**2. Explain the role of OFDMA in Wi-Fi 6 and how it improves network efficiency.**

* OFDMA stands for Orthogonal Frequency Division Multiple Access.
* It's a key feature introduced in Wi-Fi 6 to improve network efficiency and reduce latency, especially when many devices are connected.
* In earlier Wi-Fi versions (like Wi-Fi 5), one device would use the whole channel at a time, even if it sent only a small amount of data - this wasted bandwidth.
* With OFDMA, the channel is divided into smaller units called Resource Units (RUs).
* Multiple devices can send or receive data simultaneously using different RUs in the same channel.
* Like splitting a big highway into many small lanes, allowing several cars to travel side-by-side instead of waiting one by one.