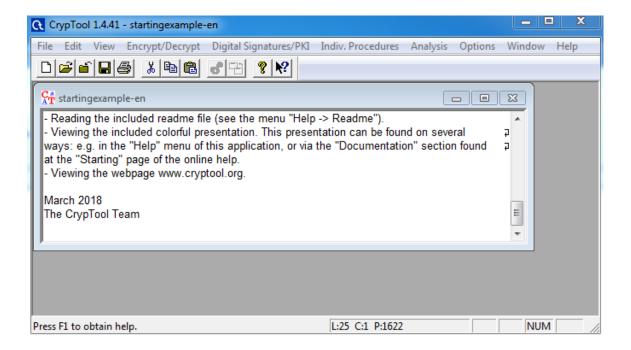
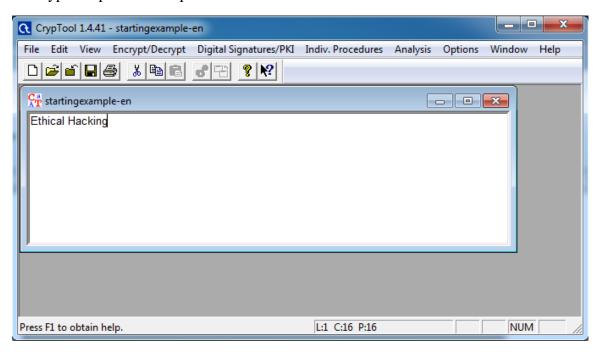
Practical 2

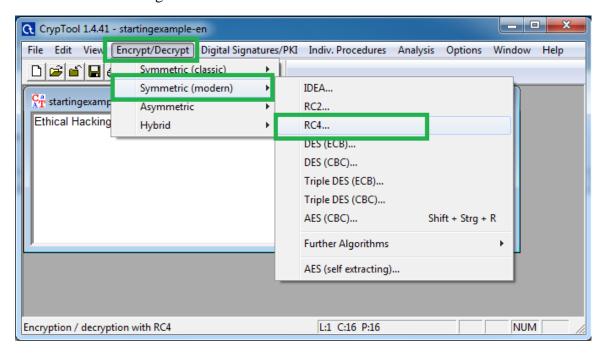
2.1 - Use crypTool to encrypt and decrypt passwords using RC4 algorithm



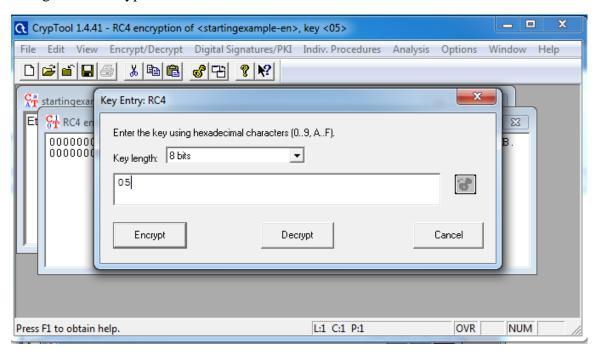
then type the password required



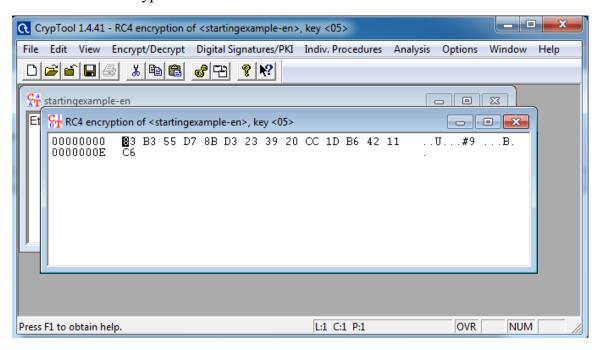
then select the RC4 algorithm



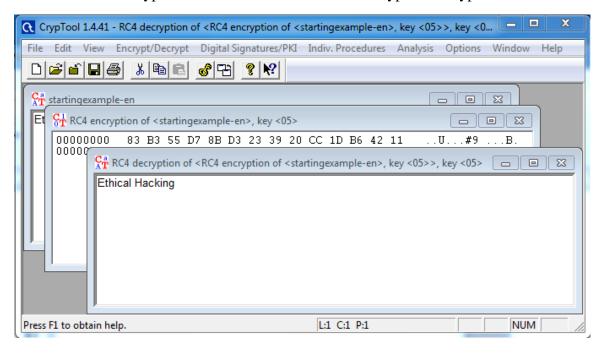
then give the encryption value



here we see the encryption

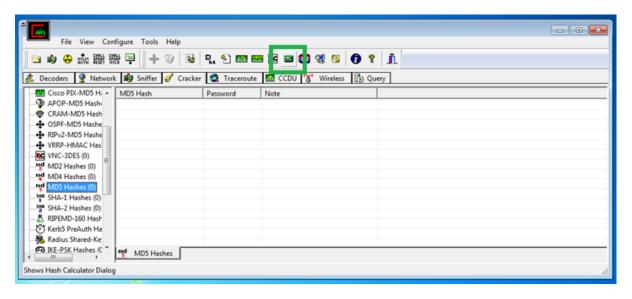


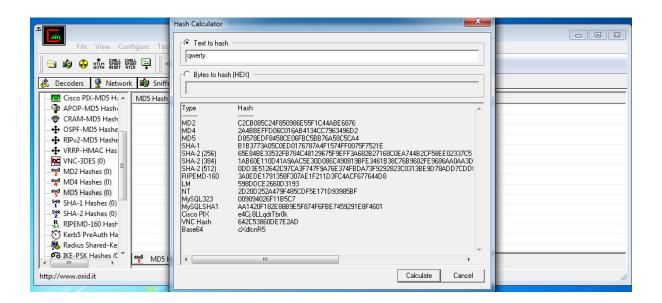
now we see the decryption do the same but instead of encrypt do decrypt



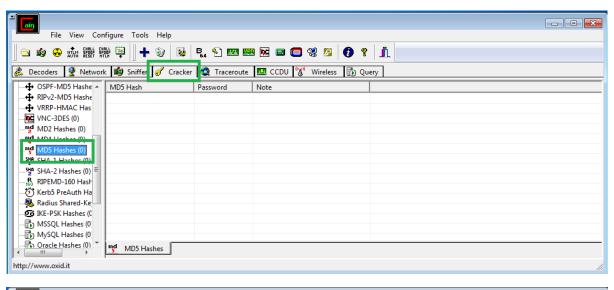
2.2 – Use Cain and Abel for cracking Windows account password using Dictionary attack and to decode wireless network passwords

Go to the hash calculator

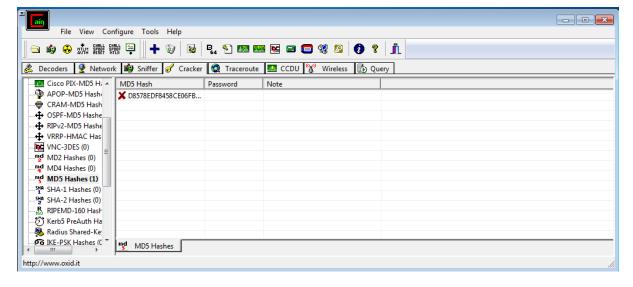




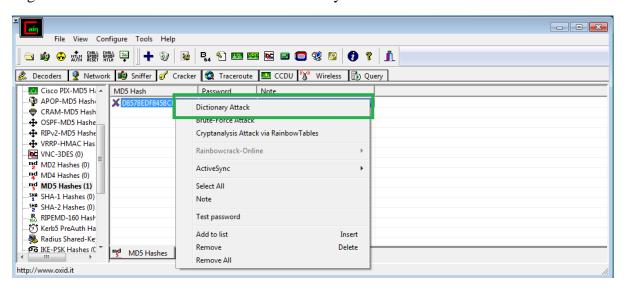
Copy the MD5 hash and paste it to the cracker of MD5

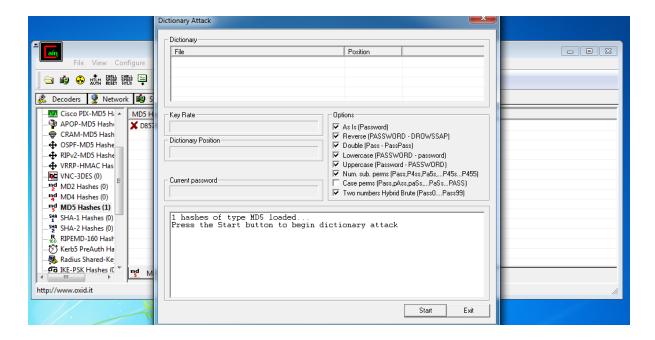




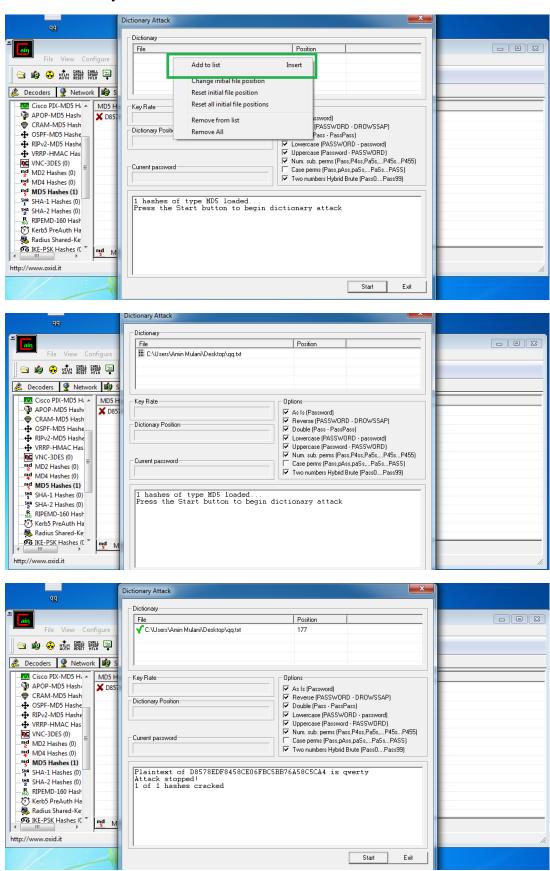


Right click on the Hash value and select Dictionary Attack





make a dictionary list and add to the attack



Practical 3

3.1 - Using TraceRoute, ping, ifconfig, netstat command

1 - tracert

```
_ D X
C:\Windows\system32\cmd.exe
C:\Users\Amin Mulani>tracert www.prestashop.com
                                                                                                                                                           Tracing route to www.prestashop.com [104.18.12.107]
over a maximum of 30 hops:
                                                            192.168.80.2
Request timed out.
104.18.12.107
             <1 ms
                              <1 ms
                                                <1 ms
   123456789
                                                  *
               ×
                                ×
               *
                                ×
                                                  ×
                                *
                                                  *
               *
                                ×
                                *
3 ms
                                                 *
3 ms
               3 ms
Trace complete.
C:∖Users\Amin Mulani>
```

2 - ping

```
C:\Users\Amin Mulani\ping 192.168.80.2

Pinging 192.168.80.2 with 32 bytes of data:
Reply from 192.168.80.2: bytes=32 time\ins TTL=128

Ping statistics for 192.168.80.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = Oms, Maximum = Oms, Average = Oms

C:\Users\Amin Mulani\ping 104.18.12.107

Pinging 104.18.12.107 with 32 bytes of data:
Reply from 104.18.12.107: bytes=32 time=3ms TTL=128
Reply from 104.18.12.107: bytes=32 time=4ms TTL=128
Reply from 104.18.12.107: bytes=32 time=4ms TTL=128
Reply from 104.18.12.107: bytes=32 time=5ms TTL=128
Ping statistics for 104.18.12.107:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 3ms, Maximum = 5ms, Average = 4ms
```

3 ifconfig

```
M
                                   kali@kali: ~
                                                                            \bigcirc \bigcirc \bigotimes
File Actions Edit View Help
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.168.80.130 netmask 255.255.255.0 broadcast 192.168.80.255
        inet6 fe80::bbd7:6bcf:9bc6:447c prefixlen 64 scopeid 0×20<link>
        ether 00:0c:29:3d:f2:65 txqueuelen 1000 (Ethernet)
        RX packets 282 bytes 31662 (30.9 KiB)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 53 bytes 6888 (6.7 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 0×10<host>
        loop txqueuelen 1000 (Local Loopback)
        RX packets 4 bytes 240 (240.0 B)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 4 bytes 240 (240.0 B)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
__(kali⊕ kali)-[~]

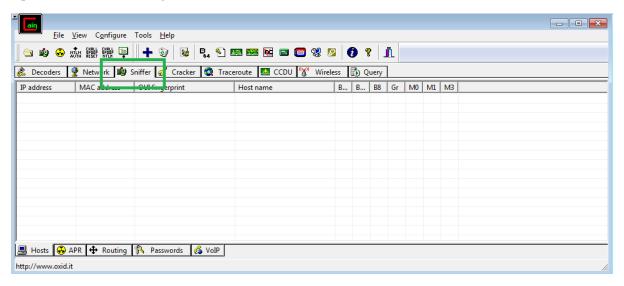
$ ■
```

4 – netstat

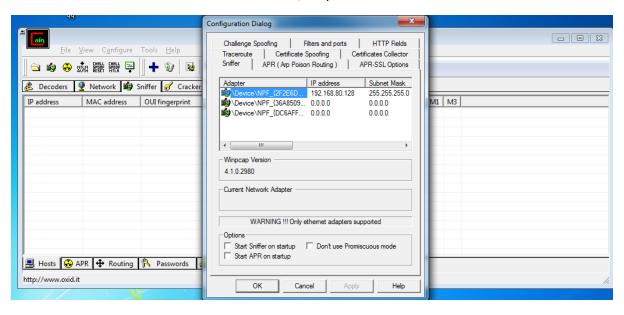
```
_$ netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address
                                              Foreign Address
                                                                       State
                  0 192.168.80.130:bootpc
           0
                                             192.168.80.254:bootps
                                                                       ESTABLISH
ED
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags
                          Type
                                     State
                                                    I-Node
                          STREAM
                                                             /run/user/1000/bus
                                     CONNECTED
                                                    11578
unix 3
unix 3
                          STREAM
                                     CONNECTED
                                                    10836
                          STREAM
                                     CONNECTED
                                                    11494
unix 2
                          DGRAM
                                     CONNECTED
                                                    10563
                          STREAM
                                     CONNECTED
                                                             /run/user/1000/pip
                                                    11337
ewire-0
                          DGRAM
                                     CONNECTED
                                                    3932
                          STREAM
                                                    10144
                                                             /run/user/1000/bus
unix
                                     CONNECTED
unix
                          STREAM
                                     CONNECTED
                                                    11557
                                                             @/tmp/.X11-unix/X0
                                     CONNECTED
unix 3
                         STREAM
                                                    10872
                                                             /run/systemd/journ
al/stdout
                          STREAM
                                     CONNECTED
                                                    8856
                                                             /run/user/1000/bus
unix 3
                          STREAM
                                     CONNECTED
                                                    11496
                                                             @/tmp/.X11-unix/X0
unix 3
unix 3
                          STREAM
                                                    102446
                                     CONNECTED
                          STREAM
                                     CONNECTED
                                                    11092
                                                             /run/dbus/system_b
us_socket
               ]
                          STREAM
                                     CONNECTED
                                                    10912
unix 3
unix
                          STREAM
                                     CONNECTED
                                                    11516
                          STREAM
                                     CONNECTED
                                                    11666
unix 3
                          STREAM
                                     CONNECTED
                                                    11632
                                                             /run/dbus/system_b
us_socket
unix 3
                          STREAM
                                     CONNECTED
                                                    10141
                                                             /run/user/1000/at-
spi/bus_0
unix 3
             [ ]
                          STREAM
                                     CONNECTED
                                                    9927
```

3.2 Perform ARP Poisoning on Windows

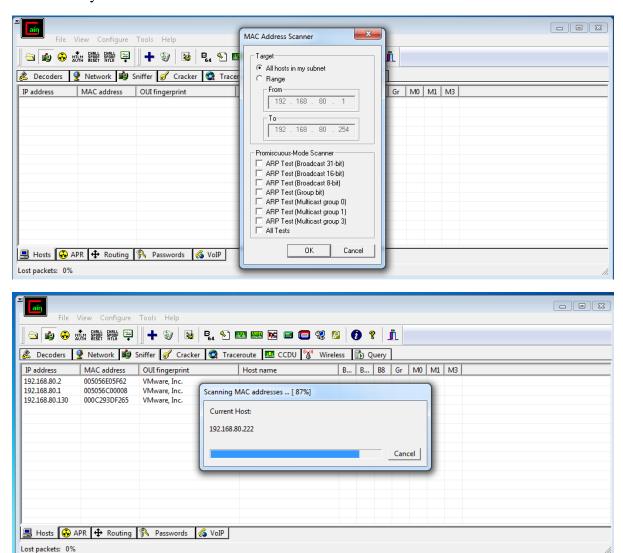
Open Cain and Abel and go to sniffer



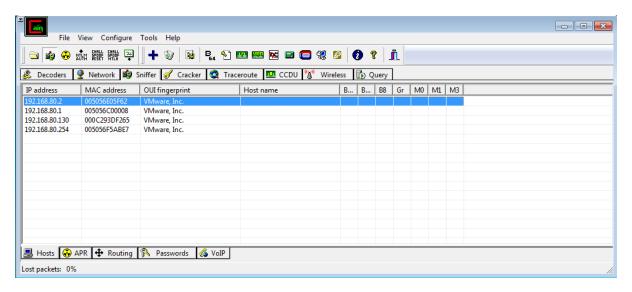
Next to folder icon there is the icon for Start/Stop Sniffer



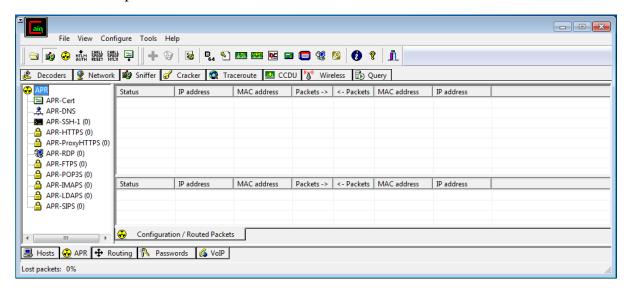
Click on + symbol on the taskbar



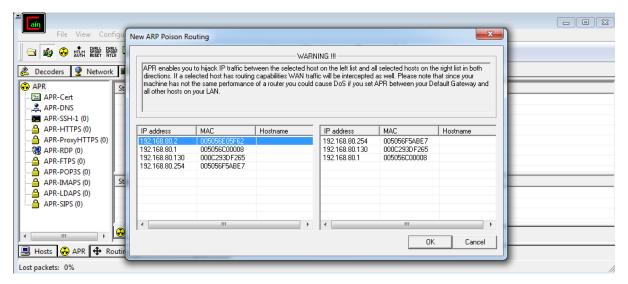
Show the connected host



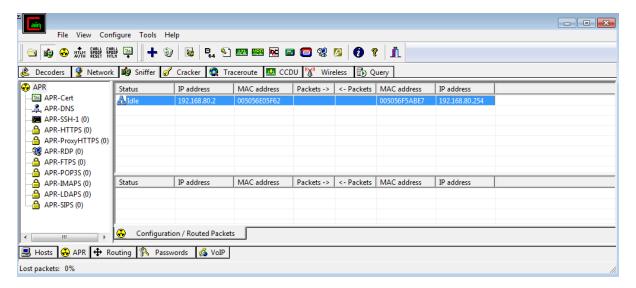
Select the APR option below



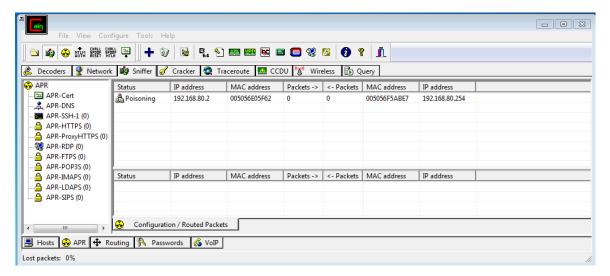
Click on + symbol on the taskbar



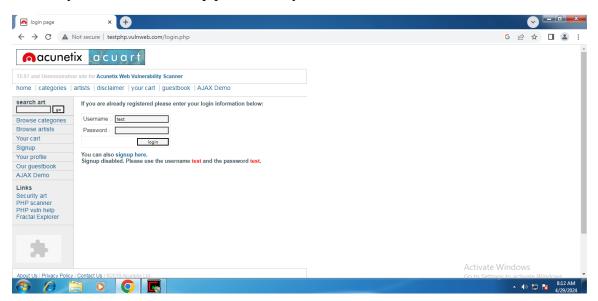
Select the host and add it the select the target and start the poisoning



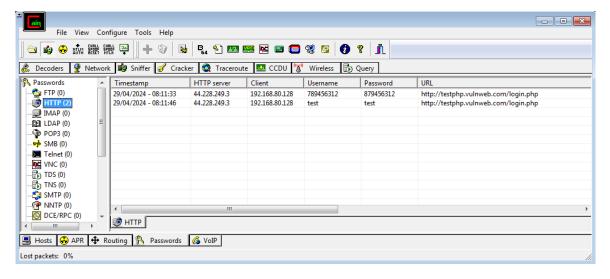
Click on Start/Stop Poisining



Go to any website that has http protocol only it will work



Go to the passwords below to view the passwords gathered



Practical 4

NOTE: Install Nmap for windows and install it. After that open cmd and type "nmap" to check if it is installed properly. Now type the below commands.

• ACK -sA (TCP ACK scan) It never determines open (or even open|filtered) ports. It is used to map out firewall rulesets, determining whether they are stateful or not and which ports are filtered.

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

```
(root@ kali)-[/home/kali]
# nmap -sA -T4 scanme.nmap.org
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-04-28 22:53 EDT
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.000048s latency).
Other addresses for scanme.nmap.org (not scanned): 2600:3c01::f03c:91ff:fe18:bb2f
All 1000 scanned ports on scanme.nmap.org (45.33.32.156) are in ignored states.
Not shown: 1000 unfiltered tcp ports (reset)
Nmap done: 1 IP address (1 host up) scanned in 0.99 seconds
```

```
C:\Users\Amin Mulani>nmap -sA -T4 scanme.nmap.org
Starting Nmap 7.70 ( https://nmap.org ) at 2024-04-29 08:24 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.00s latency).
All 1000 scanned ports on scanme.nmap.org (45.33.32.156) are unfiltered
Nmap done: 1 IP address (1 host up) scanned in 0.67 seconds
```

• SYN (Stealth) Scan (-sS) SYN scan is the default and most popular scan option for good reason. It can be performed quickly, scanning thousands of ports per second on a fast network not hampered by intrusive firewalls.

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

```
C:\Users\Amin Mulani>nmap -p22,113,139 scanme.nmap.org
Starting Nmap 7.70 ( https://nmap.org ) at 2024-04-29 08:28 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.033s latency).

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

Nmap done: 1 IP address (1 host up) scanned in 1.95 seconds
```

• FIN Scan (-sF) Sets just the TCP FIN bit.

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

```
(root@kali)-[/home/kali]
# nmap -sF -T4 scanme.nmap.org
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-04-28 23:07 EDT
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.00071s latency).
Other addresses for scanme.nmap.org (not scanned): 2600:3c01::f03c:91ff:fe18:bb2f
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 4.16 seconds
```

• NULL Scan (-sN) Does not set any bits (TCP flag header is 0)

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

```
C:\Users\Amin Mulani>nmap -sN -p 22 scanme.nmap.org

Starting Nmap 7.70 ( https://nmap.org ) at 2024-04-29 08:34 India Standard Time

Nmap scan report for scanme.nmap.org (45.33.32.156)

Host is up (0.00s latency).

PORT STATE SERVICE

22/tcp open!filtered ssh

Nmap done: 1 IP address (1 host up) scanned in 0.72 seconds
```

• XMAS Scan (-sX) Sets the FIN, PSH, and URG flags, lighting the packet up like a Christmas tree.

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

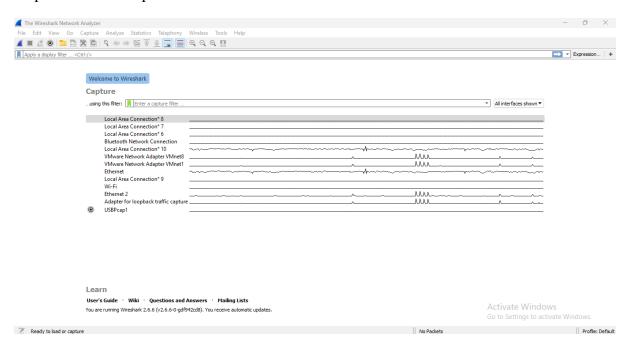
```
(root@kali)-[/home/kali]
# nmap -sX -T4 scanme.nmap.org
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-04-28 23:08 EDT
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.00064s latency).
Other addresses for scanme.nmap.org (not scanned): 2600:3c01::f03c:91ff:fe18:bb2f
All 1000 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 4.50 seconds
```

```
C:\Users\Amin Mulani>nmap -sX -T4 scanme.nmap.org
Starting Nmap 7.70 ( https://nmap.org ) at 2024-04-29 08:38 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.00s latency).
All 1000 scanned ports on scanme.nmap.org (45.33.32.156) are open filtered
Nmap done: 1 IP address (1 host up) scanned in 4.63 seconds
```

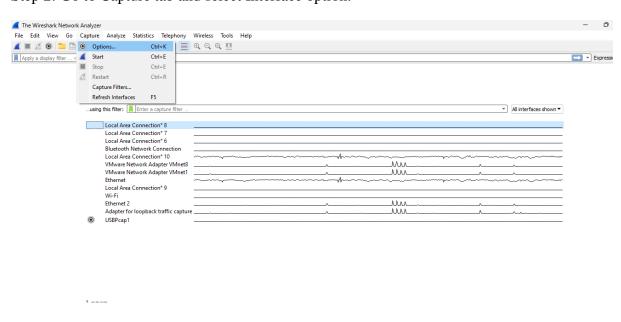
Practical 5

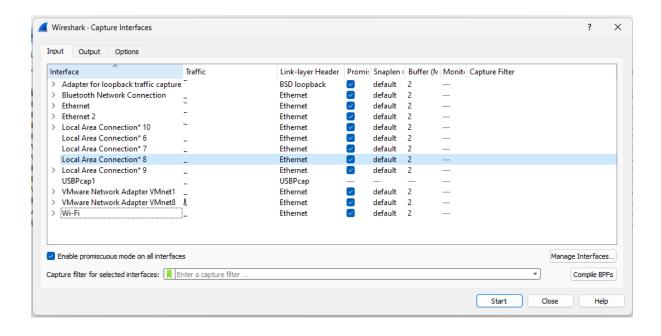
5.1) Use WireShark sniffer to capture network traffic and analyze.

Step 1: Install and open WireShark.

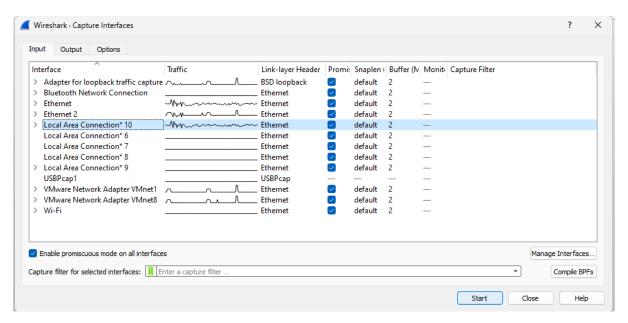


Step 2: Go to Capture tab and select Interface option.

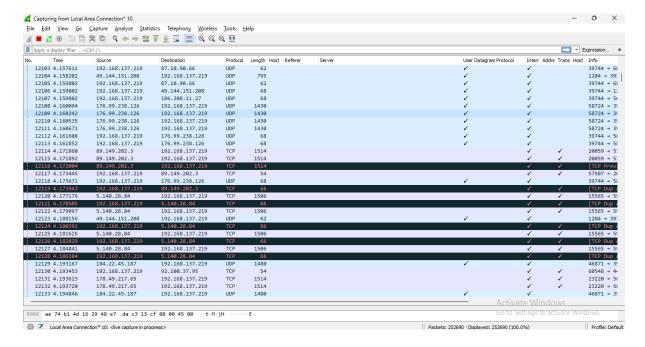




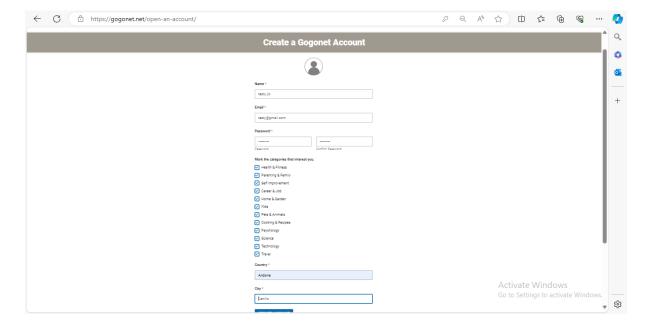
Step 3: In Capture interface, Select Local Area Connection and click on start.



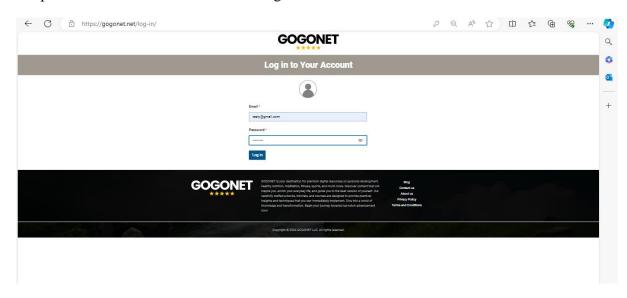
Step 4: The source, Destination and protocols of the packets in the LAN network are displayed.



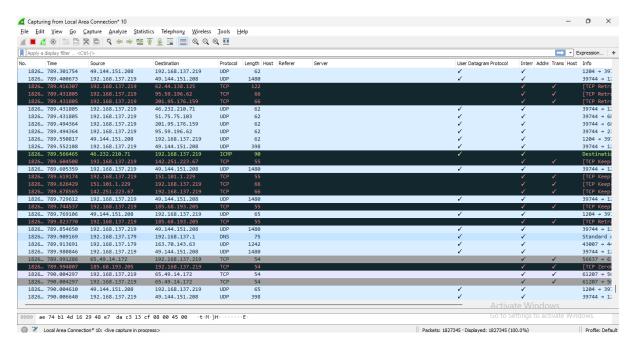
Step 5: Open a website in a new window and enter the user id and password. Register if needed



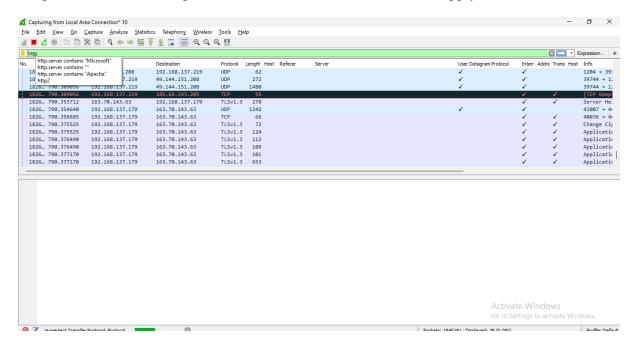
Step 6: Enter the credentials and then sign in



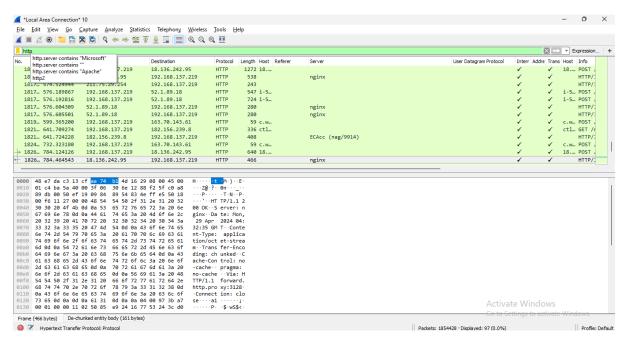
Step 7: The wireshark tool will keep recording the packets.



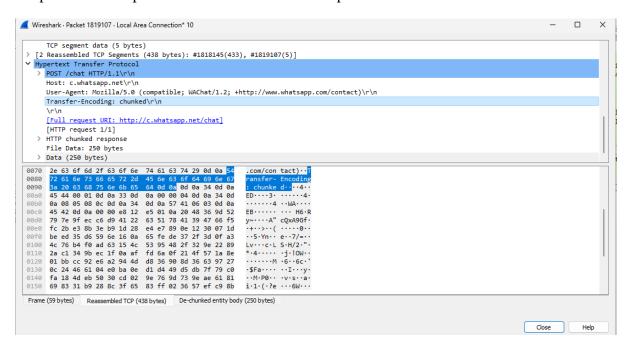
Step 8: Select filter as http to make the search easier and click on apply.



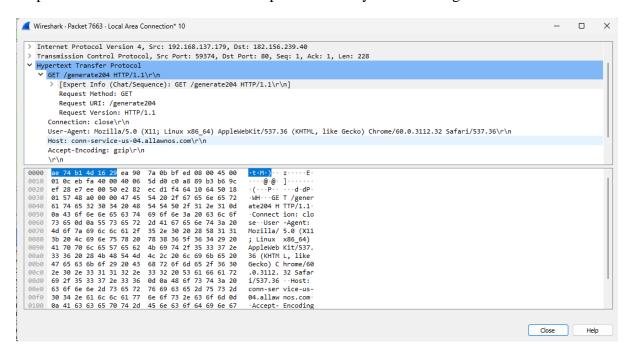
Step 9: Now stop the tool to stop recording.



Step 10: Find the post methods for username and passwords.

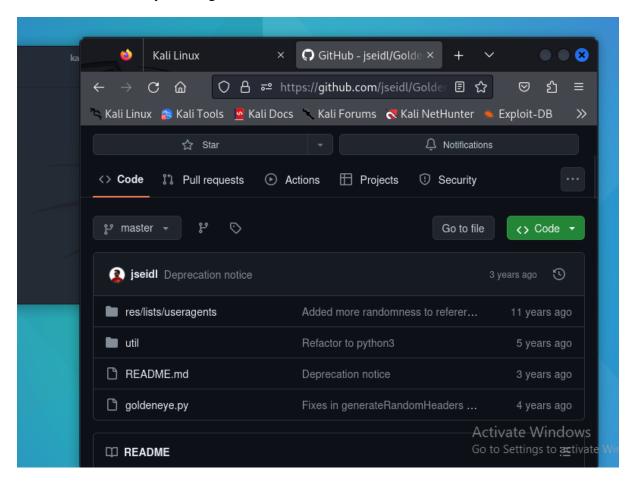


Step 11: You will see the email- id and password that you used to log in.



5.2 DOS Using GoldenEye on Kali Linux

First install Golden Eye from github



Keep It on desktop and then unzip it

Then redirect to the directory where golden eye is placed on the terminal

Then type proxychains ./goldeneye.py https://google.com

Here the DOS attack is completed

Practical 6

AIM: Persistent Cross-Site Scripting Attack

- 1. Set up a vulnerable web application that is susceptible to persistent XSS attacks
- 2. Craft a malicious script to exploit the XSS vulnerability and execute arbitrary code.
- 3. Observe the consequences of the attack and understand the potential risks associated with XSS vulnerabilities.

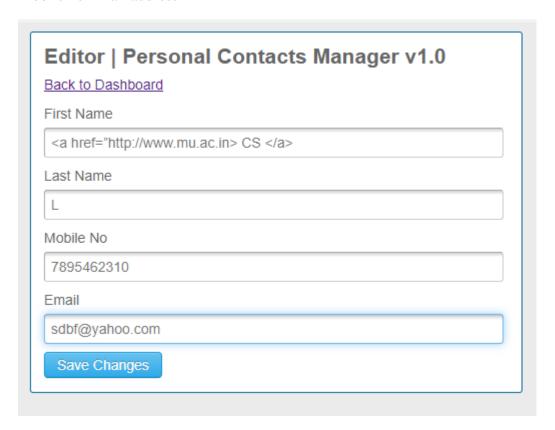
Step 1- Visit to http://www.techpanda.org

Login Personal Contacts Manager v1.0	
Password*	
Remember me	
Submit	

Step 2: Enter email as admin@google.com and password as Password2010

Add New Contact					
ID	First Name	Last Name	Mobile No	Email	Actions
1	mynams	jenefry	9898989898	admin@gmail.com	
81116	<u>Dark</u>	m	3	sd08@gmail.com	Edit
81117	Shivani	Pingili	09573642468	piddy234@gmail.com	Edit
81118	Pingili	Reddy	09573125879	pingilishivanireddy234@gmail.com	Edit
81119	Pingili	Reddy	09573125879	pingilishivanireddy234@gmail.com	<u>Edit</u>
81120	у	е	4567	eya27@gmail.com	<u>Edit</u>
81121	abc123	abc123	9393277588	abc@gmail.com	<u>Edit</u>
81122	HARRY	HARRY	9746657688	abc@gmail.com	Edit

Step 3: Click on Add new contact button and fill details as First name= <u>CS</u> Last Name Mobile no Email address



Add New Contact							
ID	First Name	Last Name	Mobile No	Email	Actions		
1	mynams	jenefry	9898989898	admin@gmail.com			
81116	<u>Dark</u>	m	3	sd08@gmail.com	<u>Edit</u>		
81117	Shivani	Pingili	09573642468	piddy234@gmail.com	Edit		
81118	Pingili	Reddy	09573125879	pingilishivanireddy234@gmail.com	Edit		
81119	Pingili	Reddy	09573125879	pingilishivanireddy234@gmail.com	Edit		
81120	у	е	4567	eya27@gmail.com	Edit		
81121	abc123	abc123	9393277588	abc@gmail.com	Edit		
81122	HARRY	HARRY	9746657688	abc@gmail.com	Edit		
81123	abc123	abc123	999999999	abc@gmail.com	Edit		
81124	abc123	abc123	999999999	abc@gmail.com	Edit		
81125	CS	L	7895462310	sdbf@yahoo.com	Edit		

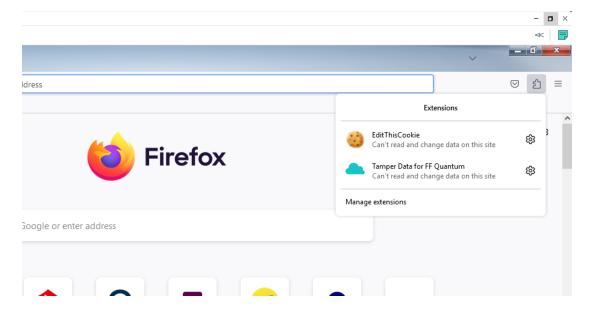
PRACTICAL NO. 7

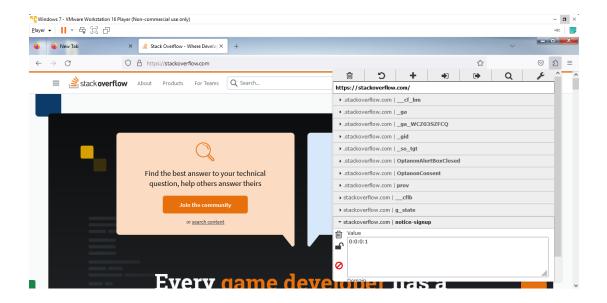
AIM: Session impersonation using Firefox and Tamper Data add-on

A] Session Impersonation

STEPS

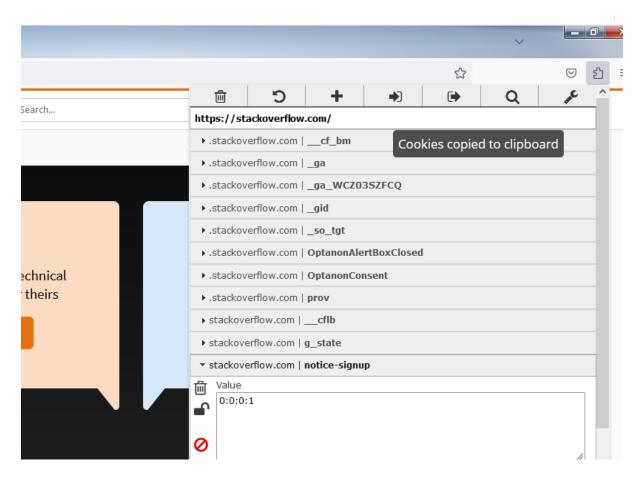
- 1. Open FireFox
- 2. Go to Tools > Addons > Extension
- 3. Search and install EditThisCookie or Cookie Import/Export or any other Cookie tool
- 4. Then Click on Cookie extension to get cookie
- 5. Open a Website and Login and then click on export cookie





Logout from the webpage once the cookie got exported

Paste the cookie in the tool which you have exported and click on green tick



```
ride Edit Format View Help

"id": 9

},

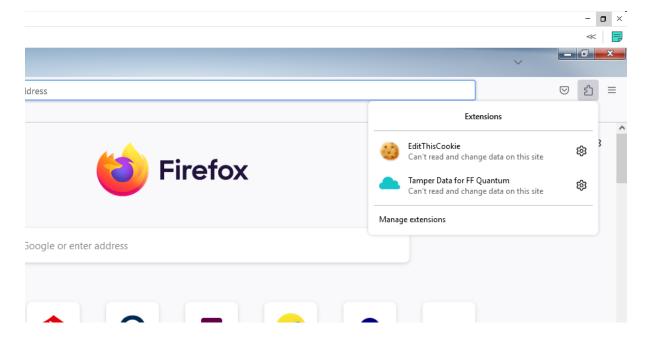
"name": "g_state",
    "value": "{\"i_p\":1714465093751,\"i_l\":1}",
    "domain": "stackoverflow.com",
    "hostonly": true,
    "path": "/",
    "secure": false,
    "httponly": false,
    "samesite": "no_restriction",
    "session": false,
    "firstPartyDomain": "",
    "partitionKey": null,
    "expirationDate": 1730009893,
    "storeId": "firefox-default",
    "id": 10

},

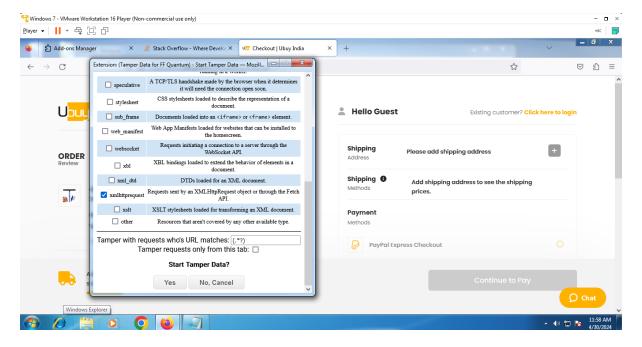
"name": "notice-signup",
    "value": "0:0:0:1",
    "domain": "stackoverflow.com",
    "hostonly": true,
    "path": "/",
    "secure": false,
    "httponly": false,
    "samesite": "no_restriction",
    "session": true,
    "session": true,
    "firstPartyDomain": "",
    "partitionKey": null,
    "storeId": "firefox-default",
    "id": 11
}
```

Tamper DATA add-on

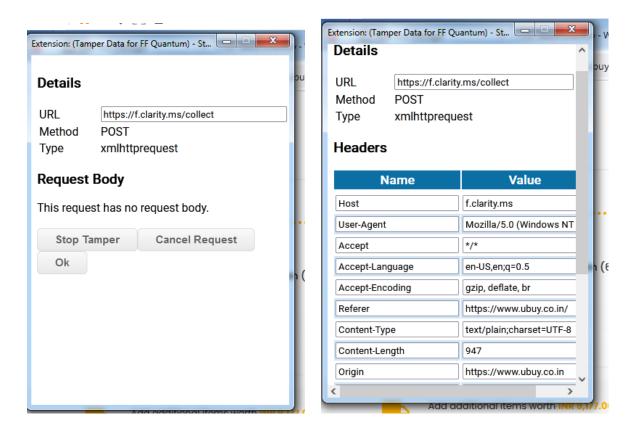
- 1. Open FireFox
- 2. Go to Tools > Addons > Extension
- 3. Search and install Temper Data Select a website for tempering data e.g(razorba)



Select any item to but Then Click to add cart Then Click on tool for tempering Data



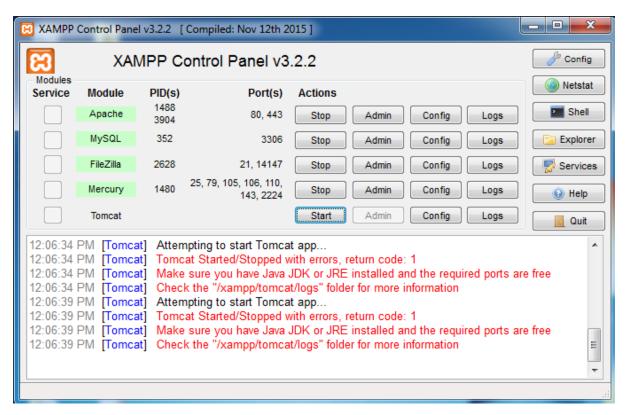
Then Start tempering the data Here you go



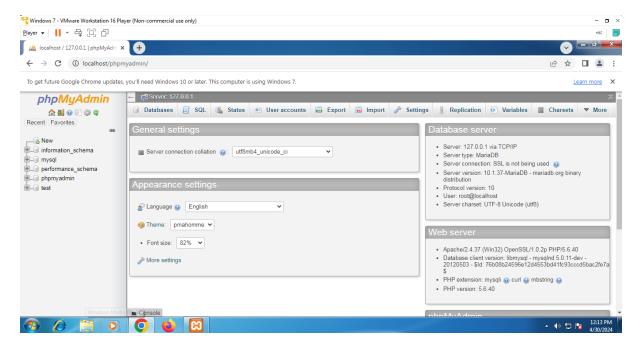
PRACTICAL NO. 8

AIM: Perform SQL injection attack.

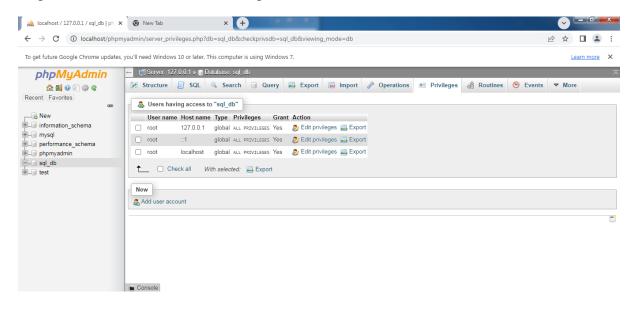
Step 1 : Open XAMPP and start apache and mysql.



Step 2 : Go to web browser and enter site localhost/phpmyadmin.

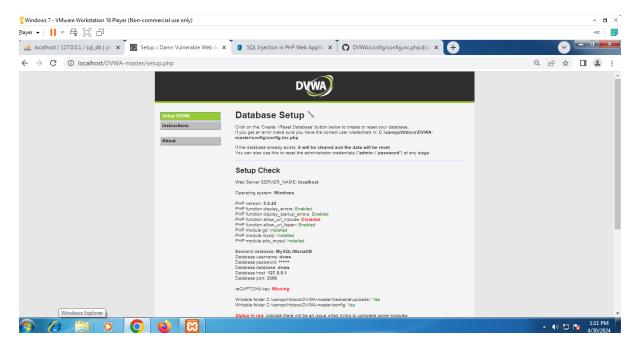


Step 3 : Create database with name sql_db.



Step 4 : Go to site localhost/DVWA-master/setup.php and click on create/reset database.

Download the DVWA setup from github and change the config.inc.php.dist to config.inc.php in the config



Step 5 : Go to login.php and login using admin and .

Step 6: Opens the home page.

Step 7: Go to security setting option in left and set security level low.

Step 8 : Click on SQL injection option in left.

Step 9: Write "1" in text box and click on submit.

Step 10: Write "a' or "="" in text box and click on submit.

Step 11: Write "1=1" in text box and click on submit.

Step 12: Write "1*" in text box and click on submit.