Question-8:

check iwconfig/ifconfig to understand in detail about network interfaces.

ifconfig and iwconfig in Linux

- "ifconfig" displays information about all network interfaces on a system, including their IP addresses, MAC addresses, and other configuration details
- "iwconfig" specifically displays and configures settings related to wireless network interfaces, like the network name (SSID) and channel frequency.

ifconfig:

```
manoj@MyLinuxVM: ~
manoj@MyLinuxVM:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
        inet 192.168.76.43 netmask 255.255.255.0 broadcast 192.168.76.255
        inet6 2409:408d:4e9a:c2af:a00:27ff:fefb:5aa7 prefixlen 64 scopeid 0x0<global>
inet6 fe80::a00:27ff:fefb:5aa7 prefixlen 64 scopeid 0x20<link>
        inet6 2409:408d:4e9a:c2af:899f:d6ef:15c3:95ac prefixlen 64 scopeid 0x0<global>
        ether 08:00:27:fb:5a:a7 txqueuelen 1000 (Ethernet)
        RX packets 58 bytes 25271 (25.2 KB)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 211 bytes 41300 (41.3 KB)
        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 203 bytes 16085 (16.0 KB)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 203 bytes 16085 (16.0 KB)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
manoj@MyLinuxVM:~$
```

enp0s3: ethernet interface

MTU - maximum transmission unit - maximum packet size - 1500 bytes

inet - Ipv4 address of the interface

ether - mac address of the interface

broadcast ip -192.168.76.255

iwconfig:

```
manoj@MyLinuxVM:~$ iwconfig
lo no wireless extensions.
enp0s3 no wireless extensions.
manoj@MyLinuxVM:~$
manoj@MyLinuxVM:~$
```

Since no wireless connections made