

## Computer Networks Lab -1

Aim :

To use commands like

- tcpdump
- netstat
- ifconfig
- nslookup
- traceroute

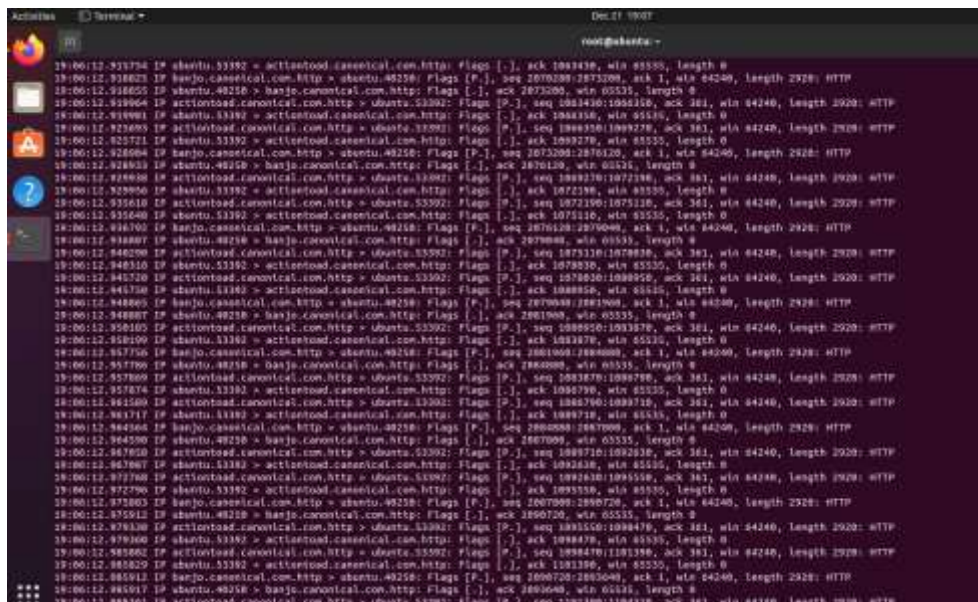
1.tcpdump:

Flags :-

Tcpdump -D

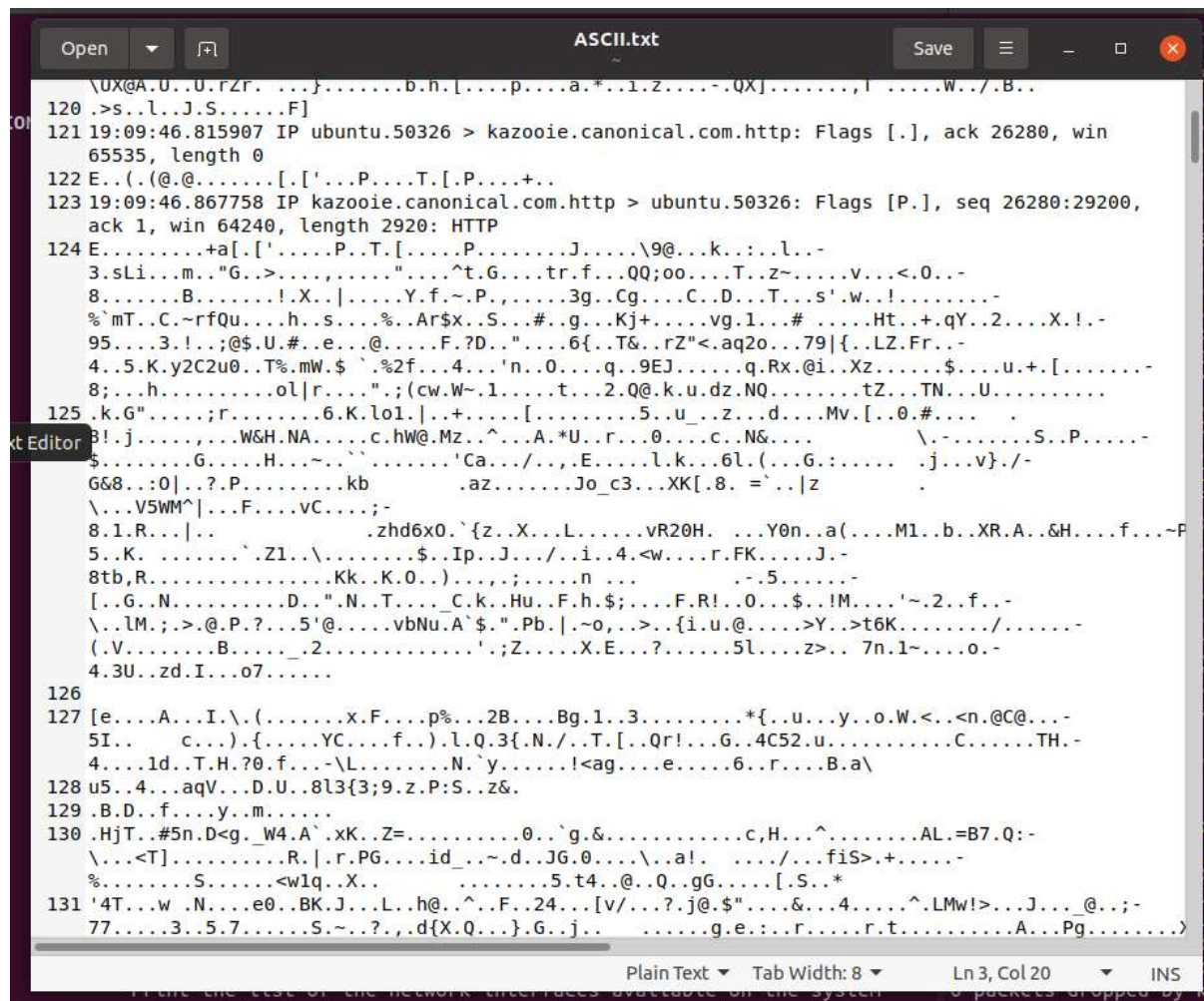
```
root@ubuntu:~# which tcpdump
/usr/sbin/tcpdump
root@ubuntu:~# tcpdump -D
1.ens33 [Up, Running]
2.lo [Up, Running, Loopback]
3.any (Pseudo-device that captures on all interfaces) [Up, Running]
4.bluetooth-monitor (Bluetooth Linux Monitor) [none]
5.nflog (Linux netfilter log (NFLOG) interface) [none]
6.nfqueue (Linux netfilter queue (NFQUEUE) interface) [none]
```

Tcpdump -I any;



```
root@ubuntu: ~
19:00:12.937794 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 109436, win 65535, length 0
19:00:12.938023 IP hanjo.canonical.com.http > ubuntu.40250: Flags [P..], seq 2070200:2073200, ack 1, win 64240, length 2920: HTTP
19:00:12.938655 IP ubuntu.40250 > hanjo.canonical.com.http: Flags [..], ack 2073200, win 65535, length 0
19:00:12.939064 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 6881430:1096310, ack 361, win 64240, length 2920: HTTP
19:00:12.939901 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1096310, win 65535, length 0
19:00:12.925605 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1096320:1099270, ack 361, win 64240, length 2920: HTTP
19:00:12.925721 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1099270, win 65535, length 0
19:00:12.926004 IP hanjo.canonical.com.http > ubuntu.40250: Flags [P..], seq 2073200:2076120, ack 1, win 64240, length 2920: HTTP
19:00:12.926933 IP ubuntu.40250 > hanjo.canonical.com.http: Flags [..], ack 2076120, win 65535, length 0
19:00:12.926938 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1099270:1072180, ack 361, win 64240, length 2920: HTTP
19:00:12.926960 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1072180, win 65535, length 0
19:00:12.935610 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1072190:1075110, ack 361, win 64240, length 2920: HTTP
19:00:12.935640 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1075110, win 65535, length 0
19:00:12.946701 IP hanjo.canonical.com.http > ubuntu.40250: Flags [P..], seq 2076120:2079040, ack 1, win 64240, length 2920: HTTP
19:00:12.946807 IP ubuntu.40250 > hanjo.canonical.com.http: Flags [..], ack 2079040, win 65535, length 0
19:00:12.946290 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1075110:1078030, ack 361, win 64240, length 2920: HTTP
19:00:12.946310 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1078030, win 65535, length 0
19:00:12.946730 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1078030:1080950, ack 361, win 64240, length 2920: HTTP
19:00:12.946730 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1080950, win 65535, length 0
19:00:12.946805 IP hanjo.canonical.com.http > ubuntu.40250: Flags [P..], seq 2079040:2081960, ack 1, win 64240, length 2920: HTTP
19:00:12.946807 IP ubuntu.40250 > hanjo.canonical.com.http: Flags [..], ack 2081960, win 65535, length 0
19:00:12.950105 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1080950:1083870, ack 361, win 64240, length 2920: HTTP
19:00:12.950109 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1083870, win 65535, length 0
19:00:12.957705 IP hanjo.canonical.com.http > ubuntu.40250: Flags [P..], seq 1081960:1084880, ack 1, win 64240, length 2920: HTTP
19:00:12.957709 IP ubuntu.40250 > hanjo.canonical.com.http: Flags [..], ack 1084880, win 65535, length 0
19:00:12.957809 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1083870:1086790, ack 361, win 64240, length 2920: HTTP
19:00:12.957834 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1086790, win 65535, length 0
19:00:12.961600 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1086790:1089710, ack 361, win 64240, length 2920: HTTP
19:00:12.961717 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1089710, win 65535, length 0
19:00:12.964364 IP hanjo.canonical.com.http > ubuntu.40250: Flags [P..], seq 2081960:2084880, ack 1, win 64240, length 2920: HTTP
19:00:12.964380 IP ubuntu.40250 > hanjo.canonical.com.http: Flags [..], ack 2084880, win 65535, length 0
19:00:12.967610 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1089710:1092630, ack 361, win 64240, length 2920: HTTP
19:00:12.967607 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1092630, win 65535, length 0
19:00:12.972760 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1092630:1095550, ack 361, win 64240, length 2920: HTTP
19:00:12.972790 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1095550, win 65535, length 0
19:00:12.973003 IP hanjo.canonical.com.http > ubuntu.40250: Flags [P..], seq 2084880:2087800, ack 1, win 64240, length 2920: HTTP
19:00:12.973012 IP ubuntu.40250 > hanjo.canonical.com.http: Flags [..], ack 2087800, win 65535, length 0
19:00:12.976330 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1095550:1098470, ack 361, win 64240, length 2920: HTTP
19:00:12.976360 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1098470, win 65535, length 0
19:00:12.983062 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1098470:1101390, ack 361, win 64240, length 2920: HTTP
19:00:12.983029 IP ubuntu.5392 > actonload.canonical.com.http: Flags [..], ack 1101390, win 65535, length 0
19:00:12.985012 IP hanjo.canonical.com.http > ubuntu.40250: Flags [P..], seq 2087800:2090720, ack 1, win 64240, length 2920: HTTP
19:00:12.985017 IP ubuntu.40250 > hanjo.canonical.com.http: Flags [..], ack 2090720, win 65535, length 0
19:00:12.988101 IP actonload.canonical.com.http > ubuntu.5392: Flags [P..], seq 1101390:1104310, ack 361, win 64240, length 2920: HTTP
```

Tcpdump -A—ASCII dump of all packets

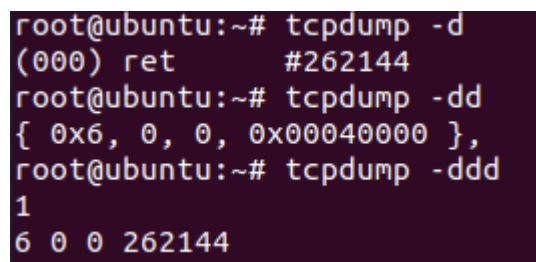


```
Open  ASCII.txt  Save  [Icons]
120 .>s..l..J.S.....F]
121 19:09:46.815907 IP ubuntu.50326 > kazooie.canonical.com.http: Flags [.], ack 26280, win
65535, length 0
122 E..(.@.@.....[.['...P....T.[.P....+.
123 19:09:46.867758 IP kazooie.canonical.com.http > ubuntu.50326: Flags [P.], seq 26280:29200,
ack 1, win 64240, length 2920: HTTP
124 E.....+a[.['...P....T.[.P....J.....\9@...k...:..l..-
3.sLi...m.."G..>.....".....^t.G....tr.f...QQ;oo....T..z~....v...<.0..-
8.....B.....!X..|.....Y.f~.P.....3g..Cg....C..D...T...s'.w...!.....-
%`mT..C..~rfQu...h..s....%.Ar$x..S...#.g...Kj+....vg.1...# .....Ht...+qY..2...X.!.-
95....3.!...;@$..U.#...e..@.....F.?D..".6{..T&..rZ"<.aq2o...79|{..LZ.Fr..-
4..5.K.y2C2u0..T%.mW.$`.%2f...4...'n..0....q..9EJ.....q.Rx.@i..Xz.....$.u..+.[.....-
8;...h.....ol|r.....";(cw.W~.1.....t...2.Q@.k.u.dz.NQ.....tZ...TN...U.....
125 .k.G".....;r.....6.K.lo1.|..+.....[.....5..u..z...d...Mv.[..0.#.....
B!.j.....W$H.NA.....c.hw@.Mz..^...A.*U..r...0....c.N&..... \...S..P.....-
$.G.....H.....~`.....'Ca.../...E.....l.k...6l.(...G......j...v}./-
G&8...:0|...?.P.....kb.....az.....Jo_c3...XK[.8. ='..|z
\...V5WM^|...F....vC....;-
8.1.R...|... zhd6x0.`{z..X...L.....vR20H. ...Y0n..a(...M1..b..XR.A..&H....f...~P
5..K. ....Z1..\.X...$.Ip..J.../.i..4.<w....r.FK.....J.-
8tb,R.....Kk..K.O..),,;.....n ... -.5.....-
[...G..N.....D..".N..T...._C.k..Hu..F.h.$;...F.R!..0...$.!M....'~.2..f..-
\..lM.;>.@.P.?...5'@.....vbNu.A`$".Pb.|.~o,.,>.{i.u.@.....>Y..>t6K...../.....-
(.V.....B....._2.....';;Z...X.E...?.....5l....z>.. 7n.1~....o.-
4.3U..zd.I...o7.....
126
127 [e...A...I.\.(.....x.F....p%...2B....Bg.1..3.....*{...u...y..o.W.<..<n.@C@...-
5I... c...).{.....YC....f...).l.Q.3{.N./..T.[..Qr!...G..4C52.u.....C.....TH.-
4....ld..T.H.?0.f...~\L.....N.`y.....!<ag....e.....6..r....B.a\
128 u5..4...aqV...D.U..8l3{3;9.z.P:S..z&.
129 .B.D..f...y..m.....
130 .HjT..#5n.D<g..W4.A`.xK..Z=.....0..`g.&.....c,H...^.....AL.=B7.Q:-
\...<T].....R.|.r.PG....id_~.d..JG.0....\..a!. ..../.fiS>.+.....-
%.....S.....<w1q..X.. .....5.t4..@..Q..gG.....[.S..*
131 '4T...w .N....e0..BK.J...L..h@..^..F..24...[v/...?.j@.$"...&...4.....^LMw!>...J...@...;-
77.....3..5.7.....S..~.?..,d{X.Q...}.G..j... .....g.e....r.....r.t.....A...Pg.....>
```

Tcpdump- d Dumps packet contents in human readable form

tcpdump-dd Dumps in to C Format

tcpdump-ddd



```
root@ubuntu:~# tcpdump -d
(000) ret #262144
root@ubuntu:~# tcpdump -dd
{ 0x6, 0, 0, 0x00040000 },
root@ubuntu:~# tcpdump -ddd
1
6 0 0 262144
```

## Tcpdump – I ens33 listening to a particular wireless interface

```
root@ubuntu:~# tcpdump -i ens33
tcpdump: verbose output suppressed, use -v or -vv for full protocol decode
listening on ens33, link-type EN10MB (Ethernet), capture size 262144 bytes
19:27:53.270888 ARP, Request who-has _gateway tell 192.168.152.1, length 48
19:27:53.272002 IP _gateway.40398 > _gateway.donata: 62558+ [1au] PRR: 1.152.168.192,ln-addr.arpa. (55)
19:27:53.281230 IP _gateway.donata > _gateway.40398: 62558+ NIDonata 8/1/1 (134)
19:27:53.281696 IP _gateway.40398 > _gateway.donata: 62558+ PRR: 1.152.168.192,ln-addr.arpa. (44)
19:27:53.285769 IP _gateway.donata > _gateway.40398: 62558+ NIDonata 8/1/0 (108)
19:27:53.287100 IP _gateway.41634 > _gateway.donata: 49397+ [1au] PRR: 1.152.168.192,ln-addr.arpa. (55)
19:27:53.294988 IP _gateway.donata > _gateway.41634: 49397+ NIDonata 8/1/1 (134)
19:27:53.296695 IP _gateway.41634 > _gateway.donata: 49397+ PRR: 1.152.168.192,ln-addr.arpa. (44)
19:27:53.301419 IP _gateway.donata > _gateway.41634: 49397+ NIDonata 8/1/0 (108)
19:27:53.305055 IP _gateway.60519 > _gateway.donata: 38337+ [1au] PRR: 192.168.192,ln-addr.arpa. (57)
19:27:53.310502 IP _gateway.donata > _gateway.60519: 38337+ NIDonata 8/1/1 (138)
19:27:53.310778 IP _gateway.60519 > _gateway.donata: 38337+ PRR: 192.168.192,ln-addr.arpa. (40)
19:27:53.316617 IP _gateway.donata > _gateway.60519: 38337+ NIDonata 8/1/0 (105)
19:27:53.340033 ARP, Request who-has _gateway tell 192.168.152.1, length 48
19:27:53.342710 ARP, Request who-has _gateway tell 192.168.152.1, length 48
19:27:53.470332 ARP, Request who-has _gateway tell ubuntu, length 28
19:27:53.470682 ARP, Reply _gateway (in-addr.60:10:0:0:0:0:0:0) (out unknown), length 48
19:27:53.530197 IP _gateway.51088 > _gateway.donata: 7902+ [1au] AAAA: connectivity-check.ubuntu.com. (38)
```

## 2.Netstat

Netstat -l – list all Interface available ;

Kernel Interface table											
Iface	MTU	RX-OK	RX-ERR	RX-DRP	RX-OVR	TX-OK	TX-ERR	TX-DRP	TX-OVR	Flg	
ens33	1500	626184	0	0	0	104903	0	0	0	BMRU	
lo	65536	1218	0	0	0	1218	0	0	0	LRU	

Netstat :

Display network statistics

```
root@ubuntu:~# netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 ubuntu:48738            123.208.120.34:https    TIME_WAIT
tcp        0      0 ubuntu:49838            ec2-35-161-26-194:https ESTABLISHED
tcp        0      0 ubuntu:46194            stackoverflow.com:https ESTABLISHED
udp        0      0 ubuntu:bootpc           192.168.152.254:bootps  ESTABLISHED

Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags       Type       State      I-Node  Path
unix   2      [ ]         DGRAM      CONNECTED  45154   /run/user/1000/systemd/notify
unix   3      [ ]         DGRAM      CONNECTED  27031   /run/systemd/notify
unix   2      [ ]         DGRAM      CONNECTED  27045   /run/systemd/journal/syslog
unix  17      [ ]         DGRAM      CONNECTED  27055   /run/systemd/journal/dev-log
unix   8      [ ]         DGRAM      CONNECTED  27059   /run/systemd/journal/socket
unix   3      [ ]         STREAM     CONNECTED  46840
unix   3      [ ]         SEQUENCE   CONNECTED  82558
unix   3      [ ]         STREAM     CONNECTED  47506
unix   3      [ ]         STREAM     CONNECTED  42621   /run/dbus/system_bus_socket
unix   3      [ ]         STREAM     CONNECTED  36204   /run/dbus/system_bus_socket
unix   2      [ ]         STREAM     CONNECTED  80093
unix   3      [ ]         STREAM     CONNECTED  58571
unix   3      [ ]         STREAM     CONNECTED  78379
unix   3      [ ]         STREAM     CONNECTED  49712
unix   3      [ ]         STREAM     CONNECTED  50279   /run/user/1000/bus
unix   3      [ ]         STREAM     CONNECTED  47521   @/home/ajay/.cache/ibus/dbus-7h509Es7
unix   3      [ ]         STREAM     CONNECTED  45366   /run/user/1000/bus
unix   3      [ ]         STREAM     CONNECTED  36500
unix   3      [ ]         STREAM     CONNECTED  85938   @/tmp/dbus-0Fwog0MGn7
unix   3      [ ]         STREAM     CONNECTED  85934
unix   3      [ ]         STREAM     CONNECTED  47644   /run/user/1000/bus
unix   3      [ ]         STREAM     CONNECTED  85979
unix   3      [ ]         STREAM     CONNECTED  46949   @/tmp/.X11-unix/X0
unix   3      [ ]         STREAM     CONNECTED  85993
unix   3      [ ]         STREAM     CONNECTED  57293   /run/systemd/journal/stdout
unix   3      [ ]         STREAM     CONNECTED  50734
unix   3      [ ]         STREAM     CONNECTED  50476   /run/user/1000/bus
unix   3      [ ]         STREAM     CONNECTED  46999   /run/user/1000/bus
unix   2      [ ]         DGRAM      46952
```



Netstat -s -> display network statistics.

```
Ip:
  Forwarding: 2
  114128 total packets received
  1 with invalid addresses
  0 forwarded
  0 incoming packets discarded
  114112 incoming packets delivered
  106043 requests sent out
  20 outgoing packets dropped
Icmp:
  40 ICMP messages received
  0 input ICMP message failed
  ICMP input histogram:
    destination unreachable: 40
  40 ICMP messages sent
  0 ICMP messages failed
  ICMP output histogram:
    destination unreachable: 40
IcmpMsg:
  InType3: 40
  OutType3: 40
Tcp:
  176 active connection openings
  0 passive connection openings
  4 failed connection attempts
  5 connection resets received
  3 connections established
  111503 segments received
  103959 segments sent out
  2 segments retransmitted
  0 bad segments received
  41 resets sent
Udp:
  2529 packets received
  40 packets to unknown port received
  0 packet receive errors
  2055 packets sent
  0 receive buffer errors
```

### 3.Ifconfig

Ifconfig

```
root@ubuntu: ~
root@ubuntu:~# ifconfig
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.152.131 netmask 255.255.255.0 broadcast 192.168.152.255
    inet6 fe80::5971:aaa2:506c:c626 prefixlen 64 scopeid 0x20<link>
    ether 08:0c:29:f0:88:2e txqueuelen 1000 (Ethernet)
    RX packets 626258 bytes 936451127 (936.4 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 104936 bytes 6907830 (6.9 MB)
    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 1226 bytes 127813 (127.8 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1226 bytes 127813 (127.8 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

#### 4.Nslookup

##### Nslookup -host

```
ajay@ubuntu:~$ nslookup www.google.com
Server:          127.0.0.53
Address:         127.0.0.53#53

Non-authoritative answer:
Name:   www.google.com
Address: 142.250.193.100
Name:   www.google.com
Address: 2404:6800:4007:81b::2004

ajay@ubuntu:~$ nslookup lms.snuchennai.edu.in
Server:          127.0.0.53
Address:         127.0.0.53#53

Non-authoritative answer:
Name:   lms.snuchennai.edu.in
Address: 115.243.215.8
```

#### 7.Wireshark

Wireshark packet capture showing a successful HTTP GET request to www.google.com. The packet list shows a TCP segment from 10.121.245.100 to 216.58.200.131. The packet details show the HTTP GET request for /www.google.com. The packet bytes show the raw data of the request.

##### Listening on port 80

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [ACK] Seq=1 Acks=1 Win=6255 len=0
2	0.000000	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [PSH, ACK] Seq=1461 Acks=1 Win=6255 len=0
3	0.000000	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [ACK] Seq=2321 Acks=1 Win=6255 len=0
4	0.000000	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [PSH, ACK] Seq=4181 Acks=1 Win=6255 len=0
5	0.000000	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [ACK] Seq=5441 Acks=1 Win=6255 len=0
6	0.000000	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [PSH, ACK] Seq=7582 Acks=1 Win=6255 len=0
7	0.000104	10.121.245.100	01.189.01.18	TCP	54	8080 → 80 [ACK] Seq=1 Acks=1 Win=6255 len=0
8	0.016077	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [ACK] Seq=8751 Acks=1 Win=6255 len=0
9	0.016077	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [PSH, ACK] Seq=10221 Acks=1 Win=6255 len=0
10	0.016077	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [ACK] Seq=11881 Acks=1 Win=6255 len=0
11	0.016077	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [PSH, ACK] Seq=13341 Acks=1 Win=6255 len=0
12	0.016077	10.121.245.100	01.189.01.18	TCP	54	8080 → 80 [ACK] Seq=1 Acks=1 Win=6255 len=0
13	0.023641	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [ACK] Seq=14881 Acks=1 Win=6255 len=0
14	0.023641	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [PSH, ACK] Seq=16441 Acks=1 Win=6255 len=0
15	0.023641	10.121.245.100	01.189.01.18	TCP	54	8080 → 80 [ACK] Seq=1 Acks=1 Win=6255 len=0
16	0.023641	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [ACK] Seq=17521 Acks=1 Win=6255 len=0
17	0.023641	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [PSH, ACK] Seq=19081 Acks=1 Win=6255 len=0
18	0.023641	10.121.245.100	01.189.01.18	TCP	54	8080 → 80 [ACK] Seq=1 Acks=1 Win=6255 len=0
19	0.023641	01.189.01.18	10.121.245.100	TCP	1514	80 → 8080 [ACK] Seq=20641 Acks=1 Win=6255 len=0

## 5.Ping

```
ajay@ubuntu:~$ ping www.google.com
PING www.google.com (142.250.182.132) 56(84) bytes of data.
64 bytes from maa05s22-in-f4.1e100.net (142.250.182.132): icmp_seq=1 ttl=128 time=9.30 ms
64 bytes from maa05s22-in-f4.1e100.net (142.250.182.132): icmp_seq=2 ttl=128 time=37.2 ms
64 bytes from maa05s22-in-f4.1e100.net (142.250.182.132): icmp_seq=3 ttl=128 time=14.7 ms
64 bytes from maa05s22-in-f4.1e100.net (142.250.182.132): icmp_seq=4 ttl=128 time=41.8 ms
64 bytes from maa05s22-in-f4.1e100.net (142.250.182.132): icmp_seq=5 ttl=128 time=18.5 ms
64 bytes from maa05s22-in-f4.1e100.net (142.250.182.132): icmp_seq=6 ttl=128 time=12.1 ms
^C
--- www.google.com ping statistics ---
6 packets transmitted, 6 received, 0% packet loss, time 5010ms
rtt min/avg/max/mdev = 9.302/22.274/41.774/12.552 ms
```

## 6. traceroute

```
ajay@ubuntu:~$ traceroute www.snuchennai.edu.in
traceroute to www.snuchennai.edu.in (182.75.25.245), 64 hops max
 1  192.168.152.2  0.258ms  0.203ms  0.216ms
 2  * * *
 3  * * *
 4  * *
```