

## WIFI TRAINING MODULE 1 ASSESSMENT SOLUTION

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2. Can you share the Wi-Fi devices that you are using day to day life, share that device's wireless capability/properties after connecting to network. Match your device to corresponding Wi-Fi Generations based on properties

Device	Wi-Fi Standard	Frequency Bands	Security
Vivo Y22	802.11ac/n (Wi-Fi 4,5)	2.4 GHz, 5 GHz	WPA2, WPA3
HP Laptop	802.11n/g/b/ac/a	2.4 GHz, 5 GHz	WPA2, WPA3
Smart TV	802.11n/ac	2.4 GHz, 5 GHz	WPA2, WPA3

The Wi-Fi properties in Laptop can be checked using **netsh wlan show drivers** and **netsh wlan show interfaces** command on the command prompt.

```
C:\Users\sakthi kumar>netsh wlan show drivers

Interface name: Wi-Fi

Driver               : Realtek RTL8821CE 802.11ac PCIe Adapter
Vendor               : Realtek Semiconductor Corp.
Provider             : Realtek Semiconductor Corp.
Date                 : 16-05-2024
Version              : 2024.10.229.0
INF file             : oem102.inf
Type                 : Native Wi-Fi Driver
Radio types supported : 802.11n 802.11g 802.11b 802.11ac 802.11n 802.11a
FIPS 140 mode supported : Yes
802.11w Management Frame Protection supported : Yes
```

```
C:\Windows\System32>netsh wlan show interfaces

There is 1 interface on the system:

Name                : Wi-Fi
Description          : Realtek RTL8821CE 802.11ac PCIe Adapter
GUID                : 6758d62b-c21d-478a-b04e-2a4cf44a2f58
Physical address     : 14:13:33:42:bd:d9
Interface type       : Primary
State                : connected
SSID                : vivo Y22
AP BSSID             : 5e:de:3a:26:56:fc
Band                 : 2.4 GHz
Channel              : 6
Network type         : Infrastructure
Radio type           : 802.11n
Authentication       : WPA2-Personal
Cipher               : CCMP
Connection mode      : Auto Connect
Receive rate (Mbps)  : 72.2
Transmit rate (Mbps) : 72.2
Signal               : 100%
Profile              : vivo Y22
QoS MSCS Configured  : 0
QoS Map Configured   : 0
QoS Map Allowed by Policy : 0

Hosted network status : Not available
```

Using these commands the band, channel, type of authentication adopted, the data link rate, signal strength AP BSSID ((Basic Service Set Identifier) unique MAC address assigned to a Wi-Fi Access Point (AP)) , Network Type, GUID, physical address, Interface Type and the radio type protocol used can be found.