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device such as PC, switch, Router, etc.

Step 3:- Complete the cabling. To create a network.

Step 4:- Assign IP Addresses to every PC.

Step 5:- Connecting PCs with Router

Step 6:- Configure interfaces of Router

Step 7:- Default gateway, Subnet Mask

Assign the default gateway of PC as 1.1.1.0

Assign the gateway of PC1 as 2.2.2.0

Step 8:- Test Connectivity by opening command prompt window on the end devices and try pinging the address which network operates on.

If it gives you a reply, it means your network was configured correctly.

Conclusion:- Thus we have configured Router successfully.

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1. Routers also support filtering and encapsulation like bridges.
2. Like bridges routers are also self-learning, as they can communicate their existence to other devices and can learn of the existence of new routers, nodes and LAN segments.
3. They route traffic by considering the network as a whole. It shows that they use a high level of intelligence.
4. The packet handled by router may include destination address, packet priority level, least-cost route, minimum route delay, minimum route distance.
5. Routers constantly monitor the condition of the network, as a whole to dynamically adapt to changes in the condition of the network.

Steps for configuring the router.

Step 1: - Open Cisco packet tracer.

Step 2: - Access your network & identify the networking



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Aim:- To connect the different networks and configure the router for communication.

Software required:- CISCO packet tracer student.

Theory:- Routers are used to connect both similar and dissimilar LANs. Router operates on the network layer of OSI Model using the physical layer, data link layer and network layer to provide connectivity addressing and switching. These are highly intelligent devices. In case of TCP/IP network, IP is used as addresses for network; this is the router which interprets the IP address and delivers the packet reliably.

Characteristics

Routers are Multi-port devices with high-speed backbones.