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- simulate RIP using Cisco Packet Tracer

b) RIP simulation Just started a practical

Aim: To simulate RIP (Routing Information Protocol) using Cisco Packet Tracer and verify dynamic routing between routers.

Initial IP configuration

- \* PCs and routers assigned IP addresses on fast Ethernet and serial interface as per topology.
- \* Serial interface on DCE side configured with clock rate and bandwidth.
- \* Interfaces brought up using no shutdown command.

RIP configuration.

- \* Enable RIP on each router using router rip command
- \* Advertise directly connected networks using network <network-address> command.

Network connectivity verification.

- \* use ping from PC0 to PC1 to verify end-to-end connectivity
- \* Two routes exist between PC0 and PC1; RIP select the route with least hop count by default.
- \* use traceroute to verify the path taken by packets.

Dynamic Route Failover

- \* simulated link failure by disconnecting Router0 serial 0/0/1 to Router2 serial 0/0/1
- \* RIP automatically rerouted traffic via alternate path (through Router1) without manual intervention.

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configured in cisco as packet and stateless connectivity  
between PCs was verified and backup/alternate  
routes worked correctly during link failure.

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