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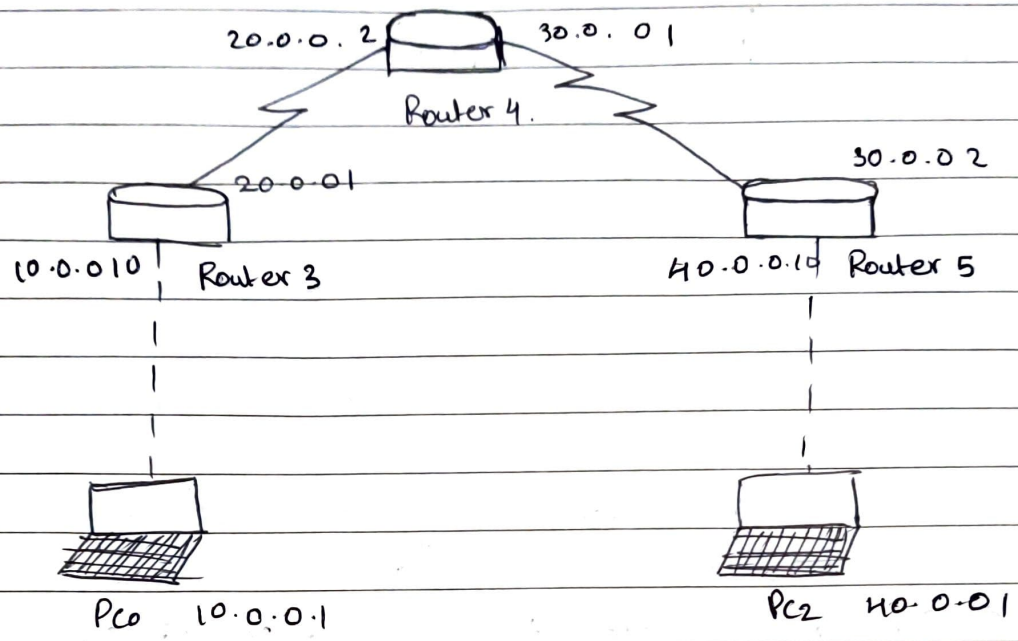
Arfath Kabir [1BM18CS130]

Topology



Procedure -

→ Connect PC0, PC2 with Router 0, Router 2
→ Connect Router 0 with Router 1
→ Connect Router 2 with Router 1
→ Use copper - Crossed - over for connection b/w the PC and router.
→ Use serial DCE for connecting b/w Routers 0

IP Configuration.

→ Set the IP address for both the PC's along with the subnet mask & default gateway
→ Configure the gateway for all their routers.
→ Check all the connections.
→ Now do IP routing for all the available routers so as to specify the routers destination address and the

next hop address.

→ Send a ping from one of the PC's and check whenever the packets are being recieved by the other PC.

Observation -

→ Once all the connections are done tried doing the ping, but we got a message that host unreachable, which means that the host is not connected.

→ To fix this we need to do static routing on all the routers.

→ After doing static routing we will be able to send data packets b/w PC's without any loss.

CLI Commands.

(i) For Router configuration.

→ Enable
→ Config. terminal
→ Interface. (Fast Ethernet)
→ IP address 10.0.0.10 255.0.0.0
→ No shut
→ Exit

(ii) For static routing for router 3.

→ Enable
→ Config. terminal
→ IP route 10.0.0.0 255.0.0.0 30.0.0.
→ IProute 20.0.0.0 255.0.0.0 30.0.0.1

(iii) Static Routing for Router 4

→ IP route 10.0.0.0 255.0.0.0 20.0.0.1
→ IP route 20.0.0.0 255.0.0.0 30.0.0.1

(iv) Static Routing for Router 5

→ IP route 10.0.0.0 255.0.0.0 30.0.0.1
→ IP route 20.0.0.0 255.0.0.0 30.0.0.1