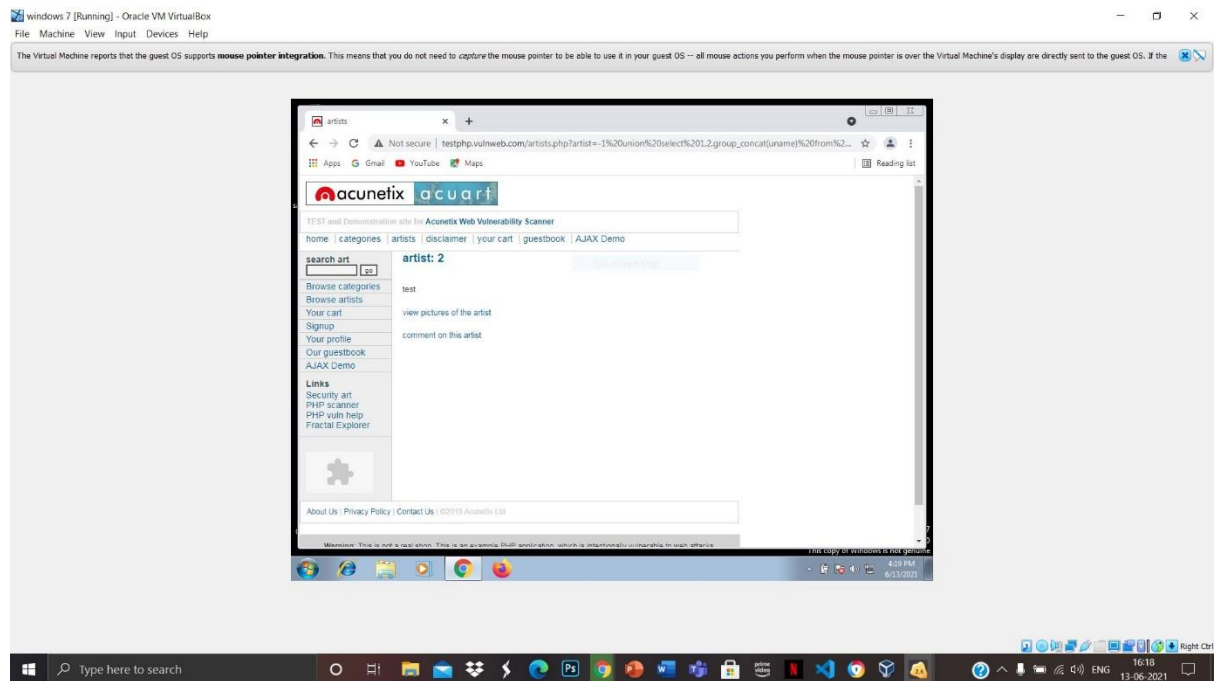
5.PERFORM SQL INJECTION MANUALLY ON VULNWEB

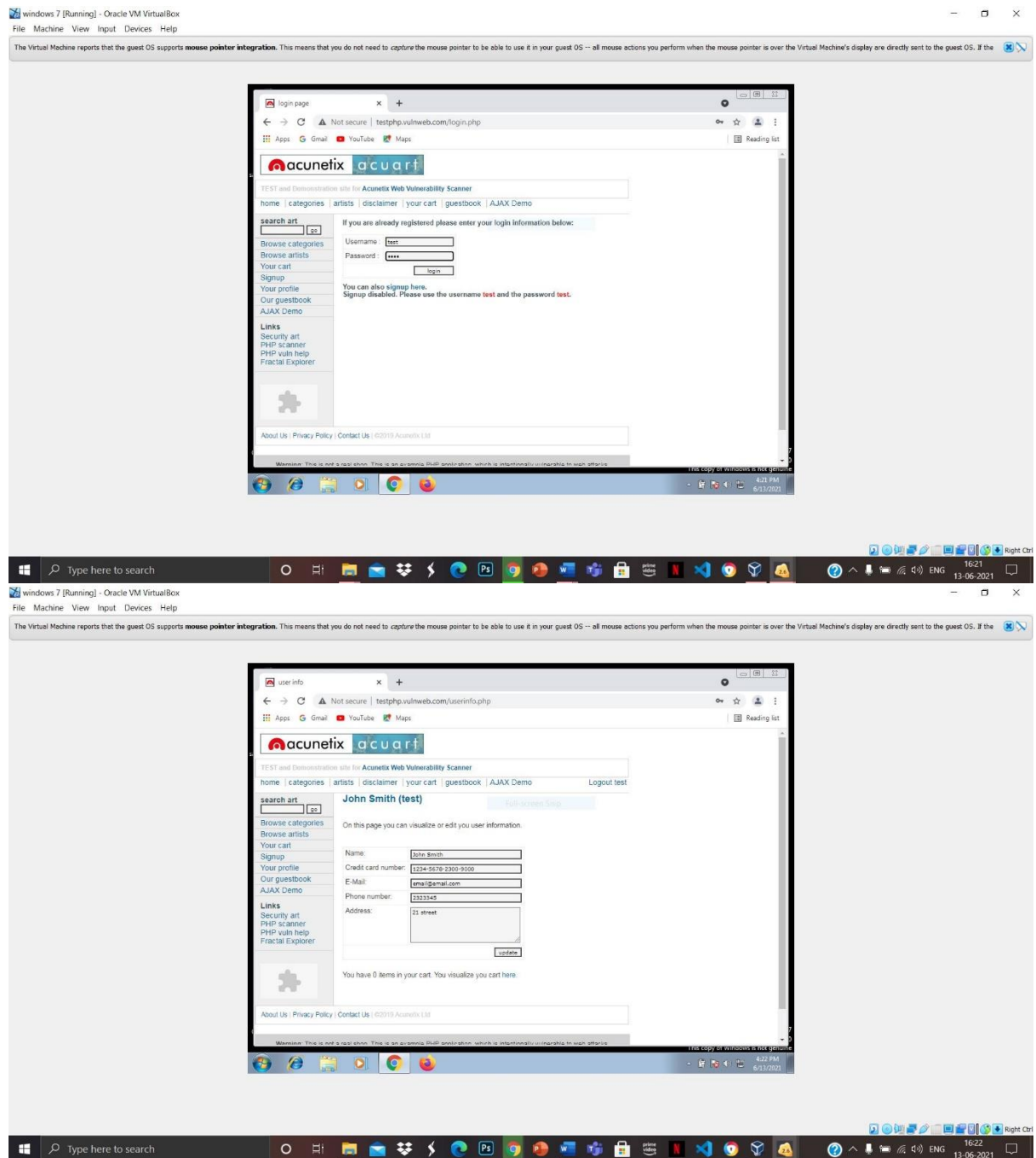












PREVENTIVE STEPS TO AVOID SQL INJECTION

Validate User Inputs.

Sanitize Data by Limiting Special Characters.

Enforce Prepared Statements and Parameterization.

Use Stored Procedures in The Database.

Actively Manage Patches and Updates.

8. ARTICLE ON CYBER SECURITY AND RECENT ATTACKS

CYBER SECURITY

Cyber security is the practice of defending computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks. It's also known as information technology security or electronic information security. The term applies in a variety of contexts, from business to mobile computing, and can be divided into a few common categories.

RECENT ATTACKS

The year 2020 has become remarkable in many ways, especially when it comes to the surge in cyber attacks. The Covid-19 pandemic has given an unprecedented opportunity to cyber attackers to hack and break down the organizations' IT infrastructure.

The work-from-home working module adopted by such organizations has been attributed to the rise of cyber attacks.

Software AG Ransomware Attack

The second-largest software vendor in Germany and the seventh-largest in Europe, Software AG has been reportedly hit by a ransomware attack in October 2020. ZDNet reported that the German tech firm has been attacked by the Clop ransomware and the cyber-criminal gang has demanded more than \$20 million ransom.

The report also says that the company has still not recovered from the attack completely. The company disclosed that the ransomware attack disrupted a part of its internal network. But services to its customers, including cloud-based services, remained unaffected. The company also tried to negotiate with the attackers but it all went in vain.

As per the statement released by Software AG, the company is in the process of restoring its system and database for resuming orderly operation.

Sopra Steria Ransomware Attack

French IT service giant Sopra Steria was attacked by ransomware on the evening of 20th October, as confirmed by the company. Its fintech business, Sopra Banking Software, identified the virus which is a new version of the Ryuk ransomware and previously unknown to cyber security providers.

Sopra Steria claimed that it was able to confine the attack to a limited part of its IT framework, even though it caught the attack after a few days. However, following an in-depth investigation, the company did not identify any leaked data or damage caused to its customers.

Ryuk is one of the most inventive ransomware which has already targeted organizations like EWA, a US defense contractor, and Prosegur, a Spanish logistics firm.

Telegram Hijack

In September 2020, hackers gained access to Telegram messenger and email data of some big names in the cryptocurrency business. Hackers used Signaling System 7 (SS7), which is used for connecting mobile networks across the world, to hack the data.

According to cyber security experts, the hackers were most probably after two-factor authentication (2FA) login codes. They spoofed the short message service center (SMSC) of mobile network operators to send a request on location updates to at least 20 targeted high-profile victims.

This attack is believed to have occurred to obtain cryptocurrency. This type of cyber attack is well known in the cryptocurrency community but the users are generally aware of such requests.

Therefore, there are better authentication methods than just SMS or call-based 2FA in the cryptocurrency community. Cyber security experts think telecom standards must move away from using protocols like SS7, which cannot resolve modern issues.

Seyfarth Shaw Malware Attack

The Chicago-based leading global legal firm, Seyfarth Shaw LLP became a victim of an “aggressive malware” attack. This attack was later confirmed by the firm as a ransomware attack. The cyber attack reportedly took place on October 10, 2020, and downed the firm’s email system completely, as per a statement published by the company.

The firm claimed in its statement that there was no evidence of client data or firm data unauthorized access or removal. However, many of its systems were found encrypted, following which the firm shut down all of those as a precautionary measure.

The global legal firm notified law enforcement and the FBI has already started an investigation. Apart from this, no further information was revealed on how the attack occurred and what family of ransomware hit the firm.

Carnival Corporation Data Breach:

The world’s largest cruise line operator, Carnival Corporation reported a data breach due to a ransomware attack that took place in the month of August 2020. Hackers stole confidential information from customers, employees, and crew members at the time of the attack.

On August 15, 2020, the company detected a ransomware attack that breached and encrypted one of its brand’s IT infrastructure. Following the attack, the cruise line operator notified law enforcement and hired legal counsel and cyber security experts and launched an investigation.

Though the company claimed that no misuse of exposed personal data has come to light, the type of ransomware and how the attack happened have remained unrevealed.

ONE OF THE TOPIC WHICH I LEARNED IN THIS COURSE

DESKTOP PHISHING:

Phishing is a type of social engineering where an attacker sends a fraudulent ("spoofed") message designed to trick a human victim into revealing sensitive information to the attacker or to deploy malicious software on the victim's infrastructure like ransomware. Phishing attacks have become increasingly sophisticated and often transparently mirror the site being targeted, allowing the attacker to observe everything while the victim is navigating the site, and transverse any additional security boundaries with the victim. As of 2020, phishing is by far the most common attack performed by cyber-criminals.

The first recorded use of the term "phishing" was in the cracking toolkit created by Koceilah Rekouche in 1995, however it is possible that the term was used before this in a print edition of the hacker magazine. The word is a leetspeakvariant of *fishing* (*ph* is a common replacement for *f*), probably influenced by phreaking and alludes to the use of increasingly sophisticated lures to "fish" for users' sensitive information.

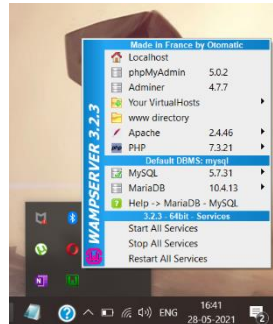
Attempts to prevent or mitigate the impact of phishing incidents include legislation, user training, public awareness, and technical security measures.

I LEARNED DESKTOP PHISING ON FACEBOOK IN THIS COURSE

- DOWNLOAD VISUAL C++ SOFTWARES THESE ARE THE SUPPORTING SOFTWARES FOR WAMP SERVER
- DOWNLOAD WAMP SERVER APPLICATION
- START ALL THE SERVICES
- CHECK ONCE WHETHER 127.0.0.1 IS WORKING OR NOT
- IF WORKING RECHECK WITH YOUR IP ADDRESS
- IF THE WAMP SERVER ICON IS CONVERTED INTO GREEN COLOUR YOUR SYSTEM IS CONVERTED INTO SERVER
- NOW YOUR SYSTEM CONVERTED INTO A SERVER
- CREATE A FOLDER AND SAVE THE FACEBOOK HTML FILE AND PHISING SCRIPT AND A TEXT DOCUMENT
- NOW SAVE THIS INTO WAMP SUBFOLDER (WWW) AND CHANGE THE HTML FILE NAME INTO INDEX

SUPPORTING SOFTWARES FOR WAMP SERVER

Microsoft Visual C++ 2010 x64 Redistributable - 10.0...	Microsoft Corporation	04-02-2021	12.4 MB	10.0.40219
Microsoft Visual C++ 2010 x86 Redistributable - 10.0...	Microsoft Corporation	04-02-2021	11.1 MB	10.0.40219
Microsoft Visual C++ 2012 Redistributable (x64) - 11...	Microsoft Corporation	13-05-2021	20.5 MB	11.0.61030.0
Microsoft Visual C++ 2012 Redistributable (x86) - 11...	Microsoft Corporation	13-05-2021	17.3 MB	11.0.61030.0
Microsoft Visual C++ 2013 Redistributable (x64) - 12...	Microsoft Corporation	13-05-2021	20.5 MB	12.0.40660.0
Microsoft Visual C++ 2013 Redistributable (x86) - 12...	Microsoft Corporation	13-05-2021	17.1 MB	12.0.40660.0
Microsoft Visual C++ 2015-2019 Redistributable (x64)...	Microsoft Corporation	13-05-2021	23.1 MB	14.24.28127.4
Microsoft Visual C++ 2015-2019 Redistributable (x86)...	Microsoft Corporation	13-05-2021	20.1 MB	14.24.28127.4



MY SYSTEM CONVERTED INTO A SERVER

Wampserver
Apache 2.4 - MySQL 5 & 8 - MariaDB 10 - PHP 5 & 7

Version 3.2.3 - 64bit | english | classic

Server Configuration
 Apache Version: 2.4.46 - [Documentation](#)
 Server Software: Apache/2.4.46 (Win64) PHP/7.3.21 - Port defined for Apache: 80
 PHP Version: 7.3.21 - [Documentation](#)

Loaded Extensions :

- apache2handler
- Core
- exif
- gmp
- json
- mysqli
- pdo_sqlite
- SimpleXML
- standard
- xmlreader
- zip
- bcmath
- ctype
- fileinfo
- hash
- ldap
- openssl
- Phar
- soap
- tokenizer
- xmlrpc
- zlib
- bz2
- curl
- filter
- iconv
- libxml
- pcr
- readline
- sockets
- wddx
- xmlwriter
- calendar
- date
- gd
- imap
- mbstring
- PDO
- Reflection
- SPL
- xdebug
- xsl
- com_dotnet
- dom
- gettext
- intl
- mysqli
- pdo_mysql
- session
- sqlite3
- xml
- Zend OPcache

MySQL Version: 5.7.31 - Port defined for MySQL: 3306 - default DBMS - [Documentation MySQL](#)
MariaDB Version: 10.4.13 - Port defined for MariaDB: 3307 - [Documentation MariaDB](#) - MySQL - MariaDB

Tools
[phpinfo\(\)](#)
[phpmyadmin](#)
[Add a Virtual Host](#)

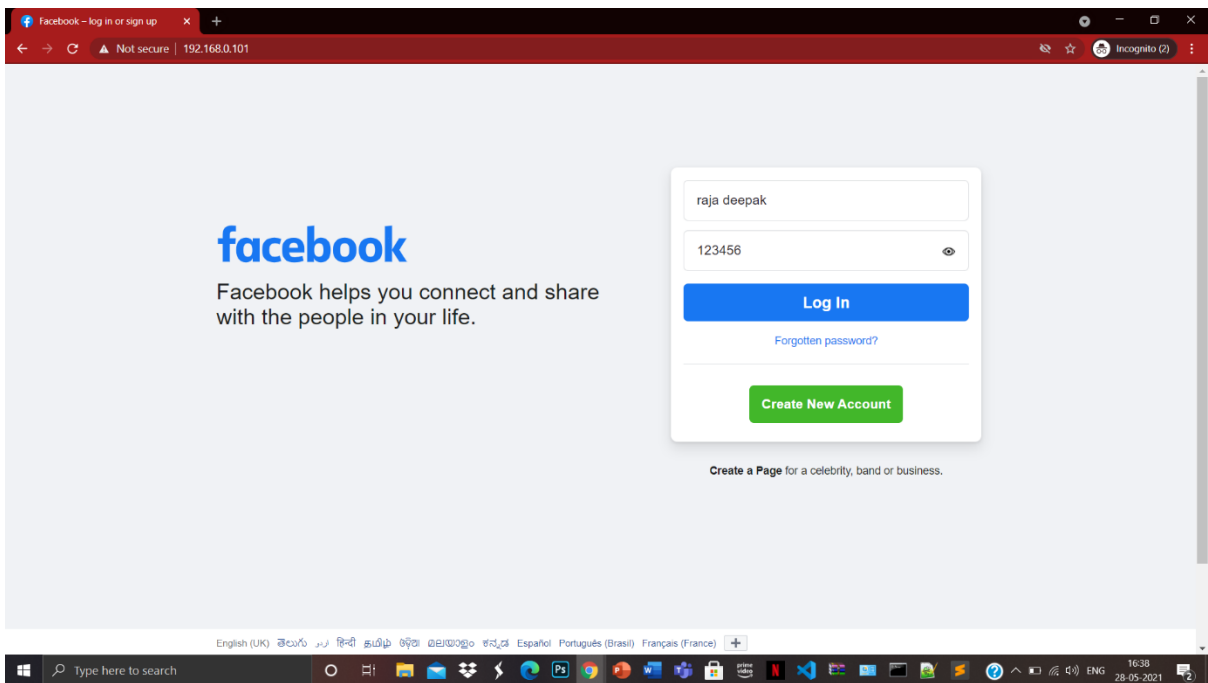
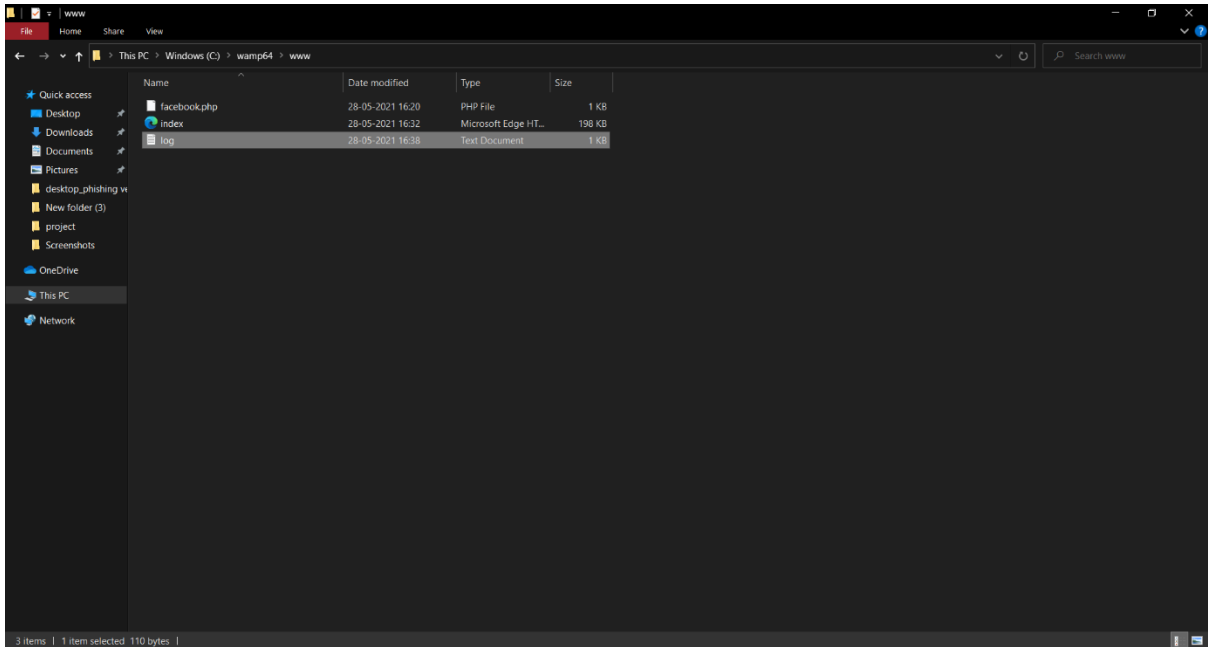
Your Projects
 No projects yet.
 To create a new one, just create a directory in www.

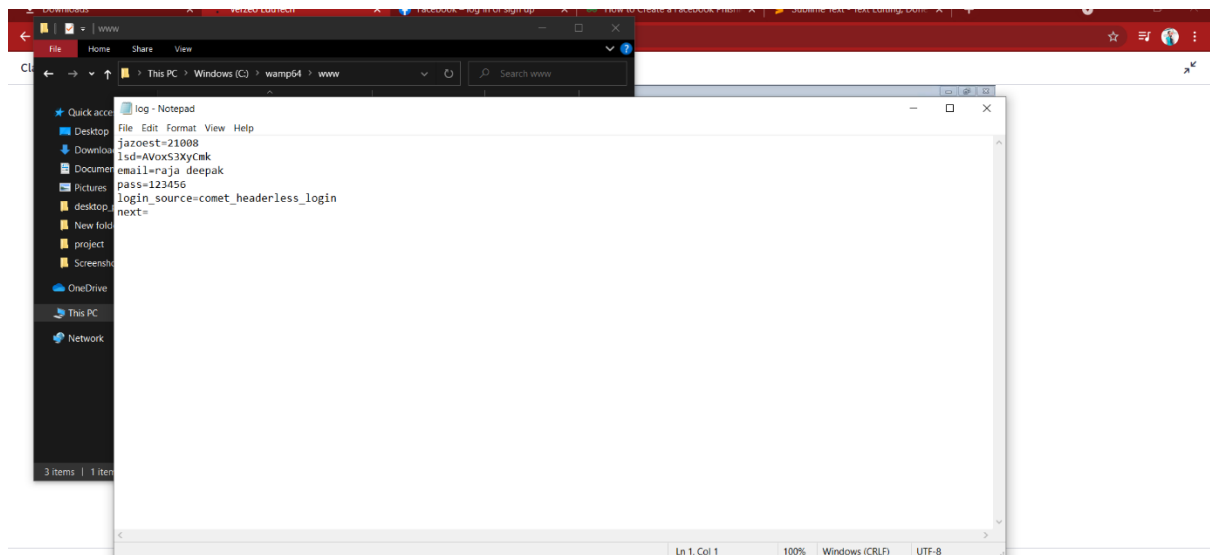
Your Aliases
[adminer](#)
[phpmyadmin](#)
[phpsysinfo](#)

Your VirtualHost
[localhost](#)

Wampserver Forum

PHISHING SCRIPT





SOLUTION TO AVOID DESKTOP PHISHING

Know what a phishing scam looks like

Don't click on that link

Get free anti-phishing add-ons

Don't give your information to an unsecured site

Rotate passwords regularly

Install firewalls

Don't give out important information unless you must

