Configure your modem/hotspot to operate only in 2.4Ghz and connect your laptop/Wi-Fi device, and capture the capability/properties in your Wi-Fi device. Repeat the same in 5Ghz and tabulate all the differences you observed during this

Changing my device hotspot to 2.4Ghz:



Checking the properties of wifi in system using cmd:

```
C:\Users\pavan>netsh wlan show interfaces
There is 1 interface on the system:
   Name
                           : Wi-Fi
                          : MediaTek MT7921 Wi-Fi 6 802.11ax PCIe Adapter
   Description
   GUID
                          : 9cea6653-53cb-431f-8bec-c93fb4f81baf
                           : d8:01:12:a8:da:f3
    Physical address
                          : Primary
    Interface type
   State
                           : connected
                          : realme 12x 5G
   SSID
    BSSID
                           : c2:4d:a6:76:66:61
   Network type
                           : Infrastructure
   Radio type
                           : 802.11n
    Authentication
                           : WPA2-Personal
   Cipher
                           : CCMP
                            Profile
    Connection mode
                            2.4 GHz
   Band
   Channel
                             72.2
   Receive rate (Mbps)
    Transmit rate (Mbps)
                             72.2
   Signal
                             83%
   Profile
                            realme 12x 5G
   Hosted network status : Not available
```

Observed:

Radio-type:802.11n

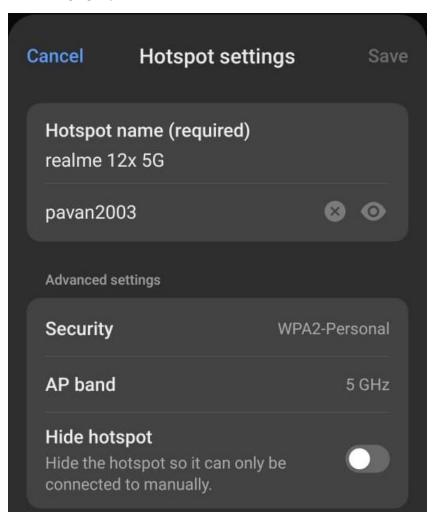
Channel: 11

Speed: 72/72 Mbps

Signal: 83%

Band: 2.4 GHz

Now changing My device band to 5GHZ:



Now checking the properties of my hotspot using cmd:

C:\Users\pavan>netsh wlan show interfaces There is 1 interface on the system: Name : Wi-Fi : MediaTek MT7921 Wi-Fi 6 802.11ax PCIe Adapter Description GUID : 9cea6653-53cb-431f-8bec-c93fb4f81baf : d8:01:12:a8:da:f3 Physical address Interface type : Primary : connected State SSID : realme 12x 5G BSSID : 56:15:63:3a:02:d1 Network type : Infrastructure : 802.11ac Radio type Authentication : WPA2-Personal Cipher : CCMP Connection mode : Profile Band : 5 GHz Channel : 36 Receive rate (Mbps) : 433.3 Transmit rate (Mbps) : 433.3 Signal : 93% Profile : realme 12x 5G

Properties observed:

Hosted network status : Not available

Radio-type:802.11ac

Channel: 36

Speed: 433/433 Mbps

Signal: 93%

Band: 5 GHz