CSE3003 Lab 6

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Experiment: Configure of four networks (viz Mumbai, Delhi, Hyderabad and Kolkata). Where Mumbai and Delhi will use class C IP address and Kolkata and Hyderabad will use Class B IP address.

Software required: Cisco Packet Tracer.

Switches: A switch, in the context of networking, is a high-speed device that receives incoming data packets and redirects them to their destination on a local area network (LAN). Switches are networking devices operating at layer 2 or a data link layer of the OSI model. They connect devices in a network and use packet switching to send, receive or forward data packets or data frames over the network.

A switch has many ports, to which computers are plugged in.

Routers: Routers are networking devices which are responsible for receiving, analysing, and forwarding data packets among the connected computer networks. When a data packet arrives, the router inspects the destination address, consults its routing tables to decide the optimal route and then transfers the packet along this route. The router reads this layer, prioritizes the data, and chooses the best route to use for each transmission.

Steps:

- **1.** Setup four different network, namely Mumbai, Delhi, Kolkata and Hyderabad.
- 2. Each network in a particular city is connected by a switch.
- 3. Assign the default gateway IP of the devices succh that they are connected to the switch
- 4. Connect the four different networks to three routers.
- 5. Interconnect the routers, which ensures that the connections are interconnected

OUTPUT:

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