

```

anish@anish-UC01654:~$ hostname
anish-UC01654
anish@anish-UC01654:~$ netstat -r
Kernel IP routing table
Destination      Gateway           Genmask           Flags   MSS Window  irtt Iface
default          _gateway         0.0.0.0           UG      0 0        0 wlo1
link-local       0.0.0.0          255.255.0.0       U        0 0        0 wlo1
192.168.43.0     0.0.0.0          255.255.255.0     U        0 0        0 wlo1
anish@anish-UC01654:~$ netstat -lat
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp      0      0 localhost:27017         0.0.0.0:*               LISTEN
tcp      0      0 0.0.0.0:netbios-ssn    0.0.0.0:*               LISTEN
tcp      0      0 localhost:domain       0.0.0.0:*               LISTEN
tcp      0      0 localhost:ipp           0.0.0.0:*               LISTEN
tcp      0      0 localhost:postgresql   0.0.0.0:*               LISTEN
tcp      0      0 0.0.0.0:microsoft-ds   0.0.0.0:*               LISTEN
tcp      0      0 anish-UC01654:58832    185.199.111.154:https   ESTABLISHED
tcp      0      0 anish-UC01654:34676    151.101.152.133:https   ESTABLISHED
tcp      0      0 anish-UC01654:34678    151.101.152.133:https   ESTABLISHED
tcp      104     0 anish-UC01654:49844    lb-192-30-253-113:https CLOSE_WAIT
tcp      0      0 anish-UC01654:34686    151.101.152.133:https   ESTABLISHED
tcp      0      0 anish-UC01654:34674    151.101.152.133:https   ESTABLISHED
tcp      0      0 anish-UC01654:56410    lb-192-30-253-124:https ESTABLISHED
tcp      0      0 anish-UC01654:58812    185.199.111.154:https   ESTABLISHED
tcp      25     0 anish-UC01654:48362    lb-192-30-253-112:https CLOSE_WAIT
tcp      0      0 anish-UC01654:42942    45.55.41.223:http       CLOSE_WAIT
tcp6     0      0 [::]:netbios-ssn      [::]:*                  LISTEN
tcp6     0      0 ip6-localhost:ipp     [::]:*                  LISTEN
tcp6     0      0 [::]:microsoft-ds     [::]:*                  LISTEN
tcp6     0      0 anish-UC01654:34424    del03s13-in-x13.1:https ESTABLISHED
tcp6     0      0 anish-UC01654:60356    2404:6800:4003:c03:5228 ESTABLISHED
tcp6     1      0 anish-UC01654:60358    2404:6800:4003:c03:5228 CLOSE_WAIT
tcp6     0      0 anish-UC01654:39758    2606:4700:10::681:https ESTABLISHED
anish@anish-UC01654:~$ ping google.com
PING google.com(del03s06-in-x0e.1e100.net (2404:6800:4002:805::200e)) 56 data bytes
64 bytes from del03s06-in-x0e.1e100.net (2404:6800:4002:805::200e): icmp_seq=1
ttl=54 time=49.3 ms
64 bytes from del03s06-in-x0e.1e100.net (2404:6800:4002:805::200e): icmp_seq=2
ttl=54 time=51.9 ms
64 bytes from del03s06-in-x0e.1e100.net (2404:6800:4002:805::200e): icmp_seq=3
ttl=54 time=61.9 ms
64 bytes from del03s06-in-x0e.1e100.net (2404:6800:4002:805::200e): icmp_seq=4
ttl=54 time=37.6 ms
64 bytes from del03s06-in-x0e.1e100.net (2404:6800:4002:805::200e): icmp_seq=5
ttl=54 time=36.2 ms
^C
--- google.com ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4007ms
rtt min/avg/max/mdev = 36.206/47.414/61.900/9.546 ms
anish@anish-UC01654:~$ ifconfig
enp1s0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    ether 18:60:24:16:91:34 txqueuelen 1000 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    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 14719 bytes 4219960 (4.2 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 14719 bytes 4219960 (4.2 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

```

```
wlo1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.43.39 netmask 255.255.255.0 broadcast 192.168.43.255
    inet6 2405:204:3329:7263:fc52:d283:3fa8:936e prefixlen 64 scopeid
0x0<global>
    inet6 2405:204:3329:7263:5b8a:444e:7487:c74c prefixlen 64 scopeid
0x0<global>
    inet6 fe80::fc30:e4de:bcf7:4c00 prefixlen 64 scopeid 0x20<link>
    ether f8:28:19:8e:ef:f3 txqueuelen 1000 (Ethernet)
    RX packets 171810 bytes 145133295 (145.1 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 131562 bytes 52066430 (52.0 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
anish@anish-UC01654:~$ nslookup google.com
Server:      127.0.0.53
Address:     127.0.0.53#53
```

Non-authoritative answer:

```
Name:   google.com
Address: 216.58.196.206
Name:   google.com
Address: 2404:6800:4002:805::200e
```

```
anish@anish-UC01654:~$ traceroute google.com
traceroute to google.com (216.58.196.206), 30 hops max, 60 byte packets
 1 * _gateway (192.168.43.1) 48.704 ms 48.977 ms
 2 * * *
 3 10.71.83.3 (10.71.83.3) 77.357 ms 10.71.83.19 (10.71.83.19) 82.304 ms
82.436 ms
 4 172.25.107.68 (172.25.107.68) 77.286 ms 172.25.107.72 (172.25.107.72) 77.253
ms 172.25.107.68 (172.25.107.68) 82.237 ms
 5 172.25.107.67 (172.25.107.67) 81.666 ms 81.925 ms 172.25.107.71
(172.25.107.71) 82.035 ms
 6 172.16.26.245 (172.16.26.245) 81.587 ms 172.16.26.249 (172.16.26.249) 33.483
ms 33.315 ms
 7 * * *
 8 * * *
 9 * * *
10 74.125.48.68 (74.125.48.68) 51.317 ms 52.041 ms 72.14.216.200
(72.14.216.200) 51.178 ms
11 108.170.251.97 (108.170.251.97) 41.509 ms 41.653 ms 108.170.251.113
(108.170.251.113) 40.611 ms
12 216.239.47.99 (216.239.47.99) 45.225 ms 40.325 ms 40.145 ms
13 kul06s14-in-f206.1e100.net (216.58.196.206) 40.046 ms 40.974 ms 38.351 ms
```

```
anish@anish-UC01654:~$ arp
Address                  HWtype  HWaddress           Flags Mask            Iface
_gateway                ether    06:92:26:a2:1b:6e    C                     wlo1
android-6d972c7cce46e67 ether    bc:79:ad:56:1f:a1    C                     wlo1
```

```
anish@anish-UC01654:~$ telnet
telnet> ^C
```

```
anish@anish-UC01654:~$ route
```

Kernel IP routing table

Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
default	_gateway	0.0.0.0	UG	600	0	0	wlo1
link-local	0.0.0.0	255.255.0.0	U	1000	0	0	wlo1
192.168.43.0	0.0.0.0	255.255.255.0	U	600	0	0	wlo1

```
anish@anish-UC01654:~$ sudo tcpdump
```

[sudo] password for anish:

```
tcpdump: verbose output suppressed, use -v or -vv for full protocol decode
listening on wlo1, link-type EN10MB (Ethernet), capture size 262144 bytes
15:22:44.929304 IP6 del03s15-in-x0e.1e100.net.443 > anish-UC01654.42698: UDP,
length 40
15:22:44.929320 IP6 del03s15-in-x0e.1e100.net.443 > anish-UC01654.42698: UDP,
length 18
15:22:44.929322 IP6 del03s15-in-x0e.1e100.net.443 > anish-UC01654.42698: UDP,
```

```
length 40
15:22:44.929324 IP6 del03s15-in-x0e.1e100.net.443 > anish-UC01654.42698: UDP,
length 18
15:22:44.929358 IP6 del03s15-in-x0e.1e100.net.443 > anish-UC01654.42698: UDP,
length 40
15:22:44.929360 IP6 del03s15-in-x0e.1e100.net.443 > anish-UC01654.42698: UDP,
length 18
15:22:44.939219 IP6 anish-UC01654.42698 > del03s15-in-x0e.1e100.net.443: UDP,
length 447
15:22:45.015075 IP6 del03s15-in-x0e.1e100.net.443 > anish-UC01654.42698: UDP,
length 21
^C
8 packets captured
8 packets received by filter
0 packets dropped by kernel
```