ASSIGNMENT 1

1. IFCONFIG

```
es    Terminal ▾                                    Sat 18:38 ●
                                      neo@neo-HP-Notebook: ~

 File  Edit  View  Search  Terminal  Help
(base) neo@neo-HP-Notebook:~$ ifconfig
enp1s0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
        ether 3c:52:82:8b:7a:de  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 13196  bytes 1257032 (1.2 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 13196  bytes 1257032 (1.2 MB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

wlo1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.43.22  netmask 255.255.255.0  broadcast 192.168.43.255
        inet6 2402:8100:3097:8300:b91c:40a5:17e5:5292  prefixlen 64  scopeid 0x0<global>
        inet6 2402:8100:3097:8300:dd7b:280d:6506:dc23  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::6cc5:53ed:2924:7d96  prefixlen 64  scopeid 0x20<link>
        ether 3c:95:09:87:4b:63  txqueuelen 1000  (Ethernet)
        RX packets 188197  bytes 218349767 (218.3 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 123533  bytes 25138685 (25.1 MB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

(base) neo@neo-HP-Notebook:~$ ▯
```

2. HOSTNAME and WHOAMI

```
                                      neo@neo-HP-Notebook: ~

 File  Edit  View  Search  Terminal  Help
(base) neo@neo-HP-Notebook:~$ hostname
neo-HP-Notebook
(base) neo@neo-HP-Notebook:~$ whoami
neo
(base) neo@neo-HP-Notebook:~$ ▯
```

3. NETSTAT

File Edit View Search Terminal Help

```
(base) neo@neo-HP-Notebook:~$ netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address          Foreign Address         State
tcp        0      0 neo-HP-Notebook:40760   ec2-52-36-163-40.:https ESTABLISHED
tcp        0      0 neo-HP-Notebook:48084   bom12s03-in-f14.1:https TIME_WAIT
tcp6       0      0 neo-HP-Notebook:37724   whatsapp-cdn6-shv:https ESTABLISHED
tcp6       0      0 neo-HP-Notebook:56182   bom05s12-in-x0e.1:https ESTABLISHED
tcp6       0      0 neo-HP-Notebook:37718   whatsapp-cdn6-shv:https ESTABLISHED
tcp6       0      0 neo-HP-Notebook:60238   bom05s10-in-x03.1:https ESTABLISHED
tcp6       0      0 neo-HP-Notebook:49604   bom05s15-in-x0a.1:https ESTABLISHED
tcp6       0      0 neo-HP-Notebook:47530   bom07s10-in-x0e.1:https ESTABLISHED
tcp6       0      0 neo-HP-Notebook:53358   2404:6800:4003:c0:https ESTABLISHED
tcp6       0      0 neo-HP-Notebook:41622   bom05s11-in-x03.1e:http ESTABLISHED
tcp6       0      0 neo-HP-Notebook:43162   bom07s15-in-x0e.1:https ESTABLISHED
tcp6       0      0 neo-HP-Notebook:41616   bom05s11-in-x03.1e:http ESTABLISHED
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags       Type       State         I-Node   Path
unix  2      [ ]         DGRAM                     27515    /run/user/1000/systemd/notify
unix  2      [ ]         DGRAM                     24997    /run/user/121/systemd/notify
unix  3      [ ]         DGRAM                     1331     /run/systemd/notify
unix  9      [ ]         DGRAM                     1346     /run/systemd/journal/socket
unix  23     [ ]         DGRAM                     1351     /run/systemd/journal/dev-log
unix  2      [ ]         DGRAM                     1363     /run/systemd/journal/syslog
unix  2      [ ]         DGRAM                     292631   /run/wpa_supplicant/wlo1
unix  3      [ ]         STREAM     CONNECTED      40191    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED      28766    @/tmp/dbus-s5PNIQRM
unix  3      [ ]         STREAM     CONNECTED      24136
unix  3      [ ]         STREAM     CONNECTED      309358
unix  3      [ ]         STREAM     CONNECTED      31271    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED      27143
unix  3      [ ]         STREAM     CONNECTED      23809
unix  3      [ ]         STREAM     CONNECTED      308512
unix  3      [ ]         STREAM     CONNECTED      31423    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED      30527    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED      33797    @/tmp/.ICE-unix/1353
```

4. ROUTE

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```
(base) neo@neo-HP-Notebook:~$ 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
(base) neo@neo-HP-Notebook:~$ 
```

5 TRACEPATH

```
                                                neo@neo-HP-Notebook: ~
File  Edit  View  Search  Terminal  Help
(base) neo@neo-HP-Notebook:~$ tracepath google.com
 1?: [LOCALHOST]                        0.022ms pmtu 1400
 1:  2402:8100:3097:8300::af                              1.975ms
 1:  2402:8100:3097:8300::af                              2.852ms
 2:  no reply
 3:  2402:8100:1:0:80::300                        72.538ms
 4:  2402:8100:1:0:29:1:0:3d                      58.929ms
 5:  ???                                    835.787ms asymm  6
 6:
???                                       898.318ms asymm  7
 7:  no reply
 8:  ???                                      54.154ms asymm 11
 9:  no reply
10:  no reply
11:  no reply
12:  no reply
13:  no reply
14:  no reply
15:  no reply
16:  no reply
17:  no reply
18:  no reply
19:  no reply
20:  no reply
21:  no reply
22:  no reply
23:  no reply
24:  no reply
25:  no reply
26:  no reply
27:  no reply
28:  no reply
29:  no reply
30:  no reply
     Too many hops: pmtu 1400
```

6. NSLOOKUP

```
                                                neo@neo-HP-Notebook: ~
File  Edit  View  Search  Terminal  Help
(base) neo@neo-HP-Notebook:~$ nslookup google.com
Server:         127.0.0.53
Address:        127.0.0.53#53

Non-authoritative answer:
Name:   google.com
Address: 216.58.203.206
Name:   google.com
Address: 2404:6800:4009:803::200e

(base) neo@neo-HP-Notebook:~$
```

7. ARP

```
neo@neo-HP-Notebook: ~

File  Edit  View  Search  Terminal  Help
(base) neo@neo-HP-Notebook:~$ arp
Address                   HWtype  HWaddress           Flags Mask           Iface
_gateway                  ether   28:16:7f:c0:6b:fa   C                    wlo1
(base) neo@neo-HP-Notebook:~$ arp -a
_gateway (192.168.43.1) at 28:16:7f:c0:6b:fa [ether] on wlo1
(base) neo@neo-HP-Notebook:~$ []
```