

Program 5

To configure RIP routing protocol in Routers.

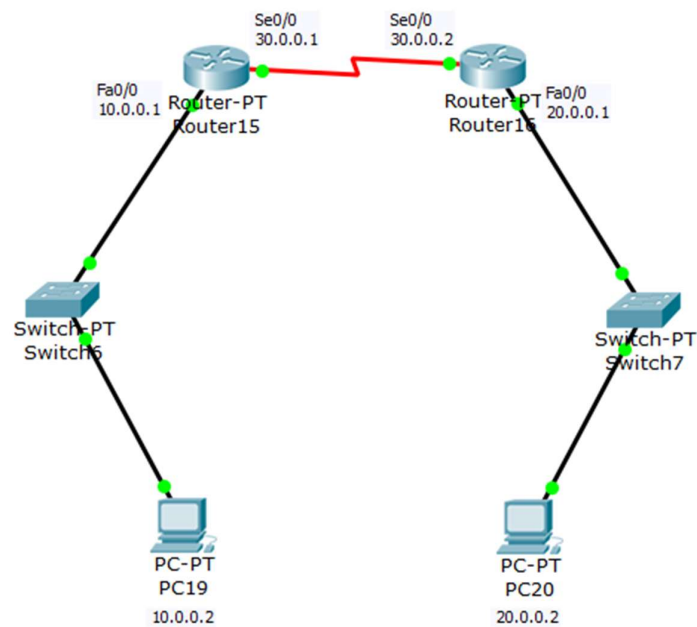


Figure 11: Topology

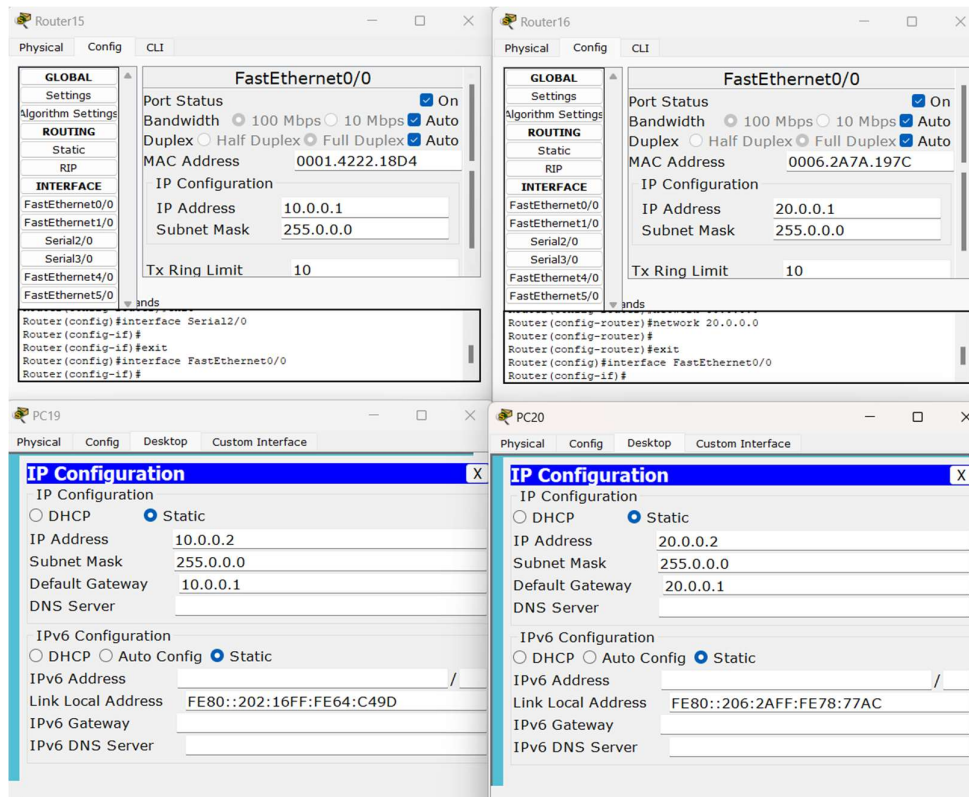


Figure 12: Router and PC IP addresses

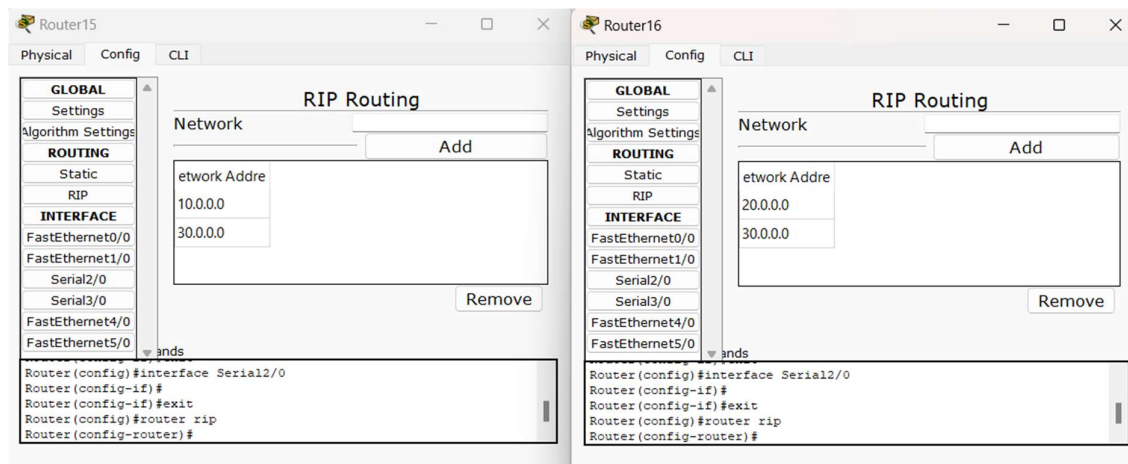


Figure 13: RIP networks

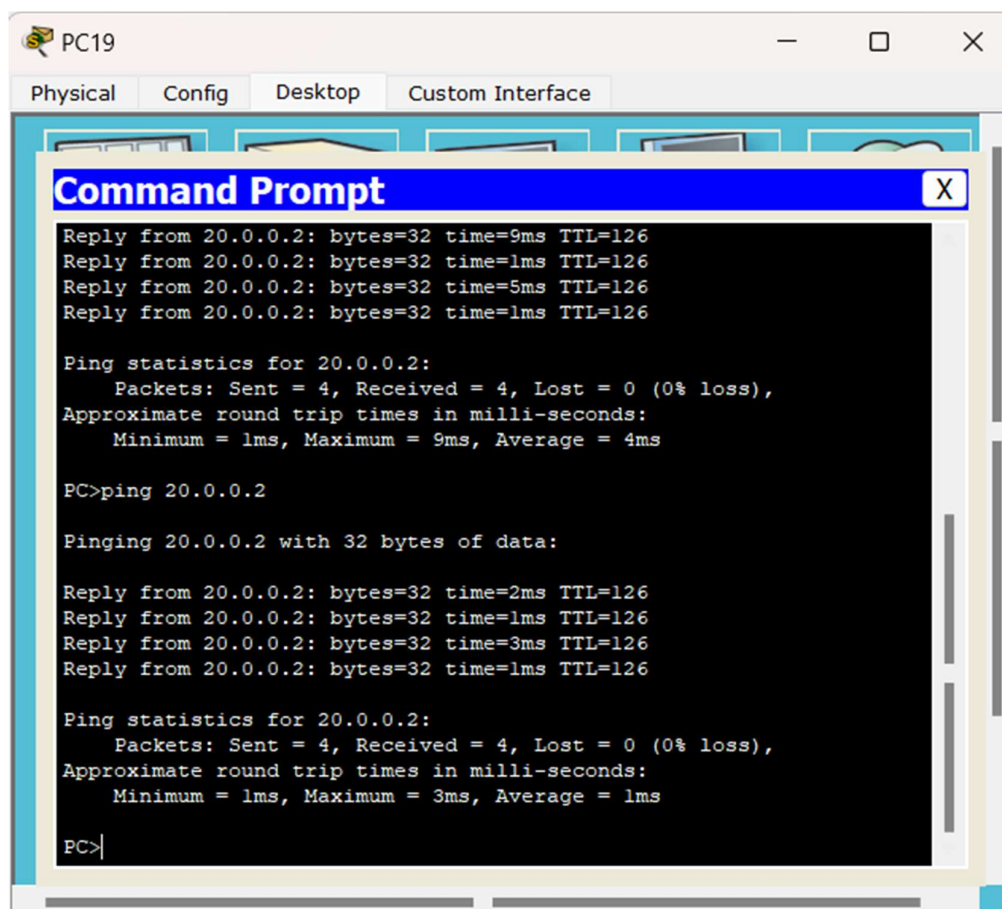


Figure 14: ping command output

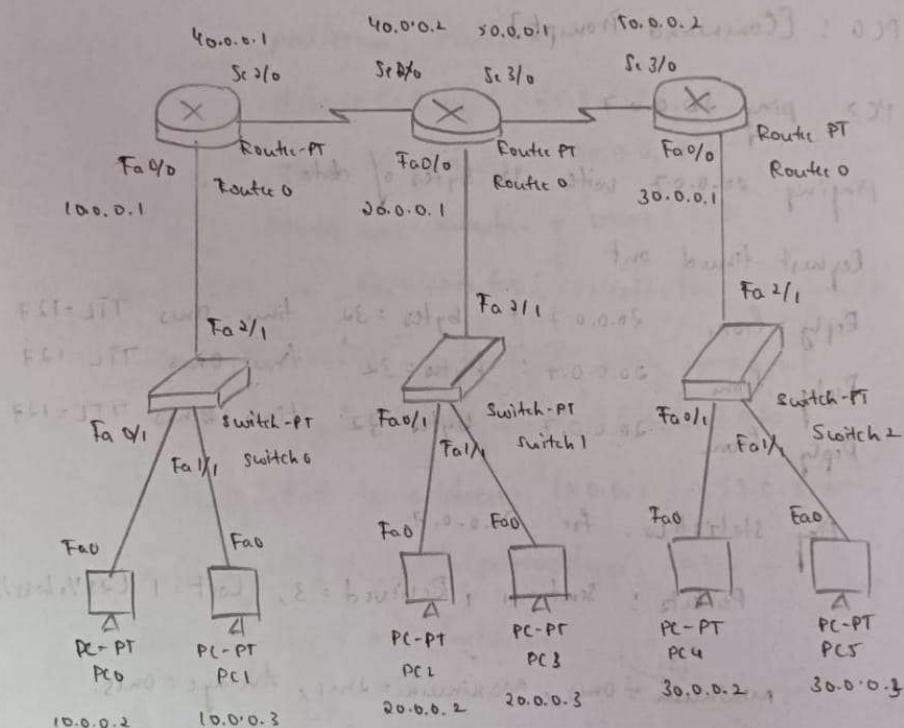
20-11-2024

Experiment 5:

Configure RIP routing Protocol in Routers.

Aim: To configure RIP routing Protocol in Routers and verify connectivity.

Topology:-



Procedure:-

1. Configure Connect the end devices with the switches which are in turn connected to the routers as shown in the topology.
2. Now, Open CLI in Router 0.
 Router > enable
 Router# config terminal

Figure 15: Observation book 1

Router (config) # router rip (19)
 Router (config-router) # network 10.0.0.0
 Router (config-router) # network 40.0.0.0

Open CLI in Router 1.

Router > enable
 Router # config terminal
 Router (config) # router rip
 Router (config-router) # network 40.0.0.0
 Router (config-router) # network 20.0.0.0
 Router (config-router) # network 50.0.0.0

Open CLI in Router 2

Router > enable
 Router # config terminal
 Router (config) # router rip
 Router (config-router) # network 50.0.0.0
 Router (config-router) # network 30.0.0.0

Give the IP addresses of the host to establish

the connection.

Observation: After configuring the default ~~to~~ RIP routing protocol, the end devices are able to communicate properly.

Output: Router 0

Router > enable

Router # show ip route

C 10.0.0.0/8 is directly connected, FastEthernet 0/0
 R 20.0.0.0/8 [120/1] via 40.0.0.2, 00:00:24, Serial 2/0
 R 30.0.0.0/8 [120/1] via 40.0.0.2, 00:00:24, Serial 2/0
 C 40.0.0.0/8 is directly connected, Serial 2/0
 R 50.0.0.0/8 [120/1] via 40.0.0.2, 00:00:24, Serial 2/0

Figure 16: Observation book 2