PRACTICAL NO 3

AIM:Linux Network Analysis and ARP Poisoning

Linux Network Analysis:

- o Execute the ifconfig command to retrieve network interfaceinformation.
- Use the ping command to test network connectivity and analyze the output.
- o Analyze the netstat command output to view active network connections.
- o Perform a traceroute to trace the route packets take to reach a target host.

Step 1: Type tracert and type www.oneplus.com press "Enter".

```
Administrator: Command Prompt
                                                                      X
C:\Windows\system32>tracert www.oneplus.com
Tracing route to e10580.dscf.akamaiedge.net [23.41.71.236]
over a maximum of 30 hops:
      8 ms
              9 ms
                      11 ms 192.168.1.1
                    62 ms comp61 [0.0.0.0]
 2
     66 ms
              65 ms
     61 ms 59 ms 50 ms 125.99.48.49
 3
     70 ms 69 ms
                     69 ms 203.212.193.26
 5
     70 ms
             71 ms
                      65 ms 202.88.130.237
 6
                     72 ms aes-static-113.114.144.59.airtel.in [59.144.114.113
    105 ms 71 ms
 7
    163 ms 163 ms 175 ms 182.79.205.188
 8 113 ms 132 ms 143 ms te0-5-0-17.br02.hkg15.pccwbtn.net [63.217.17.153]
 9
    143 ms 147 ms 149 ms global-technology.pos3-13.ar01.hkg04.pccwbtn.net [6
3.218.3.14]
10 147 ms 146 ms
                     145 ms a23-41-71-236.deploy.static.akamaitechnologies.com
[23.41.71.236]
Trace complete.
```

Step 2: Ping all the IP address

>ipconfig

```
C:\Windows\system32>ipconfig

Windows IP Configuration

Ethernet adapter Npcap Loopback Adapter:

Connection-specific DNS Suffix :
Link-local IPv6 Address . . . : fe80::e0f9:2fdc:cdc7:7bfe%28
Autoconfiguration IPv4 Address . : 169.254.123.254
Subnet Mask . . . . . : 255.255.0.0
Default Gateway . . . . :

Ethernet adapter Ethernet:

Connection-specific DNS Suffix :
Link-local IPv6 Address . . : fe80::a560:66a0:a556:5eaf%14
IPv4 Address . . . : 192.168.1.61
Subnet Mask . . . . : 255.255.255.0
Default Gateway . . : 192.168.1.1
```

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>ping 91.240.109.42

```
C:\Windows\system32>ping 91.240.109.42

Pinging 91.240.109.42 with 32 bytes of data:
Reply from 91.240.109.42: bytes=32 time=175ms TTL=53
Reply from 91.240.109.42: bytes=32 time=173ms TTL=53
Reply from 91.240.109.42: bytes=32 time=173ms TTL=53
Reply from 91.240.109.42: bytes=32 time=171ms TTL=53

Ping statistics for 91.240.109.42:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 171ms, Maximum = 175ms, Average = 173ms
```

Step 3: netstat

```
C:\Windows\system32>netstat
Active Connections
  Proto Local Address
                               Foreign Address
                                                      State
        192.168.1.61:1137
                               e1:https
                                                      ESTABLISHED
                               131.253.33.254:https ESTABLISHED
  TCP
        192.168.1.61:1146
  TCP
        192.168.1.61:1153
                               e1-ha:https
                                                     ESTABLISHED
  TCP
        192.168.1.61:1200
                               e3-ha:https
                                                     ESTABLISHED
  TCP
        192.168.1.61:1201
                               e3-ha:https
                                                     ESTABLISHED
  TCP
        192.168.1.61:1203
                                                      ESTABLISHED
                               e1:https
        192.168.1.61:1273
                               server-52-222-136-21:https CLOSE_WAIT
  TCP
        192.168.1.61:1281
                                                      ESTABLISHED
  TCP
                               e2:https
        192.168.1.61:1309
                               151.101.38.110:https ESTABLISHED
  TCP
                               media-router-fp2:https ESTABLISHED
  TCP
        192.168.1.61:1340
                               media-router-fp2:https ESTABLISHED
  TCP
        192.168.1.61:1341
  TCP
        192.168.1.61:1552
                               52.230.3.194:https
                                                      ESTABLISHED
                               dialup-mum-203:https
                                                      ESTABLISHED
  TCP
        192.168.1.61:1574
        192.168.1.61:1634
  TCP
                               COMP53:ms-do
                                                     ESTABLISHED
  TCP
        192.168.1.61:7680
                               comp151:1748
                                                      ESTABLISHED
  TCP
        192.168.1.61:7680
                               comp66:26329
                                                      ESTABLISHED
  TCP
         192.168.1.61:7680
                               comp150:1667
                                                      ESTABLISHED
                               192.168.1.163:1651
  TCP
         192.168.1.61:7680
                                                      ESTABLISHED
```

Step 4: ifconfig

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