

ASSIGNMENT

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S4_CSE
FOSS
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1. Network interfacing, assign IP address and netmask

```
user@user-Veriton-Series: ~  
user@user-Veriton-Series:~$ ifconfig -a  
eth2      Link encap:Ethernet  HWaddr 74:e6:e2:4e:e3:48  
          UP BROADCAST MULTICAST  MTU:1500  Metric:1  
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0  
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:1000  
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)  
  
lo        Link encap:Local Loopback  
          inet addr:127.0.0.1  Mask:255.0.0.0  
          inet6 addr: ::1/128 Scope:Host  
          UP LOOPBACK RUNNING  MTU:65536  Metric:1  
          RX packets:3406 errors:0 dropped:0 overruns:0 frame:0  
          TX packets:3406 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:0  
          RX bytes:295236 (295.2 KB)  TX bytes:295236 (295.2 KB)  
  
wlan0     Link encap:Ethernet  HWaddr ac:d1:b8:c7:eb:89  
          inet addr:192.168.43.96  Bcast:192.168.43.255  Mask:255.255.255.0  
          inet6 addr: fe80::aed1:b8ff:fec7:eb89/64 Scope:Link  
          inet6 addr: 2405:204:d003:f354:f869:4c1:69e7:189f/64 Scope:Global  
          inet6 addr: 2405:204:d003:f354:aed1:b8ff:fec7:eb89/64 Scope:Global  
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
          RX packets:10020 errors:0 dropped:0 overruns:0 frame:55493  
          TX packets:35164 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:1000  
          RX bytes:31366031 (31.3 MB)  TX bytes:11996792 (11.9 MB)  
          Interrupt:18  
  
user@user-Veriton-Series:~$ sudo ifconfig lo 192.168.1.9 netmask 255.255.255.0 up  
user@user-Veriton-Series:~$ ifconfig -a  
eth2      Link encap:Ethernet  HWaddr 74:e6:e2:4e:e3:48  
          UP BROADCAST MULTICAST  MTU:1500  Metric:1  
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0  
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:1000  
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)  
  
lo        Link encap:Local Loopback  
          inet addr:192.168.1.9  Mask:255.255.255.0  
          inet6 addr: ::1/128 Scope:Host  
          UP LOOPBACK RUNNING  MTU:65536  Metric:1  
          RX packets:3406 errors:0 dropped:0 overruns:0 frame:0  
          TX packets:3406 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:0  
          RX bytes:295236 (295.2 KB)  TX bytes:295236 (295.2 KB)  
  
wlan0     Link encap:Ethernet  HWaddr ac:d1:b8:c7:eb:89  
          inet addr:192.168.43.96  Bcast:192.168.43.255  Mask:255.255.255.0  
          inet6 addr: fe80::aed1:b8ff:fec7:eb89/64 Scope:Link  
          inet6 addr: 2405:204:d003:f354:f869:4c1:69e7:189f/64 Scope:Global  
          inet6 addr: 2405:204:d003:f354:aed1:b8ff:fec7:eb89/64 Scope:Global  
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
          RX packets:38320 errors:0 dropped:0 overruns:0 frame:56532  
          TX packets:35173 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:1000  
          RX bytes:31366073 (31.3 MB)  TX bytes:11997514 (11.9 MB)  
          Interrupt:18  
  
user@user-Veriton-Series:~$
```

2. Gateway configuration

```
user@user-Veriton-Series: ~  
user@user-Veriton-Series:~$ sudo route add default gw 192.168.1.1  
SIOCADDRT: File exists  
user@user-Veriton-Series:~$ ifconfig -a  
eth2      Link encap:Ethernet  HWaddr 74:e6:e2:4e:e3:48  
          UP BROADCAST MULTICAST  MTU:1500  Metric:1  
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0  
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:1000  
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)  
  
lo        Link encap:Local Loopback  
          inet addr:192.168.1.9  Mask:255.255.255.0  
          inet6 addr: ::1/128 Scope:Host  
          UP LOOPBACK RUNNING  MTU:65536  Metric:1  
          RX packets:3414 errors:0 dropped:0 overruns:0 frame:0  
          TX packets:3414 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:0  
          RX bytes:295732 (295.7 KB)  TX bytes:295732 (295.7 KB)  
  
wlan0     Link encap:Ethernet  HWaddr ac:d1:b8:c7:eb:89  
          inet addr:192.168.43.96  Bcast:192.168.43.255  Mask:255.255.255.0  
          inet6 addr: fe80::aed1:b8ff:fec7:eb89/64 Scope:Link  
          inet6 addr: 2405:204:d003:f354:f869:4c1:69e7:189f/64 Scope:Global  
          inet6 addr: 2405:204:d003:f354:aed1:b8ff:fec7:eb89/64 Scope:Global  
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
          RX packets:38340 errors:0 dropped:0 overruns:0 frame:67482  
          TX packets:35202 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:1000  
          RX bytes:31368079 (31.3 MB)  TX bytes:12000243 (12.0 MB)  
          Interrupt:18  
  
user@user-Veriton-Series:~$ sudo route add default gw 192.168.1.1  
SIOCADDRT: File exists  
user@user-Veriton-Series:~$
```

3. Configure DNS

```
user@user-Veriton-Series: ~  
user@user-Veriton-Series:~$ sudo echo "nameserver 192.168.11.1" >> /etc/resolv.conf  
bash: /etc/resolv.conf: Permission denied  
user@user-Veriton-Series:~$ nano /etc/resolv.conf  
user@user-Veriton-Series:~$
```

```
user@user-Veriton-Series: ~  
GNU nano 2.2.6 File: /etc/resolv.conf  
# Dynamic resolv.conf(5) file for glibc resolver(3) generated by resolvconf(8)  
# DO NOT EDIT THIS FILE BY HAND -- YOUR CHANGES WILL BE OVERWRITTEN  
nameserver 127.0.1.1  
  
[ Read 3 lines (Warning: No write permission) ]  
^G Get Help      ^O WriteOut      ^R Read File     ^Y Prev Page     ^K Cut Text       ^C Cur Pos  
^X Exit          ^J Justify       ^W Where Is     ^V Next Page     ^U UnCut Text    ^T To Spell
```

4. IP tables

```
user@user-Veriton-Series: ~  
user@user-Veriton-Series:~$ sudo iptables -L  
Chain INPUT (policy ACCEPT)  
target    prot opt source                destination  
Chain FORWARD (policy ACCEPT)  
target    prot opt source                destination  
Chain OUTPUT (policy ACCEPT)  
target    prot opt source                destination  
user@user-Veriton-Series:~$
```