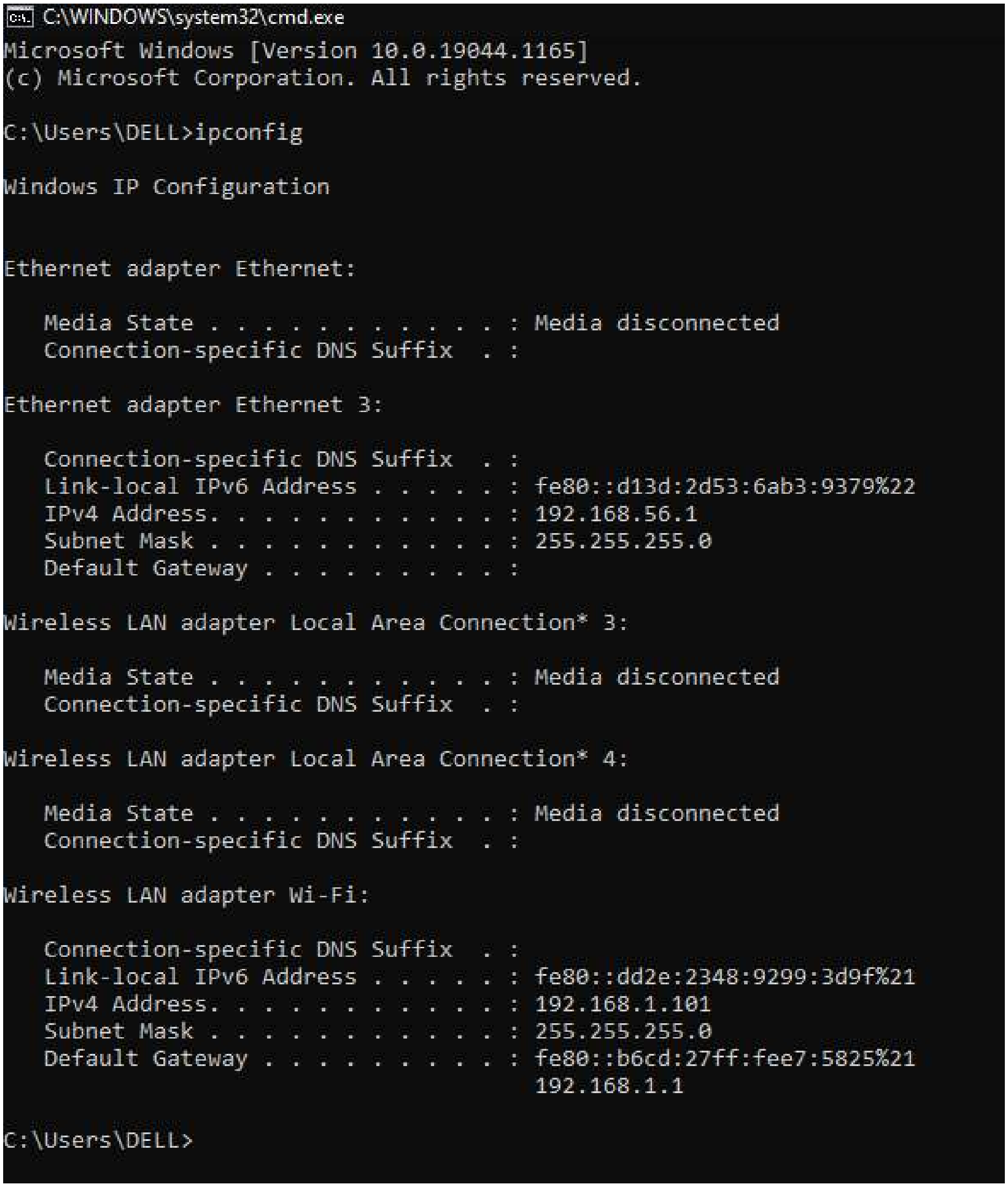
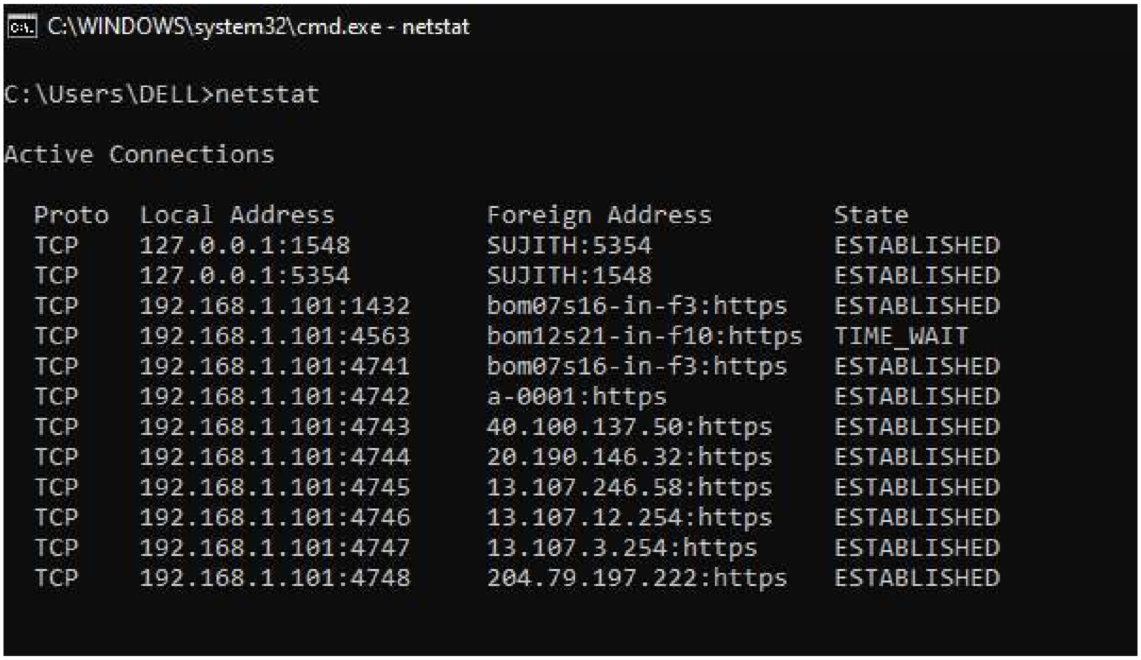
IPCONFIG



C:\WINDOWS\system32\cmd.exe

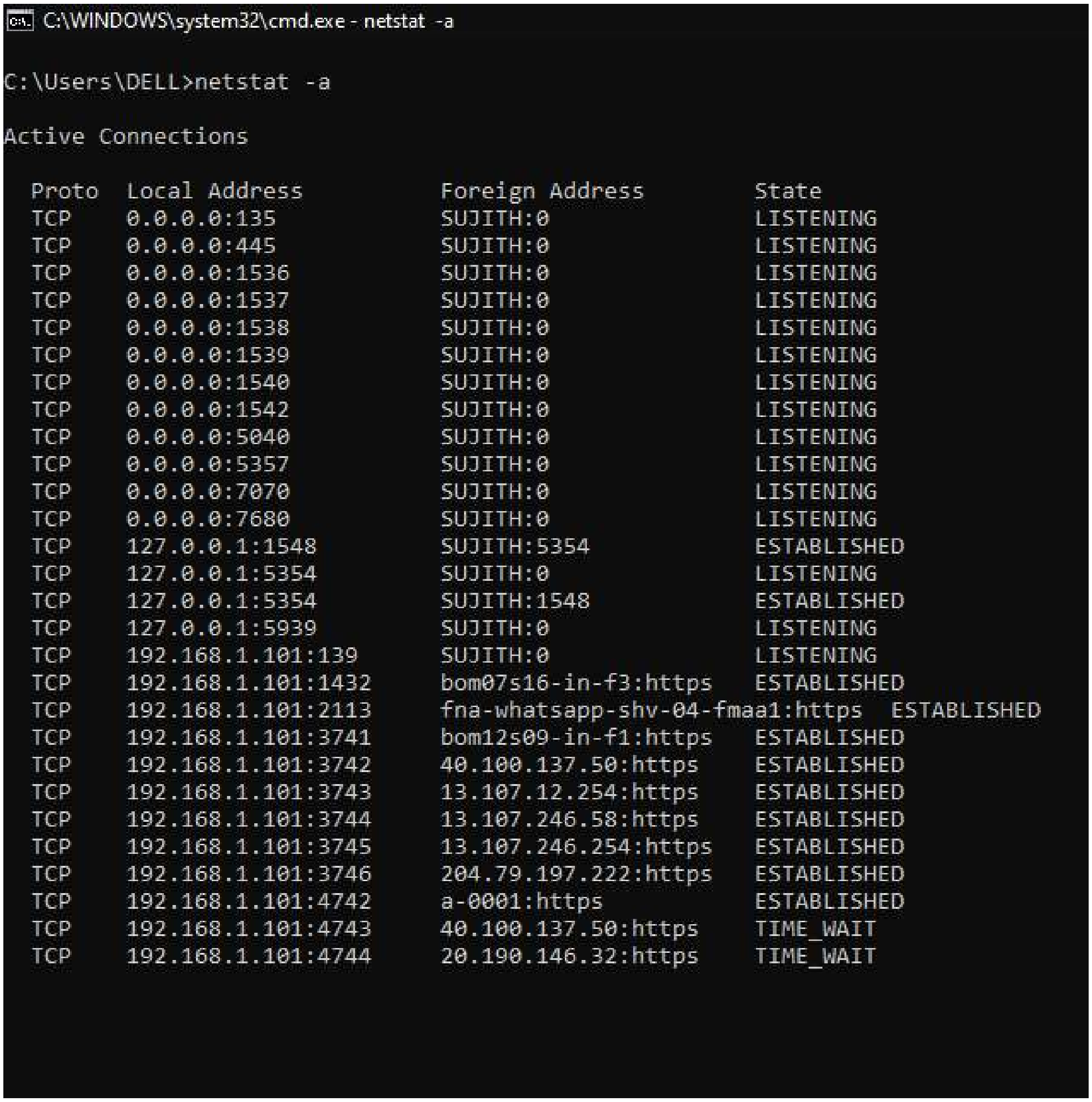
```
Microsoft Windows [Version 10.0.19044.1165]
(c) Microsoft Corporation. All rights reserved.

C:\Users\DELL>ipconfig

Windows IP Configuration


Ethernet adapter Ethernet:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Ethernet adapter Ethernet 3:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::d13d:2d53:6ab3:9379%22
   IPv4 Address. . . . . . . . . . . : 192.168.56.1
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . :

Wireless LAN adapter Local Area Connection* 3:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 4:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::dd2e:2348:9299:3d9f%21
   IPv4 Address. . . . . . . . . . . : 192.168.1.101
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . : fe80::b6cd:27ff:fee7:5825%21
                                       192.168.1.1

C:\Users\DELL>
```

NETSTAT



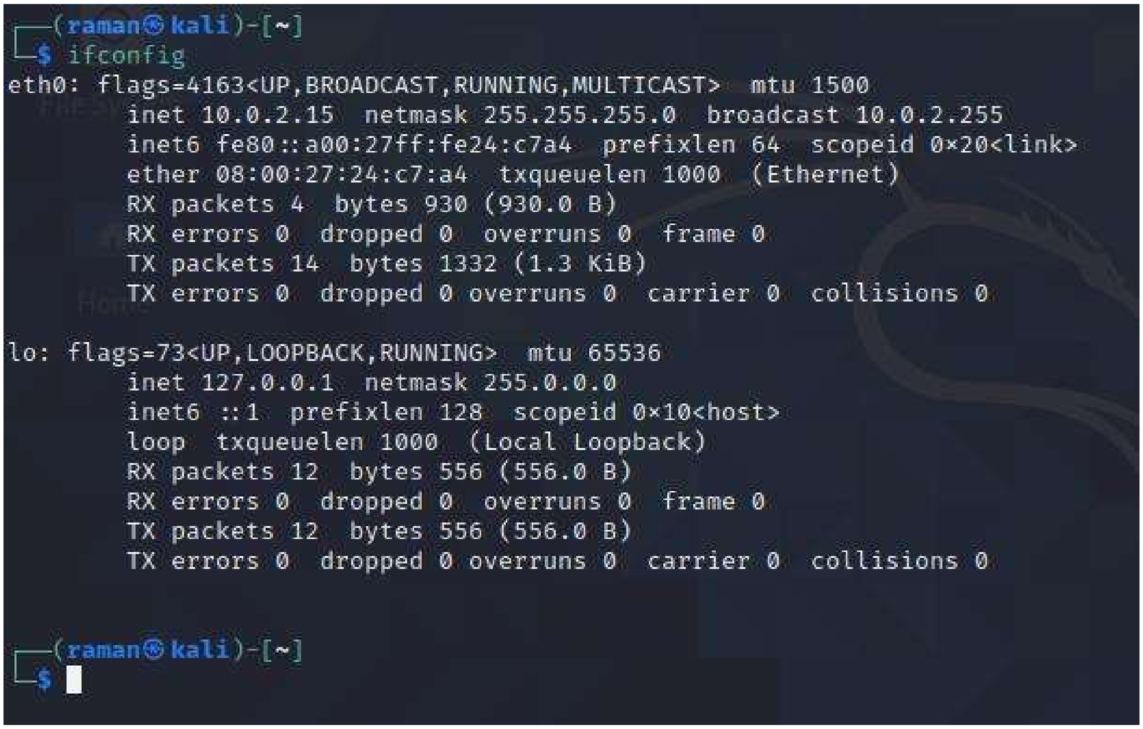
```
C:\Users\DELL>netstat

Active Connections

  Proto  Local Address          Foreign Address        State
  TCP    127.0.0.1:1548         SUJITH:5354            ESTABLISHED
  TCP    127.0.0.1:5354         SUJITH:1548            ESTABLISHED
  TCP    192.168.1.101:1432     bom07s16-in-f3:https   ESTABLISHED
  TCP    192.168.1.101:4563     bom12s21-in-f10:https  TIME_WAIT
  TCP    192.168.1.101:4741     bom07s16-in-f3:https   ESTABLISHED
  TCP    192.168.1.101:4742     a-0001:https           ESTABLISHED
  TCP    192.168.1.101:4743     40.100.137.50:https    ESTABLISHED
  TCP    192.168.1.101:4744     20.190.146.32:https    ESTABLISHED
  TCP    192.168.1.101:4745     13.107.246.58:https    ESTABLISHED
  TCP    192.168.1.101:4746     13.107.12.254:https    ESTABLISHED
  TCP    192.168.1.101:4747     13.107.3.254:https     ESTABLISHED
  TCP    192.168.1.101:4748     204.79.197.222:https   ESTABLISHED
```

NETSTAT -A



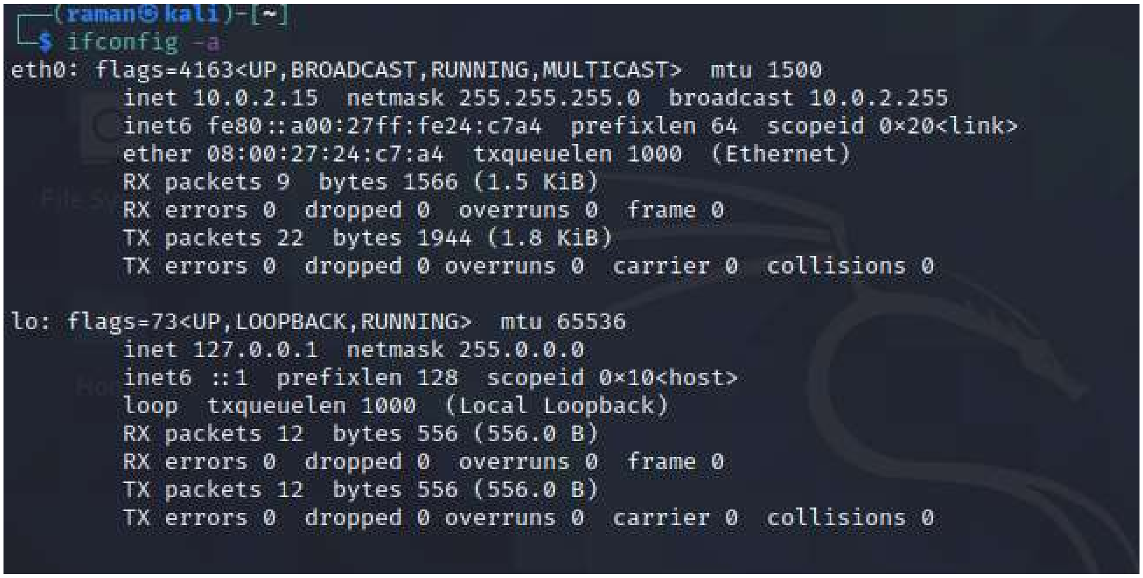
```
C:\Users\DELL>netstat -a

Active Connections

  Proto  Local Address          Foreign Address        State
  TCP    0.0.0.0:135            SUJITH:0               LISTENING
  TCP    0.0.0.0:445            SUJITH:0               LISTENING
  TCP    0.0.0.0:1536           SUJITH:0               LISTENING
  TCP    0.0.0.0:1537           SUJITH:0               LISTENING
  TCP    0.0.0.0:1538           SUJITH:0               LISTENING
  TCP    0.0.0.0:1539           SUJITH:0               LISTENING
  TCP    0.0.0.0:1540           SUJITH:0               LISTENING
  TCP    0.0.0.0:1542           SUJITH:0               LISTENING
  TCP    0.0.0.0:5040           SUJITH:0               LISTENING
  TCP    0.0.0.0:5357           SUJITH:0               LISTENING
  TCP    0.0.0.0:7070           SUJITH:0               LISTENING
  TCP    0.0.0.0:7680           SUJITH:0               LISTENING
  TCP    127.0.0.1:1548         SUJITH:5354            ESTABLISHED
  TCP    127.0.0.1:5354         SUJITH:0               LISTENING
  TCP    127.0.0.1:5354         SUJITH:1548            ESTABLISHED
  TCP    127.0.0.1:5939         SUJITH:0               LISTENING
  TCP    192.168.1.101:139      SUJITH:0               LISTENING
  TCP    192.168.1.101:1432     bom07s16-in-f3:https   ESTABLISHED
  TCP    192.168.1.101:2113     fna-whatsapp-shv-04-fmaa1:https  ESTABLISHED
  TCP    192.168.1.101:3741     bom12s09-in-f1:https   ESTABLISHED
  TCP    192.168.1.101:3742     40.100.137.50:https    ESTABLISHED
  TCP    192.168.1.101:3743     13.107.12.254:https    ESTABLISHED
  TCP    192.168.1.101:3744     13.107.246.58:https    ESTABLISHED
  TCP    192.168.1.101:3745     13.107.246.254:https   ESTABLISHED
  TCP    192.168.1.101:3746     204.79.197.222:https   ESTABLISHED
  TCP    192.168.1.101:4742     a-0001:https           ESTABLISHED
  TCP    192.168.1.101:4743     40.100.137.50:https    TIME_WAIT
  TCP    192.168.1.101:4744     20.190.146.32:https    TIME_WAIT
```

IFCONFIG LINUX



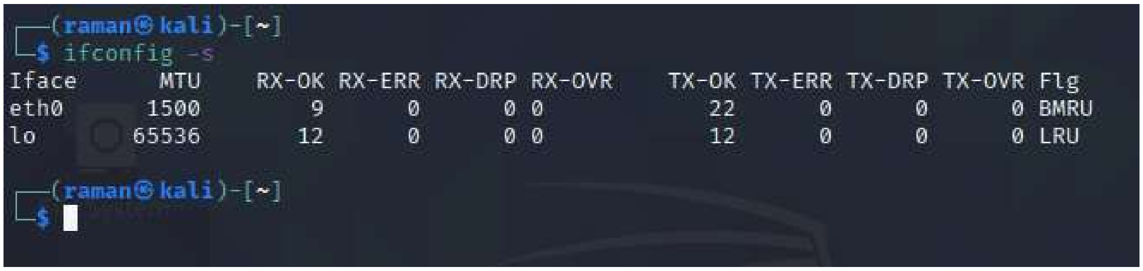
```
┌──(raman㉿kali)-[~]
└─$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 10.0.2.15  netmask 255.255.255.0  broadcast 10.0.2.255
        inet6 fe80::a00:27ff:fe24:c7a4  prefixlen 64  scopeid 0×20<link>
        ether 08:00:27:24:c7:a4  txqueuelen 1000  (Ethernet)
        RX packets 4  bytes 930 (930.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 14  bytes 1332 (1.3 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 0×10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 12  bytes 556 (556.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 12  bytes 556 (556.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0


┌──(raman㉿kali)-[~]
└─$ 
```

IFCONFIG -A



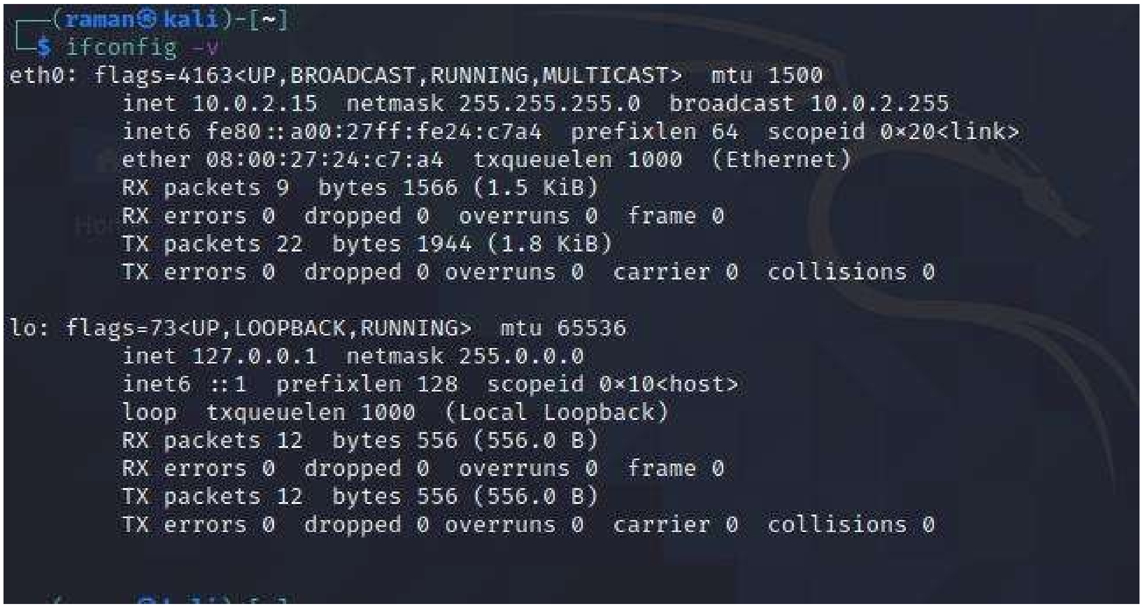
```
┌──(raman㉿kali)-[~]
└─$ ifconfig -a
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 10.0.2.15  netmask 255.255.255.0  broadcast 10.0.2.255
        inet6 fe80::a00:27ff:fe24:c7a4  prefixlen 64  scopeid 0×20<link>
        ether 08:00:27:24:c7:a4  txqueuelen 1000  (Ethernet)
        RX packets 9  bytes 1566 (1.5 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 22  bytes 1944 (1.8 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 0×10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 12  bytes 556 (556.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 12  bytes 556 (556.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

IFCONGFIG -S



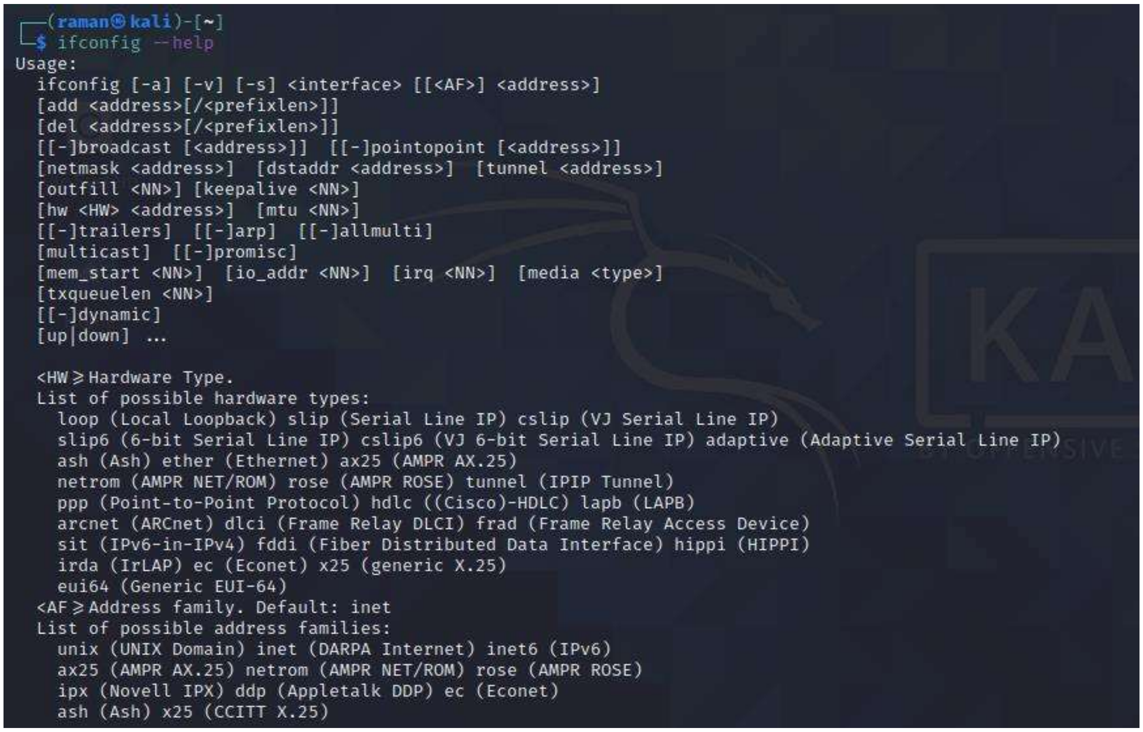
```
┌──(raman㉿kali)-[~]
└─$ ifconfig -s
Iface      MTU    RX-OK RX-ERR RX-DRP RX-OVR    TX-OK TX-ERR TX-DRP TX-OVR Flg
eth0      1500        9      0      0 0            22      0      0      0 BMRU
lo       65536       12      0      0 0            12      0      0      0 LRU

┌──(raman㉿kali)-[~]
└─$ 
```

IFCONFIG -V



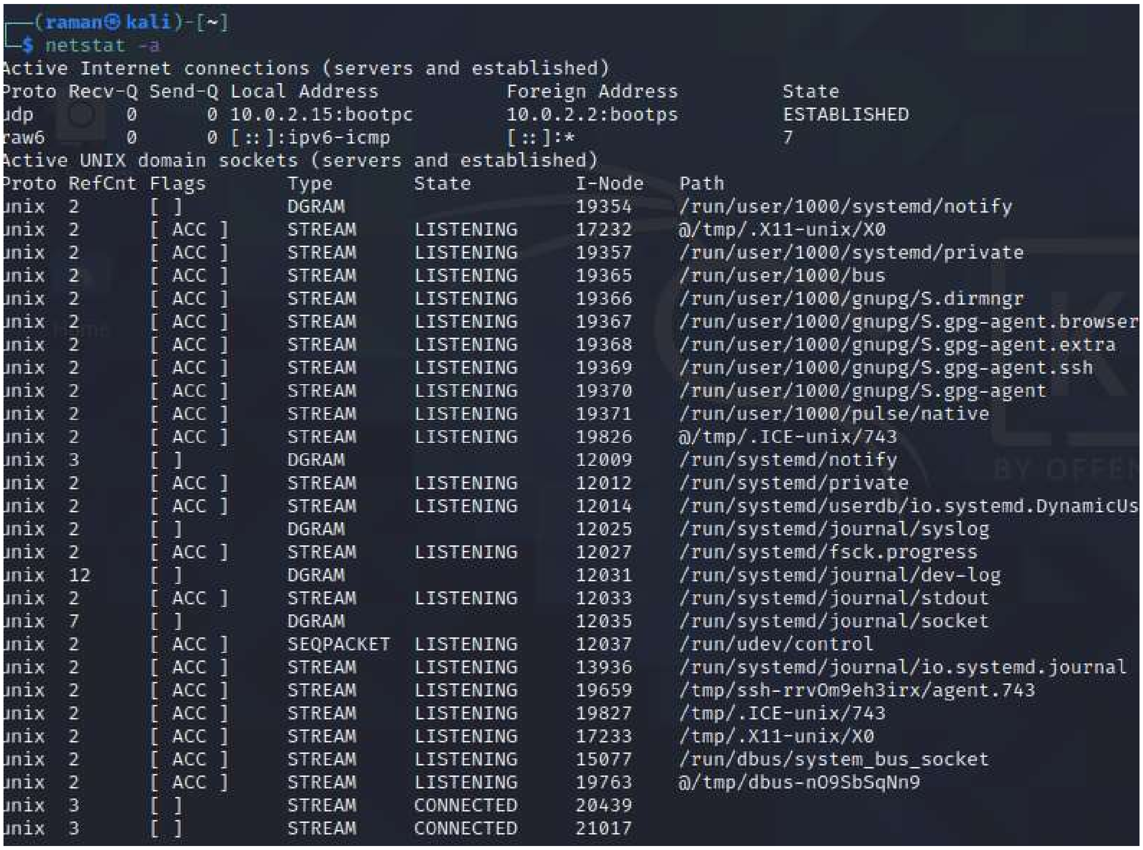
```
┌──(raman㉿kali)-[~]
└─$ ifconfig -v
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 10.0.2.15  netmask 255.255.255.0  broadcast 10.0.2.255
        inet6 fe80::a00:27ff:fe24:c7a4  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:24:c7:a4  txqueuelen 1000  (Ethernet)
        RX packets 9  bytes 1566 (1.5 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 22  bytes 1944 (1.8 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 12  bytes 556 (556.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 12  bytes 556 (556.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

IFCONFIG –HELP

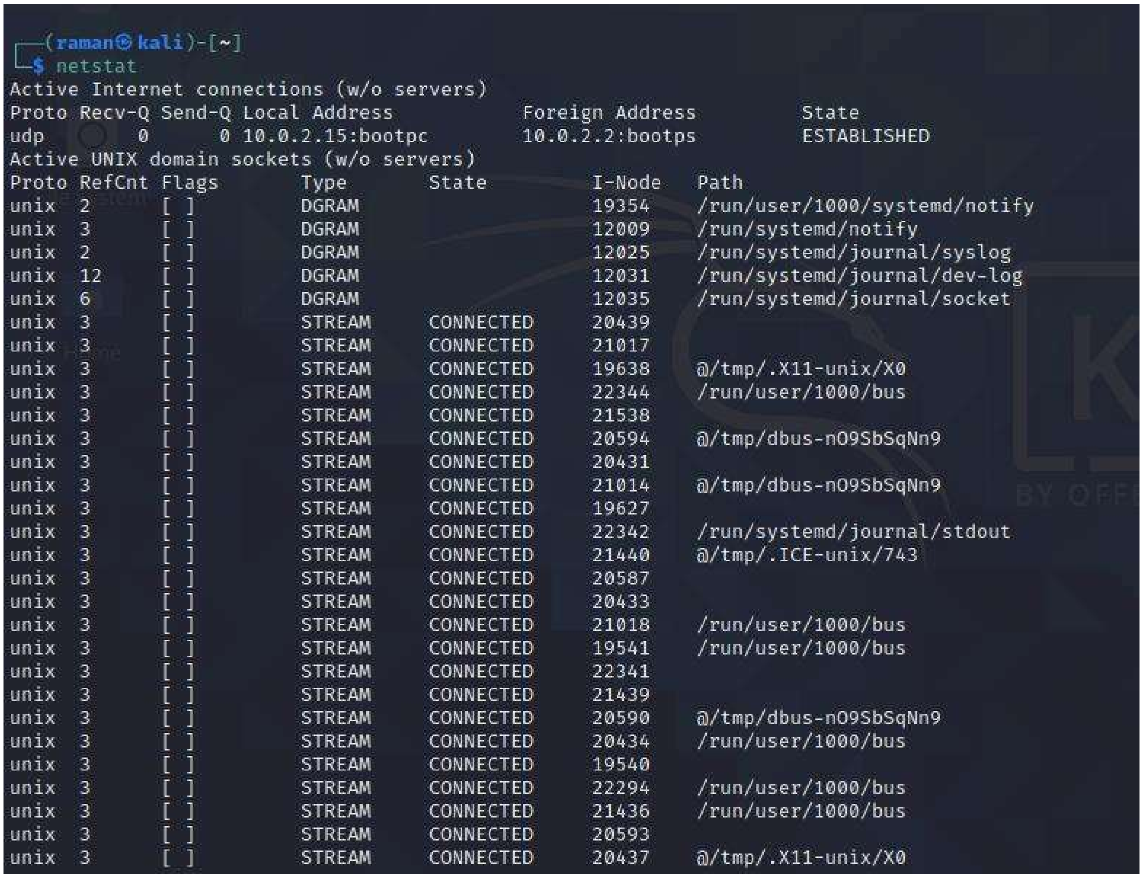


```
┌──(raman㉿kali)-[~]
└─$ ifconfig --help
Usage:
  ifconfig [-a] [-v] [-s] <interface> [[<AF>] <address>]
  [add <address>[/<prefixlen>]]
  [del <address>[/<prefixlen>]]
  [[-]broadcast [<address>]]  [[-]pointopoint [<address>]]
  [netmask <address>]  [dstaddr <address>]  [tunnel <address>]
  [outfill <NN>] [keepalive <NN>]
  [hw <HW> <address>]  [mtu <NN>]
  [[-]trailers]  [[-]arp]  [[-]allmulti]
  [multicast]  [[-]promisc]
  [mem_start <NN>]  [io_addr <NN>]  [irq <NN>]  [media <type>]
  [txqueuelen <NN>]
  [[-]dynamic]
  [up|down] ...

  <HW>=Hardware Type.
  List of possible hardware types:
    loop (Local Loopback) slip (Serial Line IP) cslip (VJ Serial Line IP)
    slip6 (6-bit Serial Line IP) cslip6 (VJ 6-bit Serial Line IP) adaptive (Adaptive Serial Line IP)
    ash (Ash) ether (Ethernet) ax25 (AMPR AX.25)
    netrom (AMPR NET/ROM) rose (AMPR ROSE) tunnel (IPIP Tunnel)
    ppp (Point-to-Point Protocol) hdlc ((Cisco)-HDLC) lapb (LAPB)
    arcnet (ARCnet) dlci (Frame Relay DLCI) frad (Frame Relay Access Device)
    sit (IPv6-in-IPv4) fddi (Fiber Distributed Data Interface) hippi (HIPPI)
    irda (IrLAP) ec (Econet) x25 (generic X.25)
    eui64 (Generic EUI-64)
  <AF>=Address family. Default: inet
  List of possible address families:
    unix (UNIX Domain) inet (DARPA Internet) inet6 (IPv6)
    ax25 (AMPR AX.25) netrom (AMPR NET/ROM) rose (AMPR ROSE)
    ipx (Novell IPX) ddp (Appletalk DDP) ec (Econet)
    ash (Ash) x25 (CCITT X.25)
```

NETSTAT LINUX

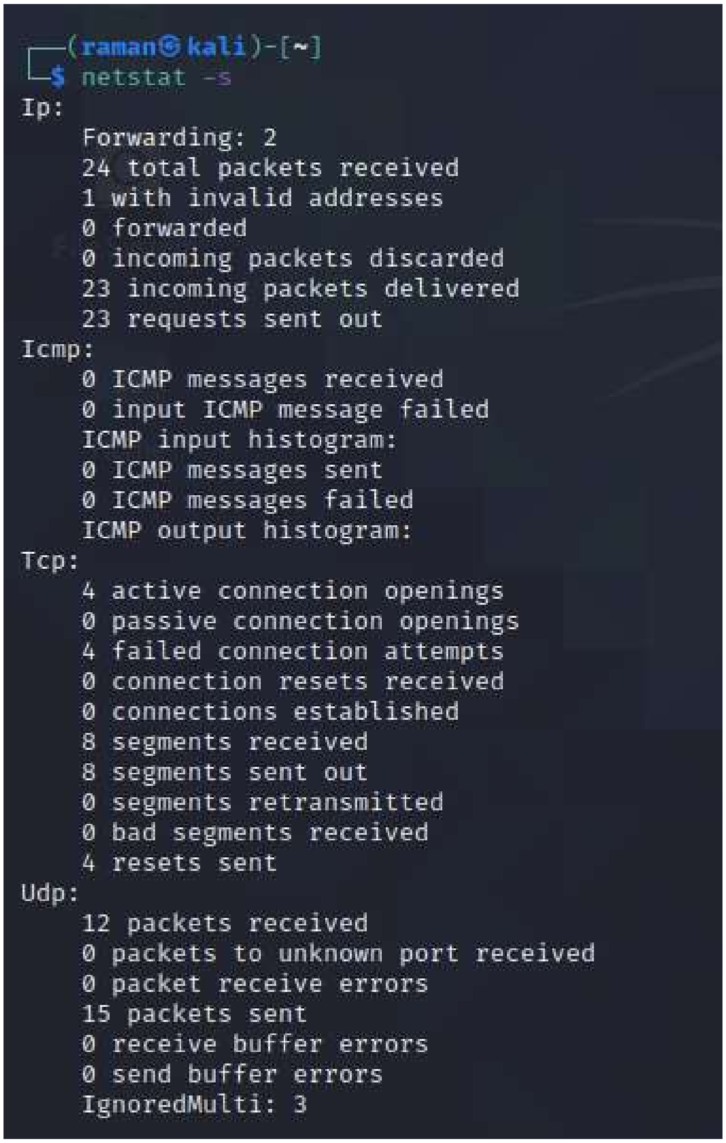


```
┌──(raman㉿kali)-[~]
└─$ netstat -a
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
udp        0      0 10.0.2.15:bootpc        10.0.2.2:bootps         ESTABLISHED
raw6       0      0 [::]:ipv6-icmp          [::]:*                  7
Active UNIX domain sockets (servers and established)
Proto RefCnt Flags       Type       State         I-Node   Path
unix  2      [ ]         DGRAM                    19354    /run/user/1000/systemd/notify
unix  2      [ ACC ]     STREAM     LISTENING     17232    @/tmp/.X11-unix/X0
unix  2      [ ACC ]     STREAM     LISTENING     19357    /run/user/1000/systemd/private
unix  2      [ ACC ]     STREAM     LISTENING     19365    /run/user/1000/bus
unix  2      [ ACC ]     STREAM     LISTENING     19366    /run/user/1000/gnupg/S.dirmngr
unix  2      [ ACC ]     STREAM     LISTENING     19367    /run/user/1000/gnupg/S.gpg-agent.browser
unix  2      [ ACC ]     STREAM     LISTENING     19368    /run/user/1000/gnupg/S.gpg-agent.extra
unix  2      [ ACC ]     STREAM     LISTENING     19369    /run/user/1000/gnupg/S.gpg-agent.ssh
unix  2      [ ACC ]     STREAM     LISTENING     19370    /run/user/1000/gnupg/S.gpg-agent
unix  2      [ ACC ]     STREAM     LISTENING     19371    /run/user/1000/pulse/native
unix  2      [ ACC ]     STREAM     LISTENING     19826    @/tmp/.ICE-unix/743
unix  3      [ ]         DGRAM                    12009    /run/systemd/notify
unix  2      [ ACC ]     STREAM     LISTENING     12012    /run/systemd/private
unix  2      [ ACC ]     STREAM     LISTENING     12014    /run/systemd/userdb/io.systemd.DynamicUs
unix  2      [ ]         DGRAM                    12025    /run/systemd/journal/syslog
unix  2      [ ACC ]     STREAM     LISTENING     12027    /run/systemd/fsck.progress
unix  12     [ ]         DGRAM                    12031    /run/systemd/journal/dev-log
unix  2      [ ACC ]     STREAM     LISTENING     12033    /run/systemd/journal/stdout
unix  7      [ ]         DGRAM                    12035    /run/systemd/journal/socket
unix  2      [ ACC ]     SEQPACKET  LISTENING     12037    /run/udev/control
unix  2      [ ACC ]     STREAM     LISTENING     13936    /run/systemd/journal/io.systemd.journal
unix  2      [ ACC ]     STREAM     LISTENING     19659    /tmp/ssh-rrvOm9eh3irx/agent.743
unix  2      [ ACC ]     STREAM     LISTENING     19827    /tmp/.ICE-unix/743
unix  2      [ ACC ]     STREAM     LISTENING     17233    /tmp/.X11-unix/X0
unix  2      [ ACC ]     STREAM     LISTENING     15077    /run/dbus/system_bus_socket
unix  2      [ ACC ]     STREAM     LISTENING     19763    @/tmp/dbus-nO9SbSqNn9
unix  3      [ ]         STREAM     CONNECTED     20439
unix  3      [ ]         STREAM     CONNECTED     21017
```



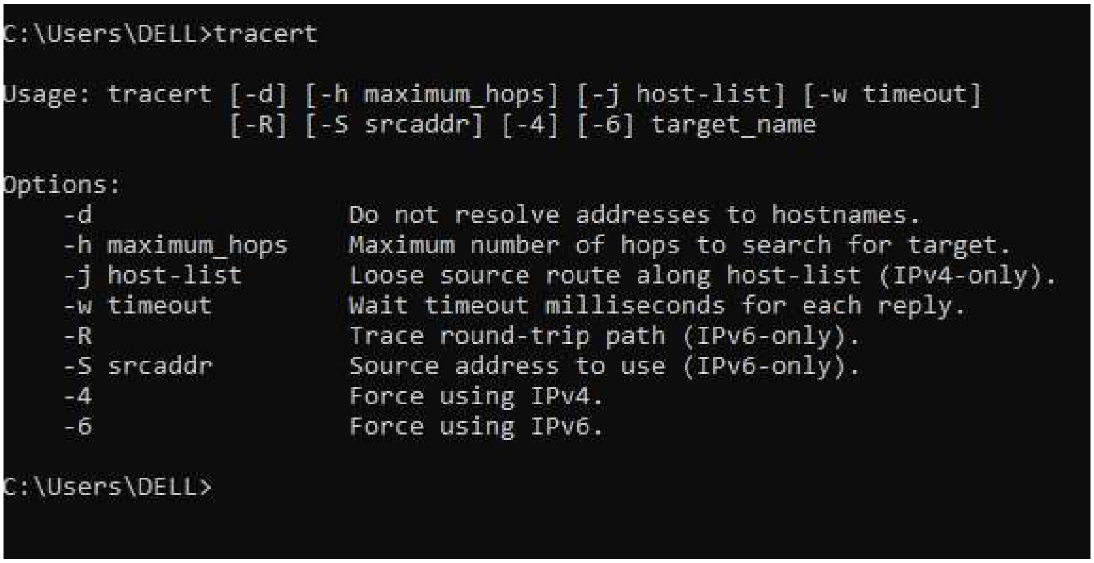
```
┌──(raman㉿kali)-[~]
└─$ netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
udp        0      0 10.0.2.15:bootpc        10.0.2.2:bootps         ESTABLISHED
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags       Type       State         I-Node   Path
unix  2      [ ]         DGRAM                    19354    /run/user/1000/systemd/notify
unix  3      [ ]         DGRAM                    12009    /run/systemd/notify
unix  2      [ ]         DGRAM                    12025    /run/systemd/journal/syslog
unix  12     [ ]         DGRAM                    12031    /run/systemd/journal/dev-log
unix  6      [ ]         DGRAM                    12035    /run/systemd/journal/socket
unix  3      [ ]         STREAM     CONNECTED     20439
unix  3      [ ]         STREAM     CONNECTED     21017
unix  3      [ ]         STREAM     CONNECTED     19638    @/tmp/.X11-unix/X0
unix  3      [ ]         STREAM     CONNECTED     22344    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     21538
unix  3      [ ]         STREAM     CONNECTED     20594    @/tmp/dbus-nO9SbSqNn9
unix  3      [ ]         STREAM     CONNECTED     20431
unix  3      [ ]         STREAM     CONNECTED     21014    @/tmp/dbus-nO9SbSqNn9
unix  3      [ ]         STREAM     CONNECTED     19627
unix  3      [ ]         STREAM     CONNECTED     22342    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     21440    @/tmp/.ICE-unix/743
unix  3      [ ]         STREAM     CONNECTED     20587
unix  3      [ ]         STREAM     CONNECTED     20433
unix  3      [ ]         STREAM     CONNECTED     21018    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     19541    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     22341
unix  3      [ ]         STREAM     CONNECTED     21439
unix  3      [ ]         STREAM     CONNECTED     20590    @/tmp/dbus-nO9SbSqNn9
unix  3      [ ]         STREAM     CONNECTED     20434    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     19540
unix  3      [ ]         STREAM     CONNECTED     22294    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     21436    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     20593
unix  3      [ ]         STREAM     CONNECTED     20437    @/tmp/.X11-unix/X0
```

NETSTAT S



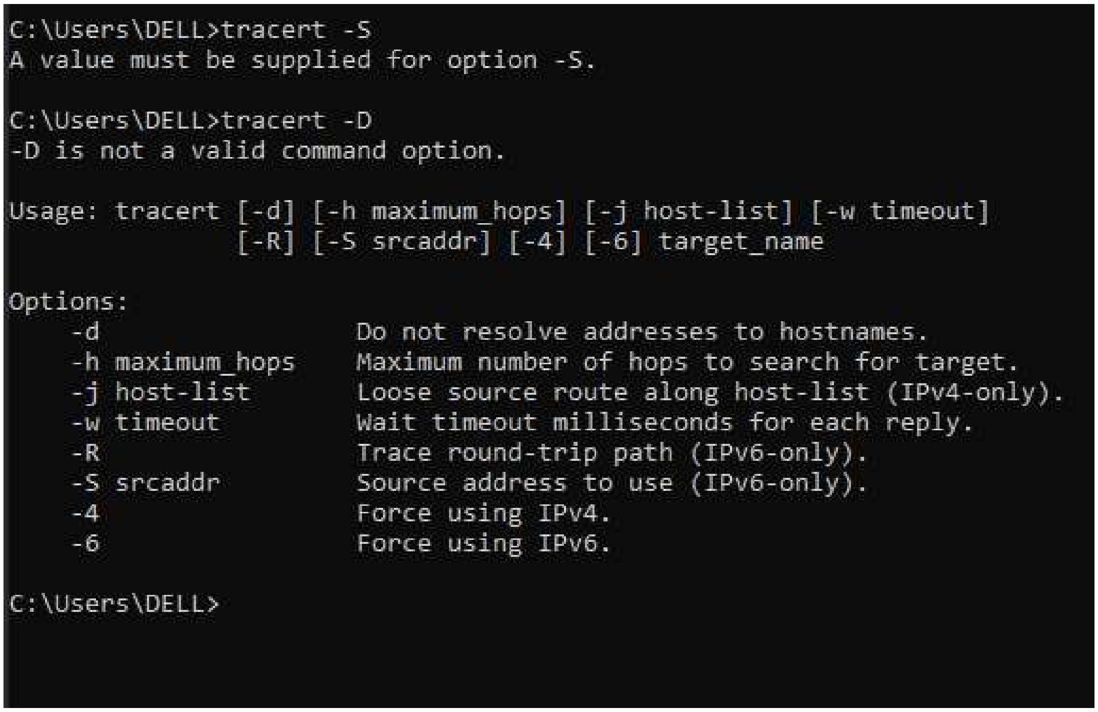
```
┌──(raman㉿kali)-[~]
└─$ netstat -s
Ip:
    Forwarding: 2
    24 total packets received
    1 with invalid addresses
    0 forwarded
    0 incoming packets discarded
    23 incoming packets delivered
    23 requests sent out
Icmp:
    0 ICMP messages received
    0 input ICMP message failed
    ICMP input histogram:
    0 ICMP messages sent
    0 ICMP messages failed
    ICMP output histogram:
Tcp:
    4 active connection openings
    0 passive connection openings
    4 failed connection attempts
    0 connection resets received
    0 connections established
    8 segments received
    8 segments sent out
    0 segments retransmitted
    0 bad segments received
    4 resets sent
Udp:
    12 packets received
    0 packets to unknown port received
    0 packet receive errors
    15 packets sent
    0 receive buffer errors
    0 send buffer errors
    IgnoredMulti: 3
```

TRACERT



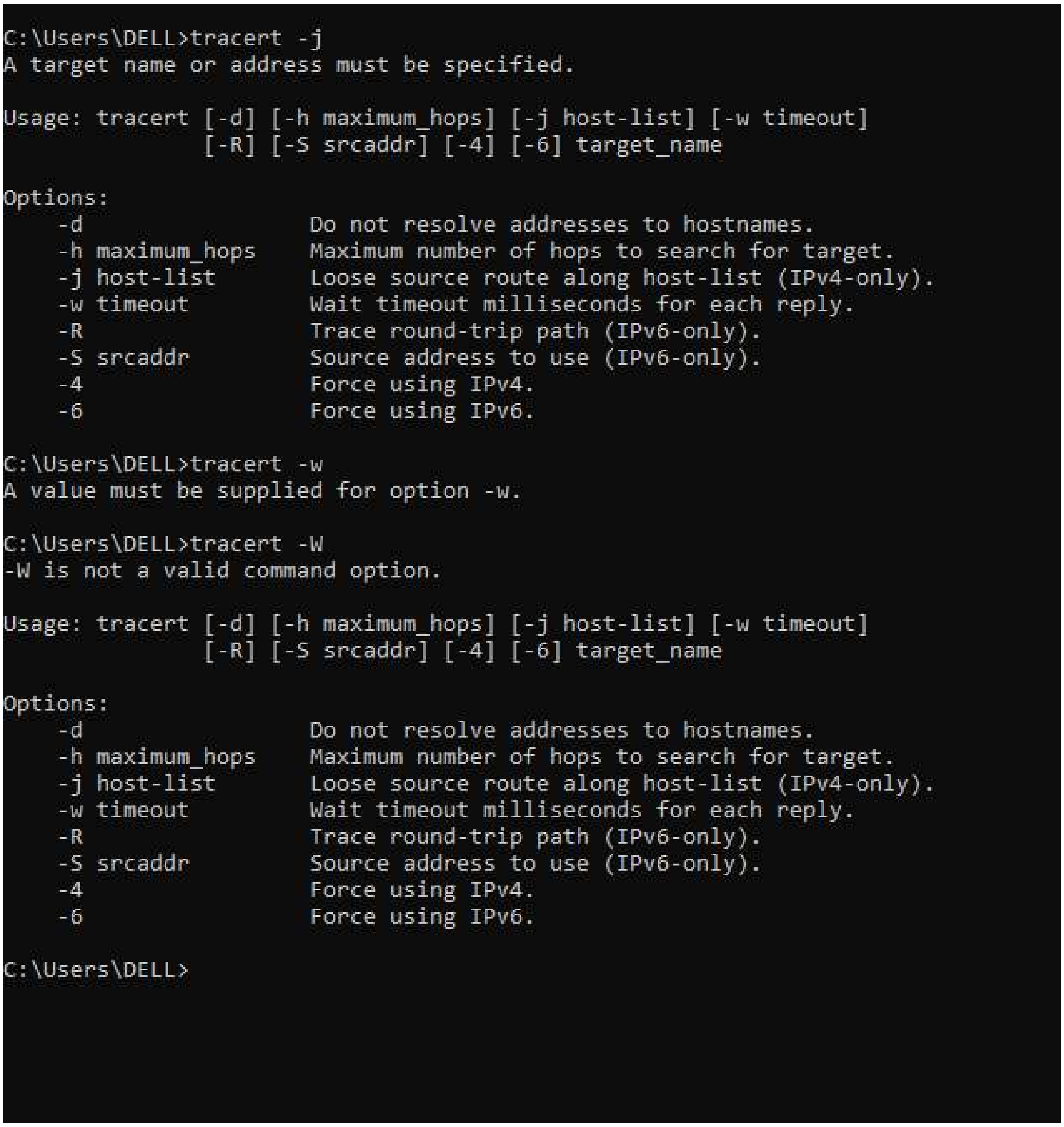
```
C:\Users\DELL>tracert

Usage: tracert [-d] [-h maximum_hops] [-j host-list] [-w timeout]
               [-R] [-S srcaddr] [-4] [-6] target_name

Options:
    -d                 Do not resolve addresses to hostnames.
    -h maximum_hops    Maximum number of hops to search for target.
    -j host-list       Loose source route along host-list (IPv4-only).
    -w timeout         Wait timeout milliseconds for each reply.
    -R                 Trace round-trip path (IPv6-only).
    -S srcaddr         Source address to use (IPv6-only).
    -4                 Force using IPv4.
    -6                 Force using IPv6.

C:\Users\DELL>
```

Tracert S



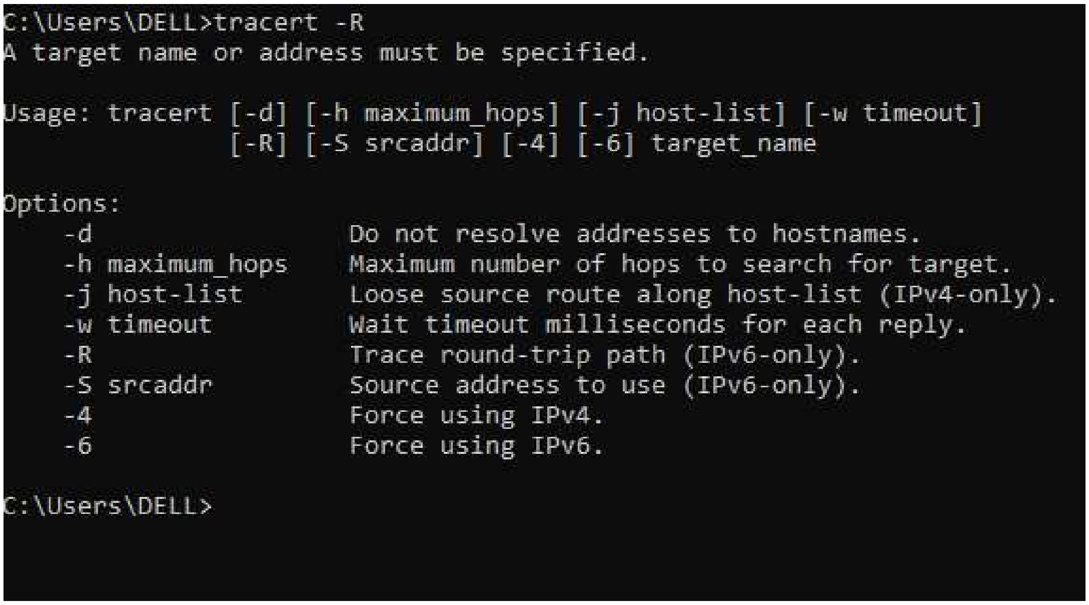
```
C:\Users\DELL>tracert -S
A value must be supplied for option -S.

C:\Users\DELL>tracert -D
-D is not a valid command option.

Usage: tracert [-d] [-h maximum_hops] [-j host-list] [-w timeout]
               [-R] [-S srcaddr] [-4] [-6] target_name

Options:
    -d                 Do not resolve addresses to hostnames.
    -h maximum_hops    Maximum number of hops to search for target.
    -j host-list       Loose source route along host-list (IPv4-only).
    -w timeout         Wait timeout milliseconds for each reply.
    -R                 Trace round-trip path (IPv6-only).
    -S srcaddr         Source address to use (IPv6-only).
    -4                 Force using IPv4.
    -6                 Force using IPv6.

C:\Users\DELL>
```

Tracert j



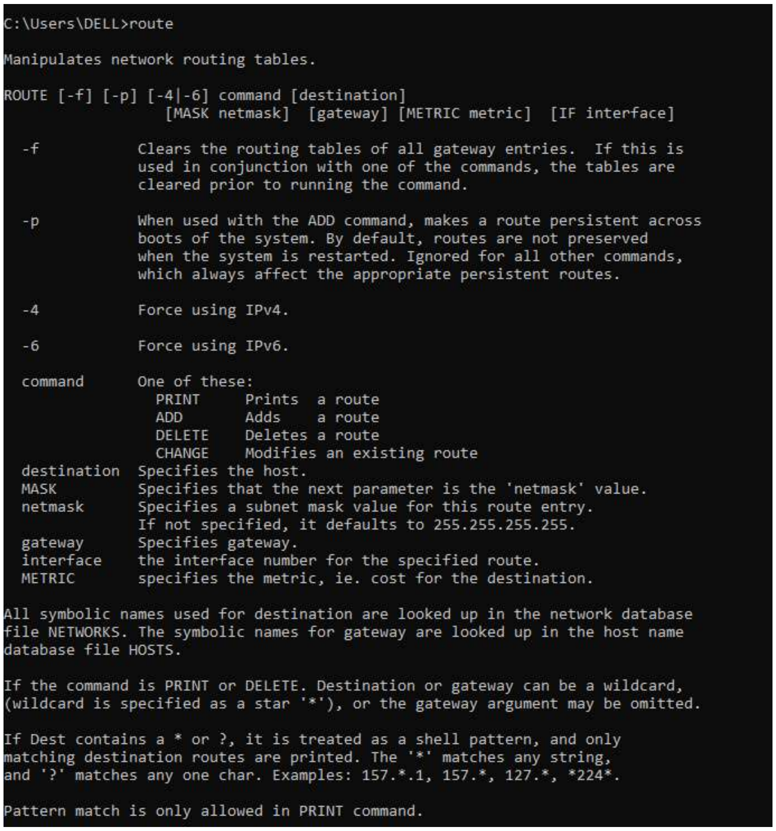
```
C:\Users\DELL>tracert -j
A target name or address must be specified.

Usage: tracert [-d] [-h maximum_hops] [-j host-list] [-w timeout]
               [-R] [-S srcaddr] [-4] [-6] target_name

Options:
    -d                 Do not resolve addresses to hostnames.
    -h maximum_hops    Maximum number of hops to search for target.
    -j host-list       Loose source route along host-list (IPv4-only).
    -w timeout         Wait timeout milliseconds for each reply.
    -R                 Trace round-trip path (IPv6-only).
    -S srcaddr         Source address to use (IPv6-only).
    -4                 Force using IPv4.
    -6                 Force using IPv6.

C:\Users\DELL>tracert -w
A value must be supplied for option -w.

C:\Users\DELL>tracert -W
-W is not a valid command option.

Usage: tracert [-d] [-h maximum_hops] [-j host-list] [-w timeout]
               [-R] [-S srcaddr] [-4] [-6] target_name

Options:
    -d                 Do not resolve addresses to hostnames.
    -h maximum_hops    Maximum number of hops to search for target.
    -j host-list       Loose source route along host-list (IPv4-only).
    -w timeout         Wait timeout milliseconds for each reply.
    -R                 Trace round-trip path (IPv6-only).
    -S srcaddr         Source address to use (IPv6-only).
    -4                 Force using IPv4.
    -6                 Force using IPv6.

C:\Users\DELL>
```

Tracert



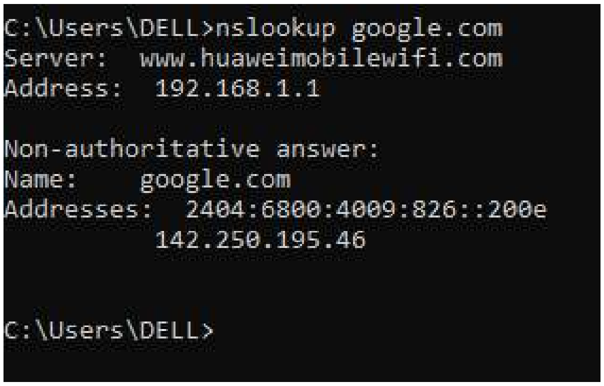
```
C:\Users\DELL>tracert -R
A target name or address must be specified.

Usage: tracert [-d] [-h maximum_hops] [-j host-list] [-w timeout]
               [-R] [-S srcaddr] [-4] [-6] target_name

Options:
    -d                 Do not resolve addresses to hostnames.
    -h maximum_hops    Maximum number of hops to search for target.
    -j host-list       Loose source route along host-list (IPv4-only).
    -w timeout         Wait timeout milliseconds for each reply.
    -R                 Trace round-trip path (IPv6-only).
    -S srcaddr         Source address to use (IPv6-only).
    -4                 Force using IPv4.
    -6                 Force using IPv6.

C:\Users\DELL>
```

Route



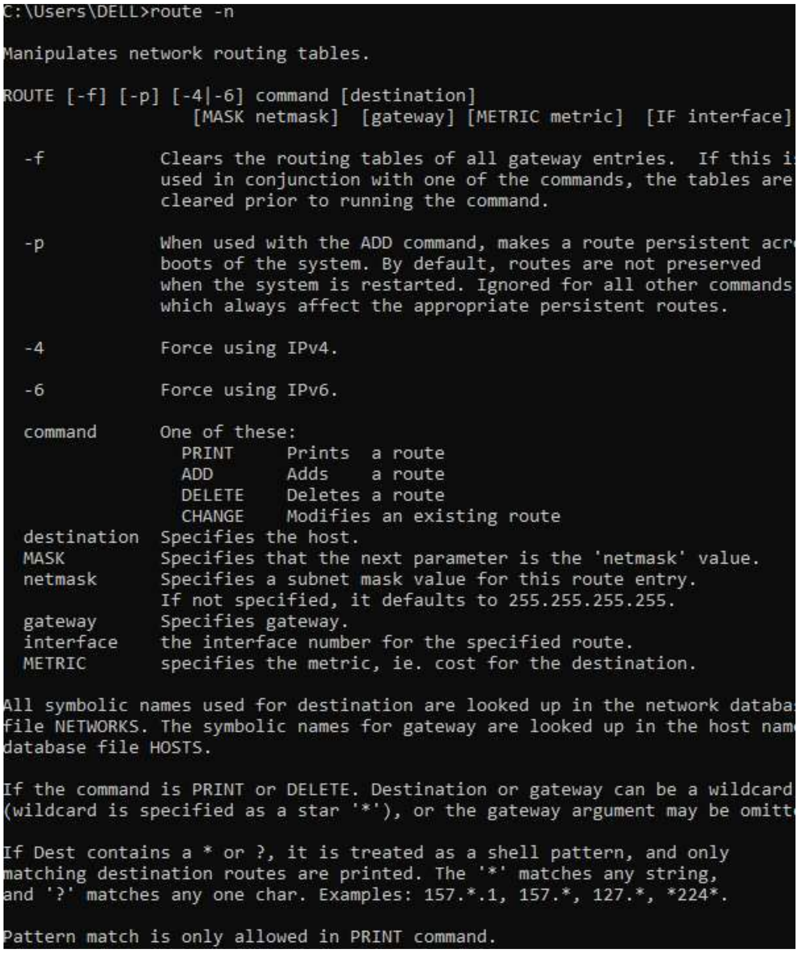
```
C:\Users\DELL>route

Manipulates network routing tables.

ROUTE [-f] [-p] [-4|-6] command [destination]
                  [MASK netmask]  [gateway] [METRIC metric]  [IF interface]

  -f           Clears the routing tables of all gateway entries.  If this is
               used in conjunction with one of the commands, the tables are
               cleared prior to running the command.

  -p           When used with the ADD command, makes a route persistent across
               boots of the system. By default, routes are not preserved
               when the system is restarted. Ignored for all other commands,
               which always affect the appropriate persistent routes.

  -4           Force using IPv4.

  -6           Force using IPv6.

  command      One of these:
                 PRINT     Prints  a route
                 ADD       Adds    a route
                 DELETE    Deletes a route
                 CHANGE    Modifies an existing route
  destination  Specifies the host.
  MASK         Specifies that the next parameter is the 'netmask' value.
  netmask      Specifies a subnet mask value for this route entry.
               If not specified, it defaults to 255.255.255.255.
  gateway      Specifies gateway.
  interface    the interface number for the specified route.
  METRIC       specifies the metric, ie. cost for the destination.

All symbolic names used for destination are looked up in the network database
file NETWORKS. The symbolic names for gateway are looked up in the host name
database file HOSTS.

If the command is PRINT or DELETE. Destination or gateway can be a wildcard,
(wildcard is specified as a star '*'), or the gateway argument may be omitted.

If Dest contains a * or ?, it is treated as a shell pattern, and only
matching destination routes are printed. The '*' matches any string,
and '?' matches any one char. Examples: 157.*.1, 157.*, 127.*, *224*.

Pattern match is only allowed in PRINT command.
```

nslookup



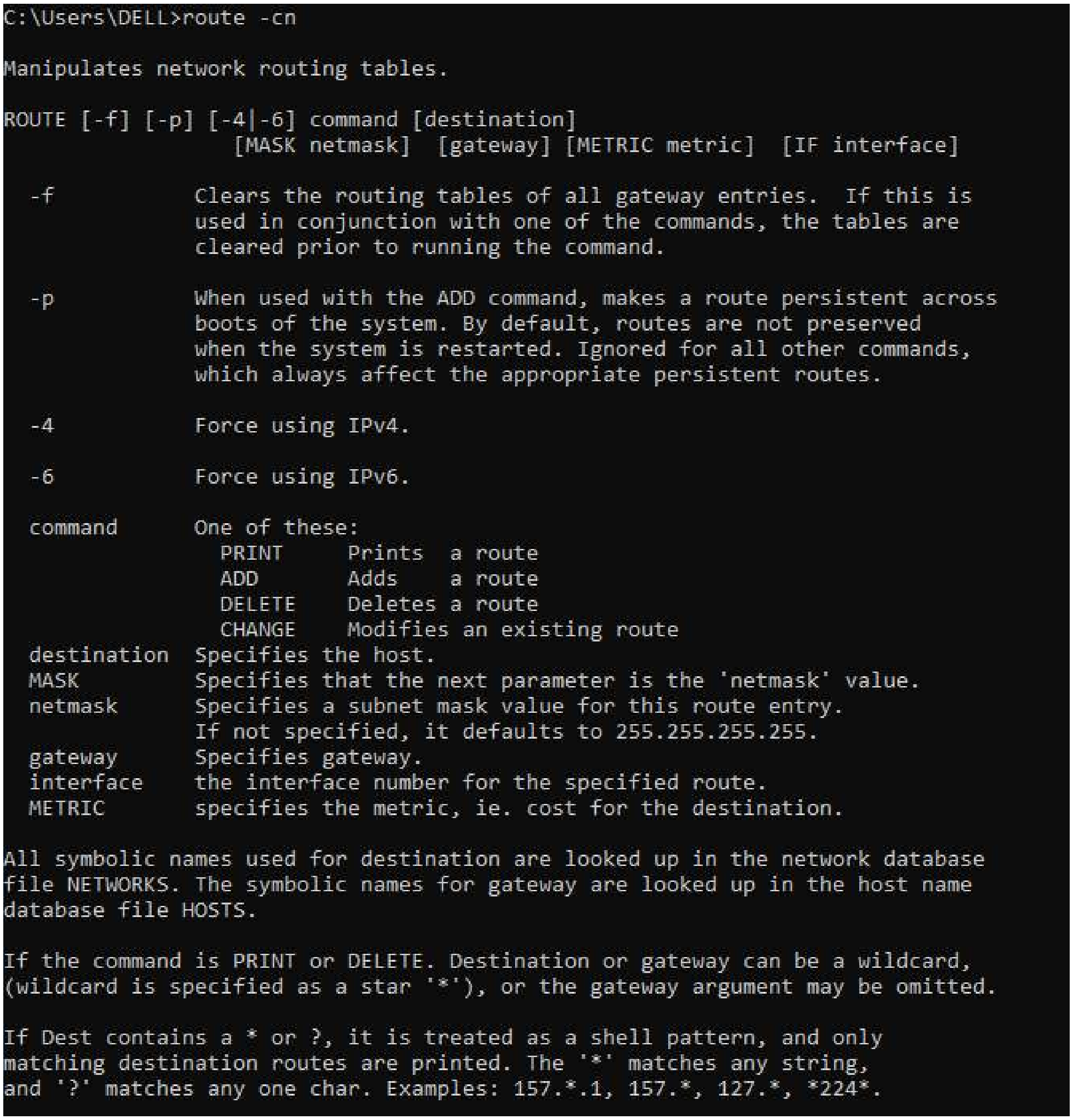
```
C:\Users\DELL>nslookup google.com
Server:  www.huaweimobilewifi.com
Address:  192.168.1.1

Non-authoritative answer:
Name:    google.com
Addresses:  2404:6800:4009:826::200e
          142.250.195.46


C:\Users\DELL>
```

Route -n



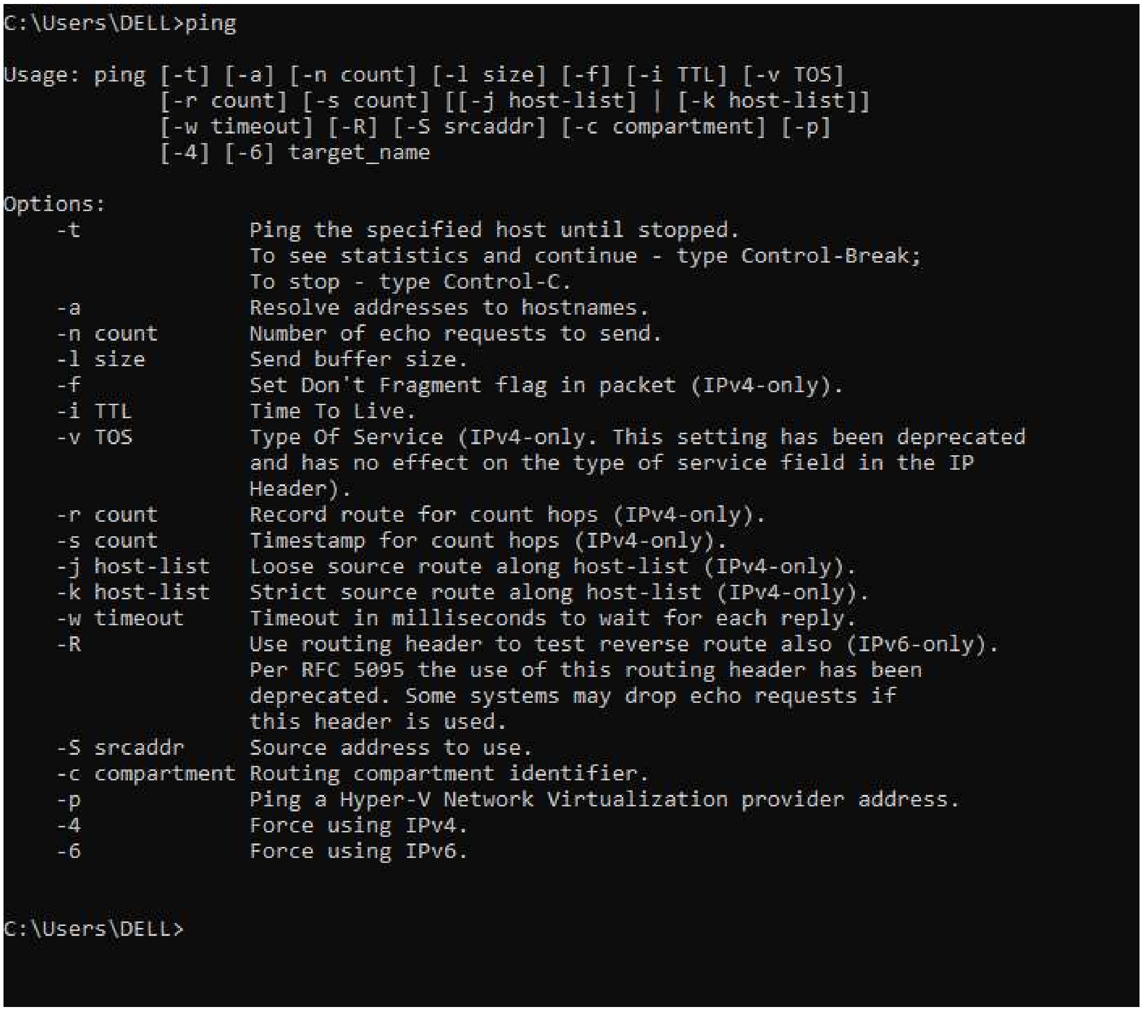
```
C:\Users\DELL>route -n

Manipulates network routing tables.

ROUTE [-f] [-p] [-4|-6] command [destination]
                  [MASK netmask]  [gateway] [METRIC metric]  [IF interface]

  -f           Clears the routing tables of all gateway entries.  If this i
               used in conjunction with one of the commands, the tables are
               cleared prior to running the command.

  -p           When used with the ADD command, makes a route persistent acr
               boots of the system. By default, routes are not preserved
               when the system is restarted. Ignored for all other commands
               which always affect the appropriate persistent routes.

  -4           Force using IPv4.

  -6           Force using IPv6.

  command      One of these:
                 PRINT     Prints  a route
                 ADD       Adds    a route
                 DELETE    Deletes a route
                 CHANGE    Modifies an existing route
  destination  Specifies the host.
  MASK         Specifies that the next parameter is the 'netmask' value.
  netmask      Specifies a subnet mask value for this route entry.
               If not specified, it defaults to 255.255.255.255.
  gateway      Specifies gateway.
  interface    the interface number for the specified route.
  METRIC       specifies the metric, ie. cost for the destination.

All symbolic names used for destination are looked up in the network databa
file NETWORKS. The symbolic names for gateway are looked up in the host nam
database file HOSTS.

If the command is PRINT or DELETE. Destination or gateway can be a wildcard
(wildcard is specified as a star '*'), or the gateway argument may be omitt

If Dest contains a * or ?, it is treated as a shell pattern, and only
matching destination routes are printed. The '*' matches any string,
and '?' matches any one char. Examples: 157.*.1, 157.*, 127.*, *224*.

Pattern match is only allowed in PRINT command.
```

Route -cn



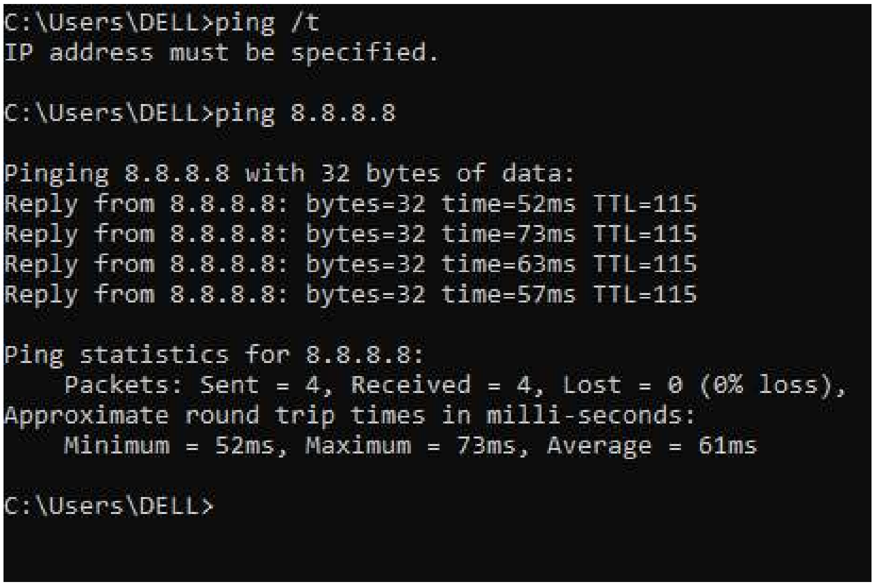
```
C:\Users\DELL>route -cn

Manipulates network routing tables.

ROUTE [-f] [-p] [-4|-6] command [destination]
                  [MASK netmask]  [gateway] [METRIC metric]  [IF interface]

  -f           Clears the routing tables of all gateway entries.  If this is
               used in conjunction with one of the commands, the tables are
               cleared prior to running the command.

  -p           When used with the ADD command, makes a route persistent across
               boots of the system. By default, routes are not preserved
               when the system is restarted. Ignored for all other commands,
               which always affect the appropriate persistent routes.

  -4           Force using IPv4.

  -6           Force using IPv6.

  command      One of these:
                 PRINT     Prints  a route
                 ADD       Adds    a route
                 DELETE    Deletes a route
                 CHANGE    Modifies an existing route
  destination  Specifies the host.
  MASK         Specifies that the next parameter is the 'netmask' value.
  netmask      Specifies a subnet mask value for this route entry.
               If not specified, it defaults to 255.255.255.255.
  gateway      Specifies gateway.
  interface    the interface number for the specified route.
  METRIC       specifies the metric, ie. cost for the destination.

All symbolic names used for destination are looked up in the network database
file NETWORKS. The symbolic names for gateway are looked up in the host name
database file HOSTS.

If the command is PRINT or DELETE. Destination or gateway can be a wildcard,
(wildcard is specified as a star '*'), or the gateway argument may be omitted.

If Dest contains a * or ?, it is treated as a shell pattern, and only
matching destination routes are printed. The '*' matches any string,
and '?' matches any one char. Examples: 157.*.1, 157.*, 127.*, *224*.
```

Ping



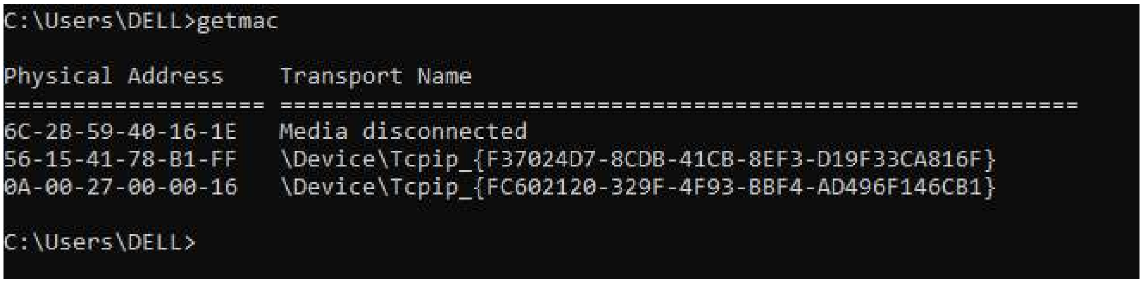
```
C:\Users\DELL>ping

Usage: ping [-t] [-a] [-n count] [-l size] [-f] [-i TTL] [-v TOS]
            [-r count] [-s count] [[-j host-list] | [-k host-list]]
            [-w timeout] [-R] [-S srcaddr] [-c compartment] [-p]
            [-4] [-6] target_name

Options:
    -t             Ping the specified host until stopped.
                   To see statistics and continue - type Control-Break;
                   To stop - type Control-C.
    -a             Resolve addresses to hostnames.
    -n count       Number of echo requests to send.
    -l size        Send buffer size.
    -f             Set Don't Fragment flag in packet (IPv4-only).
    -i TTL         Time To Live.
    -v TOS         Type Of Service (IPv4-only. This setting has been deprecated
                   and has no effect on the type of service field in the IP
                   Header).
    -r count       Record route for count hops (IPv4-only).
    -s count       Timestamp for count hops (IPv4-only).
    -j host-list   Loose source route along host-list (IPv4-only).
    -k host-list   Strict source route along host-list (IPv4-only).
    -w timeout     Timeout in milliseconds to wait for each reply.
    -R             Use routing header to test reverse route also (IPv6-only).
                   Per RFC 5095 the use of this routing header has been
                   deprecated. Some systems may drop echo requests if
                   this header is used.
    -S srcaddr     Source address to use.
    -c compartment Routing compartment identifier.
    -p             Ping a Hyper-V Network Virtualization provider address.
    -4             Force using IPv4.
    -6             Force using IPv6.


C:\Users\DELL>
```

Ping /t 8.8.8.8



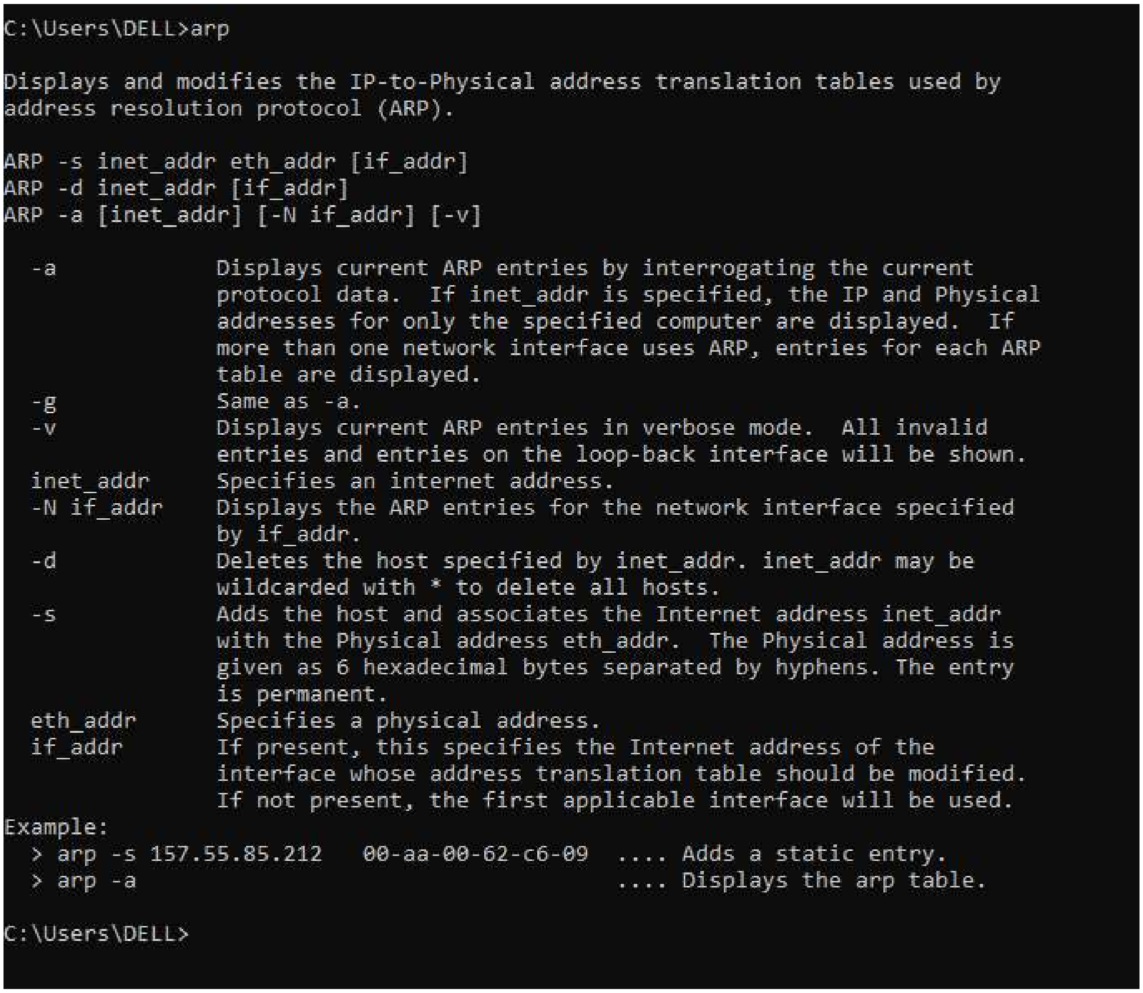
```
C:\Users\DELL>ping /t
IP address must be specified.

C:\Users\DELL>ping 8.8.8.8

Pinging 8.8.8.8 with 32 bytes of data:
Reply from 8.8.8.8: bytes=32 time=52ms TTL=115
Reply from 8.8.8.8: bytes=32 time=73ms TTL=115
Reply from 8.8.8.8: bytes=32 time=63ms TTL=115
Reply from 8.8.8.8: bytes=32 time=57ms TTL=115

Ping statistics for 8.8.8.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 52ms, Maximum = 73ms, Average = 61ms

C:\Users\DELL>
```

Getmac



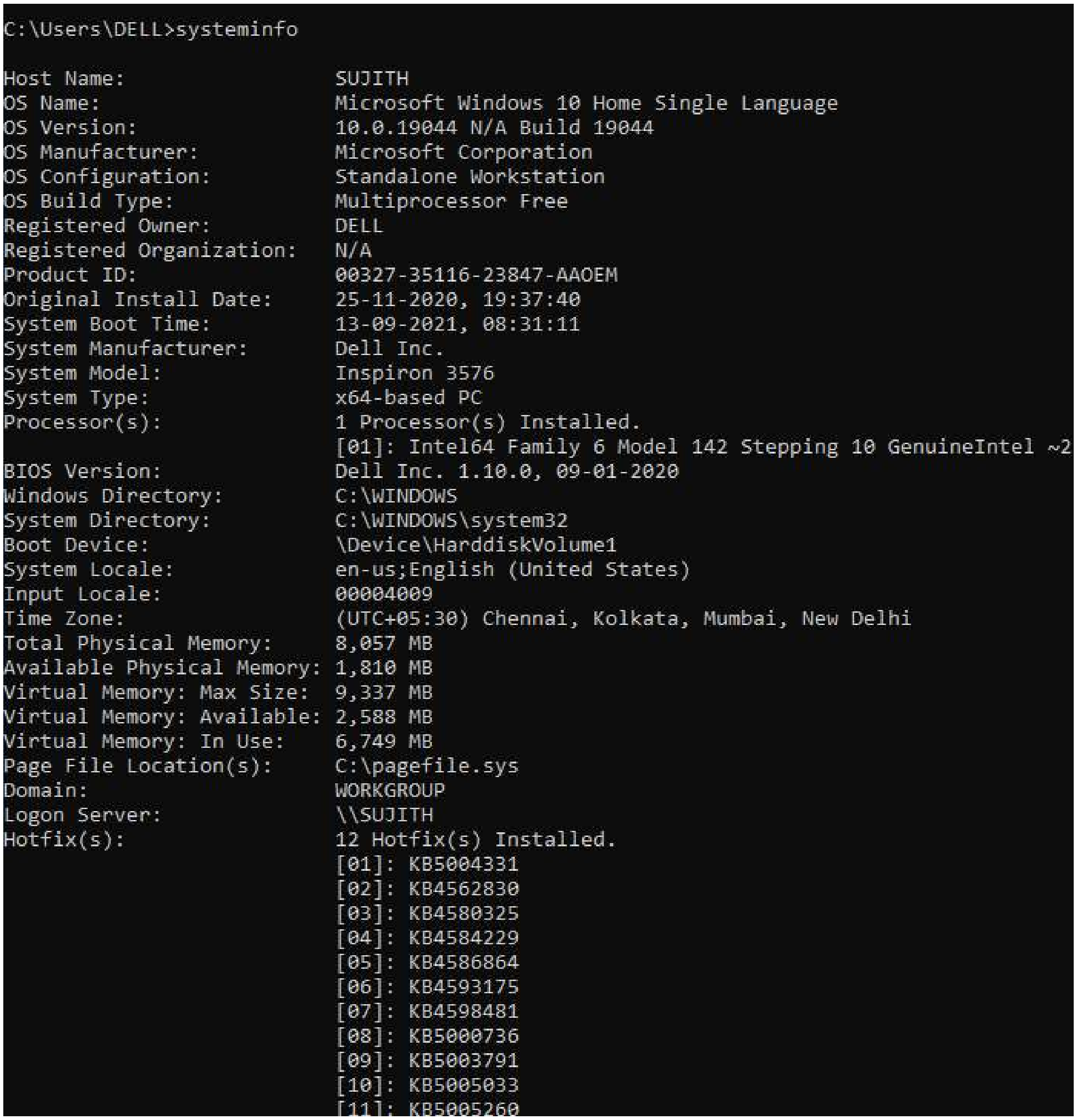
```
C:\Users\DELL>getmac

Physical Address    Transport Name
=================== ==========================================================
6C-2B-59-40-16-1E   Media disconnected
56-15-41-78-B1-FF   \Device\Tcpip_{F37024D7-8CDB-41CB-8EF3-D19F33CA816F}
0A-00-27-00-00-16   \Device\Tcpip_{FC602120-329F-4F93-BBF4-AD496F146CB1}

C:\Users\DELL>
```

ARP



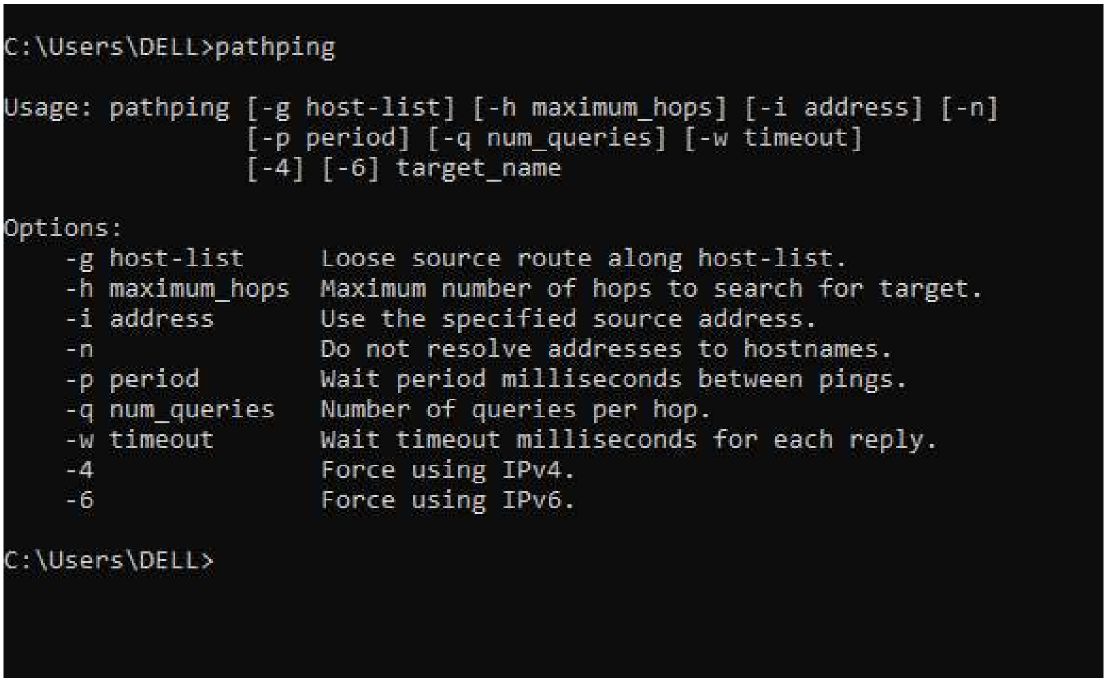
```
C:\Users\DELL>arp

Displays and modifies the IP-to-Physical address translation tables used by
address resolution protocol (ARP).

ARP -s inet_addr eth_addr [if_addr]
ARP -d inet_addr [if_addr]
ARP -a [inet_addr] [-N if_addr] [-v]

  -a            Displays current ARP entries by interrogating the current
                protocol data.  If inet_addr is specified, the IP and Physical
                addresses for only the specified computer are displayed.  If
                more than one network interface uses ARP, entries for each ARP
                table are displayed.
  -g            Same as -a.
  -v            Displays current ARP entries in verbose mode.  All invalid
                entries and entries on the loop-back interface will be shown.
  inet_addr     Specifies an internet address.
  -N if_addr    Displays the ARP entries for the network interface specified
                by if_addr.
  -d            Deletes the host specified by inet_addr. inet_addr may be
                wildcarded with * to delete all hosts.
  -s            Adds the host and associates the Internet address inet_addr
                with the Physical address eth_addr.  The Physical address is
                given as 6 hexadecimal bytes separated by hyphens. The entry
                is permanent.
  eth_addr      Specifies a physical address.
  if_addr       If present, this specifies the Internet address of the
                interface whose address translation table should be modified.
                If not present, the first applicable interface will be used.
Example:
  > arp -s 157.55.85.212   00-aa-00-62-c6-09  .... Adds a static entry.
  > arp -a                                    .... Displays the arp table.

C:\Users\DELL>
```

Systeminfo



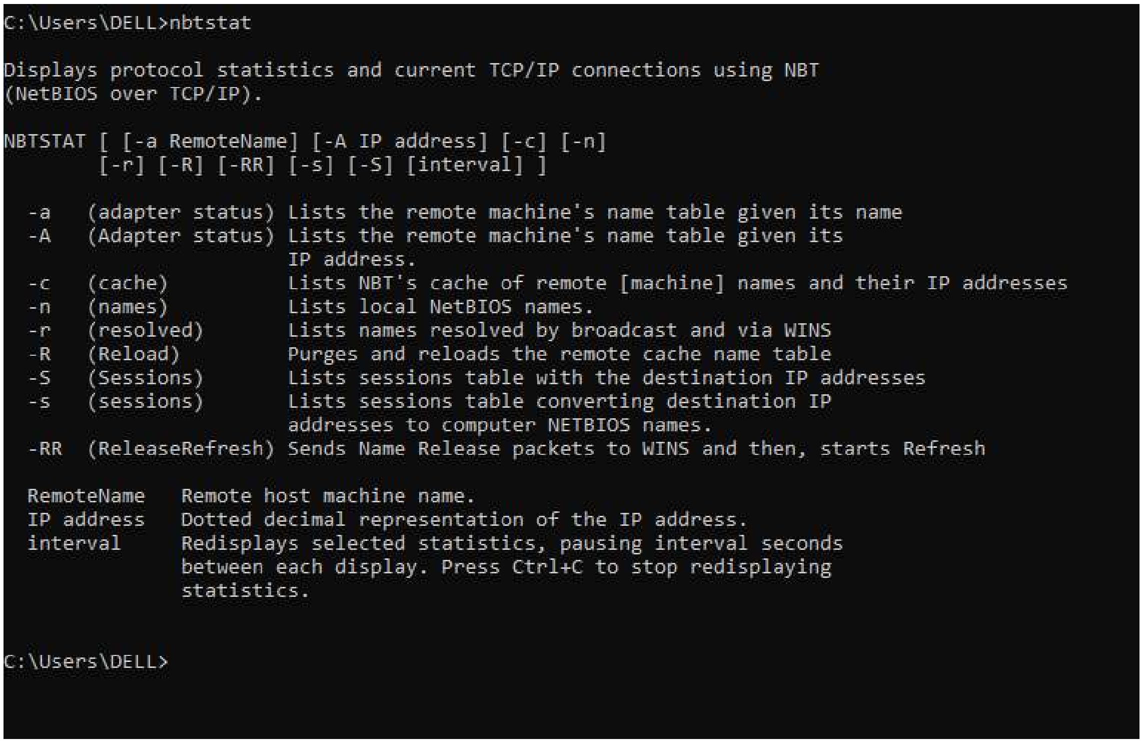
```
C:\Users\DELL>systeminfo

Host Name:                 SUJITH
OS Name:                   Microsoft Windows 10 Home Single Language
OS Version:                10.0.19044 N/A Build 19044
OS Manufacturer:           Microsoft Corporation
OS Configuration:          Standalone Workstation
OS Build Type:             Multiprocessor Free
Registered Owner:          DELL
Registered Organization:   N/A
Product ID:                00327-35116-23847-AAOEM
Original Install Date:     25-11-2020, 19:37:40
System Boot Time:          13-09-2021, 08:31:11
System Manufacturer:       Dell Inc.
System Model:              Inspiron 3576
System Type:               x64-based PC
Processor(s):              1 Processor(s) Installed.
                           [01]: Intel64 Family 6 Model 142 Stepping 10 GenuineIntel ~2
BIOS Version:              Dell Inc. 1.10.0, 09-01-2020
Windows Directory:         C:\WINDOWS
System Directory:          C:\WINDOWS\system32
Boot Device:               \Device\HarddiskVolume1
System Locale:             en-us;English (United States)
Input Locale:              00004009
Time Zone:                 (UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi
Total Physical Memory:     8,057 MB
Available Physical Memory: 1,810 MB
Virtual Memory: Max Size:  9,337 MB
Virtual Memory: Available: 2,588 MB
Virtual Memory: In Use:    6,749 MB
Page File Location(s):     C:\pagefile.sys
Domain:                    WORKGROUP
Logon Server:              \\SUJITH
Hotfix(s):                 12 Hotfix(s) Installed.
                           [01]: KB5004331
                           [02]: KB4562830
                           [03]: KB4580325
                           [04]: KB4584229
                           [05]: KB4586864
                           [06]: KB4593175
                           [07]: KB4598481
                           [08]: KB5000736
                           [09]: KB5003791
                           [10]: KB5005033
                           [11]: KB5005260
```

Pathping



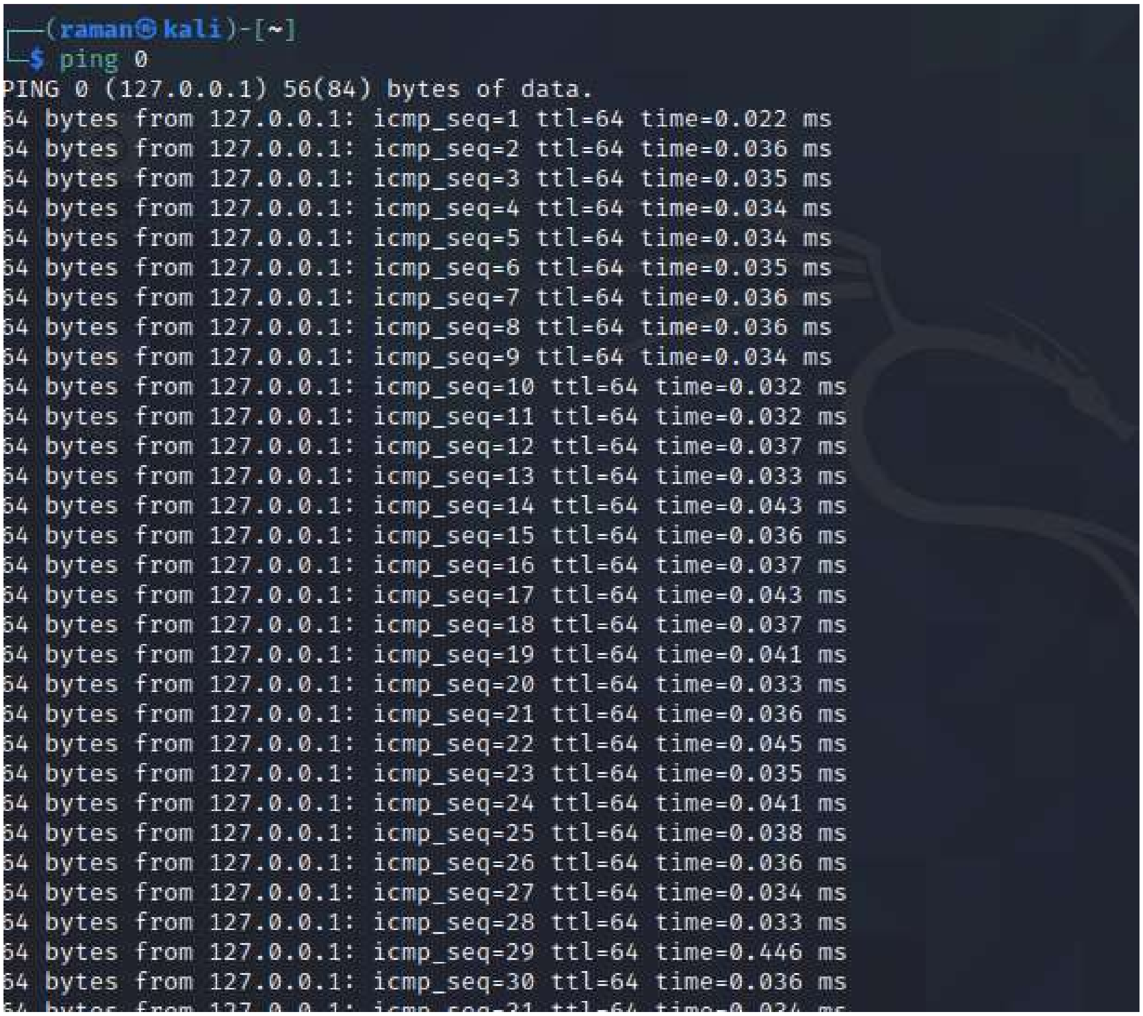
```
C:\Users\DELL>pathping

Usage: pathping [-g host-list] [-h maximum_hops] [-i address] [-n]
                [-p period] [-q num_queries] [-w timeout]
                [-4] [-6] target_name

Options:
    -g host-list     Loose source route along host-list.
    -h maximum_hops  Maximum number of hops to search for target.
    -i address       Use the specified source address.
    -n               Do not resolve addresses to hostnames.
    -p period        Wait period milliseconds between pings.
    -q num_queries   Number of queries per hop.
    -w timeout       Wait timeout milliseconds for each reply.
    -4               Force using IPv4.
    -6               Force using IPv6.

C:\Users\DELL>
```

Nbtstat

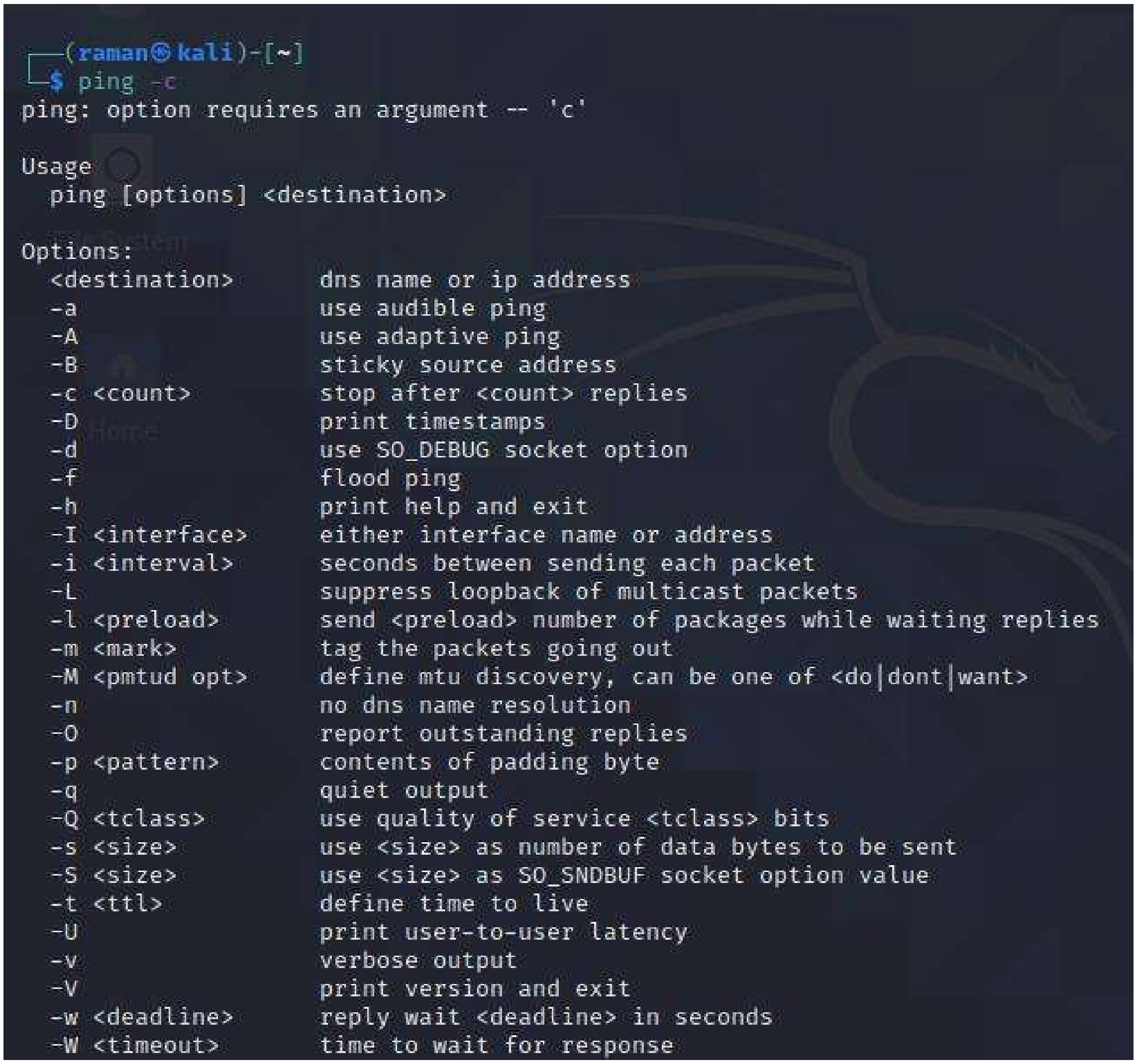


```
C:\Users\DELL>nbtstat

Displays protocol statistics and current TCP/IP connections using NBT
(NetBIOS over TCP/IP).

NBTSTAT [ [-a RemoteName] [-A IP address] [-c] [-n]
        [-r] [-R] [-RR] [-s] [-S] [interval] ]

  -a   (adapter status) Lists the remote machine's name table given its name
  -A   (Adapter status) Lists the remote machine's name table given its
                        IP address.
  -c   (cache)          Lists NBT's cache of remote [machine] names and their IP addresses
  -n   (names)          Lists local NetBIOS names.
  -r   (resolved)       Lists names resolved by broadcast and via WINS
  -R   (Reload)         Purges and reloads the remote cache name table
  -S   (Sessions)       Lists sessions table with the destination IP addresses
  -s   (sessions)       Lists sessions table converting destination IP
                        addresses to computer NETBIOS names.
  -RR  (ReleaseRefresh) Sends Name Release packets to WINS and then, starts Refresh

  RemoteName   Remote host machine name.
  IP address   Dotted decimal representation of the IP address.
  interval     Redisplays selected statistics, pausing interval seconds
               between each display. Press Ctrl+C to stop redisplaying
               statistics.

C:\Users\DELL>
```

Ping linux

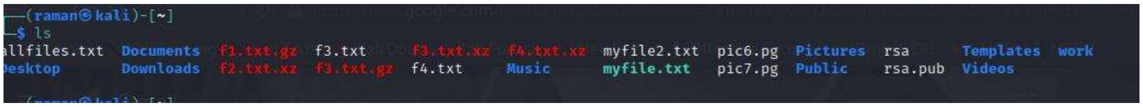


```
┌──(raman㉿kali)-[~]
└─$ ping 0
PING 0 (127.0.0.1) 56(84) bytes of data.
64 bytes from 127.0.0.1: icmp_seq=1 ttl=64 time=0.022 ms
64 bytes from 127.0.0.1: icmp_seq=2 ttl=64 time=0.036 ms
64 bytes from 127.0.0.1: icmp_seq=3 ttl=64 time=0.035 ms
64 bytes from 127.0.0.1: icmp_seq=4 ttl=64 time=0.034 ms
64 bytes from 127.0.0.1: icmp_seq=5 ttl=64 time=0.034 ms
64 bytes from 127.0.0.1: icmp_seq=6 ttl=64 time=0.035 ms
64 bytes from 127.0.0.1: icmp_seq=7 ttl=64 time=0.036 ms
64 bytes from 127.0.0.1: icmp_seq=8 ttl=64 time=0.036 ms
64 bytes from 127.0.0.1: icmp_seq=9 ttl=64 time=0.034 ms
64 bytes from 127.0.0.1: icmp_seq=10 ttl=64 time=0.032 ms
64 bytes from 127.0.0.1: icmp_seq=11 ttl=64 time=0.032 ms
64 bytes from 127.0.0.1: icmp_seq=12 ttl=64 time=0.037 ms
64 bytes from 127.0.0.1: icmp_seq=13 ttl=64 time=0.033 ms
64 bytes from 127.0.0.1: icmp_seq=14 ttl=64 time=0.043 ms
64 bytes from 127.0.0.1: icmp_seq=15 ttl=64 time=0.036 ms
64 bytes from 127.0.0.1: icmp_seq=16 ttl=64 time=0.037 ms
64 bytes from 127.0.0.1: icmp_seq=17 ttl=64 time=0.043 ms
64 bytes from 127.0.0.1: icmp_seq=18 ttl=64 time=0.037 ms
64 bytes from 127.0.0.1: icmp_seq=19 ttl=64 time=0.041 ms
64 bytes from 127.0.0.1: icmp_seq=20 ttl=64 time=0.033 ms
64 bytes from 127.0.0.1: icmp_seq=21 ttl=64 time=0.036 ms
64 bytes from 127.0.0.1: icmp_seq=22 ttl=64 time=0.045 ms
64 bytes from 127.0.0.1: icmp_seq=23 ttl=64 time=0.035 ms
64 bytes from 127.0.0.1: icmp_seq=24 ttl=64 time=0.041 ms
64 bytes from 127.0.0.1: icmp_seq=25 ttl=64 time=0.038 ms
64 bytes from 127.0.0.1: icmp_seq=26 ttl=64 time=0.036 ms
64 bytes from 127.0.0.1: icmp_seq=27 ttl=64 time=0.034 ms
64 bytes from 127.0.0.1: icmp_seq=28 ttl=64 time=0.033 ms
64 bytes from 127.0.0.1: icmp_seq=29 ttl=64 time=0.446 ms
64 bytes from 127.0.0.1: icmp_seq=30 ttl=64 time=0.036 ms
64 bytes from 127.0.0.1: icmp_seq=31 ttl=64 time=0.034 ms
```



```
┌──(raman㉿kali)-[~]
└─$ ping -c
ping: option requires an argument -- 'c'

Usage
  ping [options] <destination>

Options:
  <destination>      dns name or ip address
  -a                 use audible ping
  -A                 use adaptive ping
  -B                 sticky source address
  -c <count>         stop after <count> replies
  -D                 print timestamps
  -d                 use SO_DEBUG socket option
  -f                 flood ping
  -h                 print help and exit
  -I <interface>     either interface name or address
  -i <interval>      seconds between sending each packet
  -L                 suppress loopback of multicast packets
  -l <preload>       send <preload> number of packages while waiting replies
  -m <mark>          tag the packets going out
  -M <pmtud opt>     define mtu discovery, can be one of <do|dont|want>
  -n                 no dns name resolution
  -O                 report outstanding replies
  -p <pattern>       contents of padding byte
  -q                 quiet output
  -Q <tclass>        use quality of service <tclass> bits
  -s <size>          use <size> as number of data bytes to be sent
  -S <size>          use <size> as SO_SNDBUF socket option value
  -t <ttl>           define time to live
  -U                 print user-to-user latency
  -v                 verbose output
  -V                 print version and exit
  -w <deadline>      reply wait <deadline> in seconds
  -W <timeout>       time to wait for response
```

Ls



```
┌──(raman㉿kali)-[~]
└─$ ls
llfiles.txt  Documents  f1.txt.gz  f3.txt     f3.txt.xz  f4.txt.xz  myfile2.txt  pic6.pg  Pictures  rsa      Templates  work
esktop       Downloads  f2.txt.xz  f3.txt.gz  f4.txt     Music      myfile.txt   pic7.pg  Public    rsa.pub  Videos

┌──(raman㉿kali)-[~]
```