**5. Difference between Bridge mode and Repeater mode.**

**Bridge Mode**

* Connects two separate networks and makes them work as a single network.
* Used to link two LANs or extend a wired network wirelessly.
* Devices on both networks can communicate without issues.
* Doesn’t create a new network; just extends the existing one.
* Helps reduce network congestion by forwarding only necessary traffic.
* **Example:** Connecting a warehouse and an office building wirelessly so that both share the same network resources like printers and servers.

**Repeater Mode**

* Extends the Wi-Fi range by rebroadcasting the signal.
* Used to remove dead zones and improve coverage.
* Devices connect to the repeater just like they would to a normal Wi-Fi Access Point.
* Can create a new network with the same SSID or a different one.
* Speeds might drop since it retransmits the signal.
* **Example:** Placing a Wi-Fi repeater in a hotel to extend network coverage from the lobby to guest rooms without requiring additional wired connections.