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**Network Topology:**

* Bus Topology: All devices are connected to a single backbone cable.Star Topology: All devices are connected to a central hub or switch.
* Ring Topology: Each device is connected to exactly two other devices, forming a single continuous pathway for signals.
* Mesh Topology: Devices are connected with many redundant interconnections between network nodes.
* Tree Topology: Hierarchical bus topology or a set of star networks connected to a linear bus.

**Intermediary Network Devices:**

* Router: Connects multiple networks and routes network traffic between them.
* Switch: Connects devices within a network and forwards data packets to the intended recipient.
* Hub: Passes data packets along to all devices in a network, regardless of the intended recipient.
* Bridge: Connects two different network segments and manages traffic between them.
* Gateway: Translates between two different protocols or data formats, allowing different systems to communicate.

**Network Components:**

* Network Interface Card (NIC): Hardware component that enables devices to connect to a network.
* Ethernet Cable: Physical cable used to connect devices in a wired network.
* Wireless Access Point (WAP): Device that allows wireless devices to connect to a wired network using Wi-Fi.
* Modem: Device that modulates and demodulates digital data for transmission over telephone or cable lines.
* Firewall: Network security device that monitors and controls incoming and outgoing network traffic.

**Type of Networks:**

* LAN (Local Area Network): Connects devices in a limited geographical area, such as a home, office, or campus.
* WAN (Wide Area Network): Spans a large geographical area, typically connecting multiple LANs or other networks together.
* MAN (Metropolitan Area Network): Covers a larger geographic area than a LAN but smaller than a WAN, usually within a city or metropolitan area.
* PAN (Personal Area Network): Connects devices in close proximity to an individual, typically within a range of a few meters.
* VPN (Virtual Private Network): Provides a secure connection between remote users and a private network over the internet, enabling users to access resources as if they were physically connected to the network.