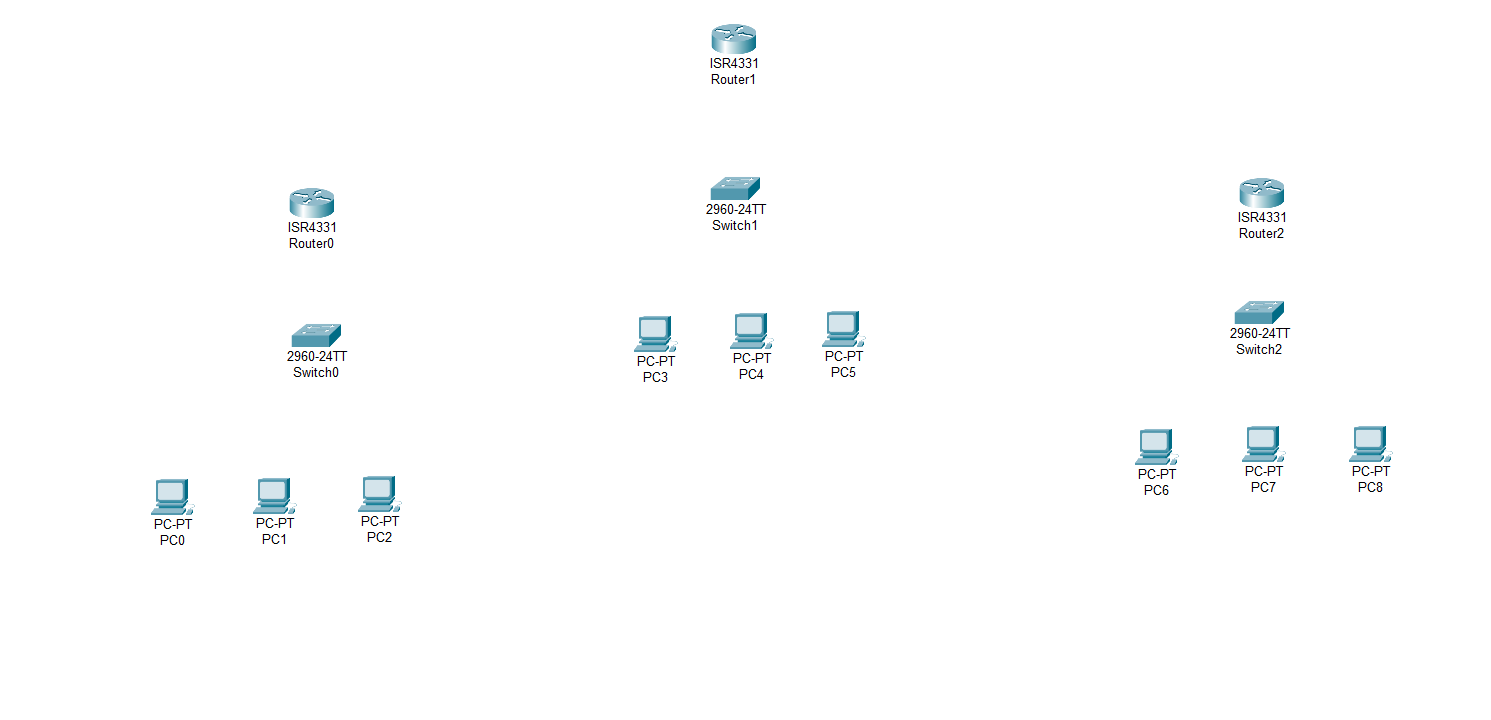
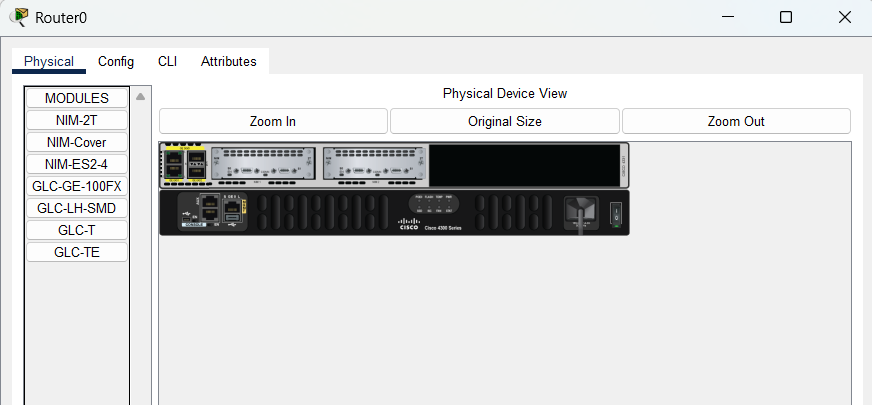
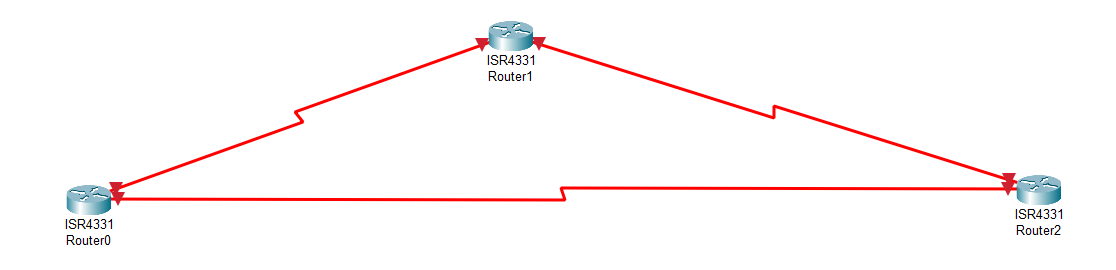
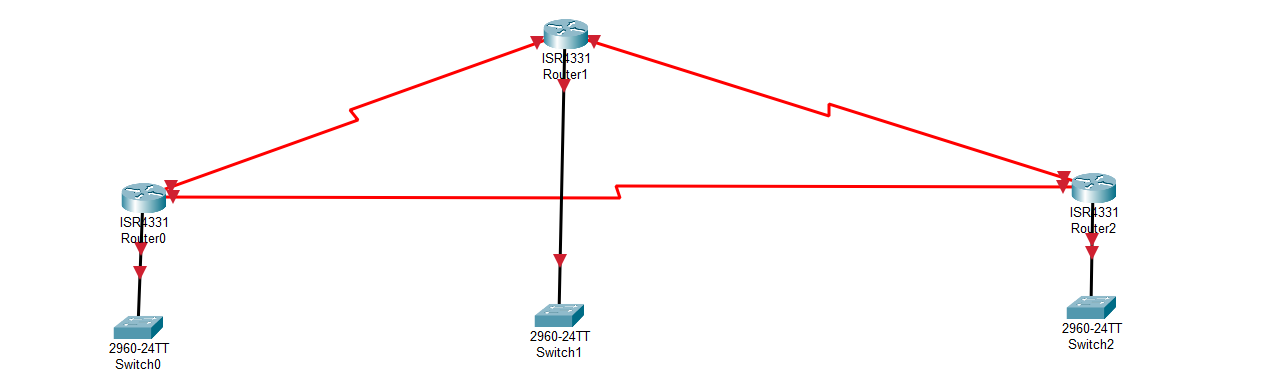
**Aim**: Perform dynamic routing protocol (RIP) and analyze the results.

**Step – 1:-** Open the Cisco Packet tracer and take three routers, three switch and nine PC’s.

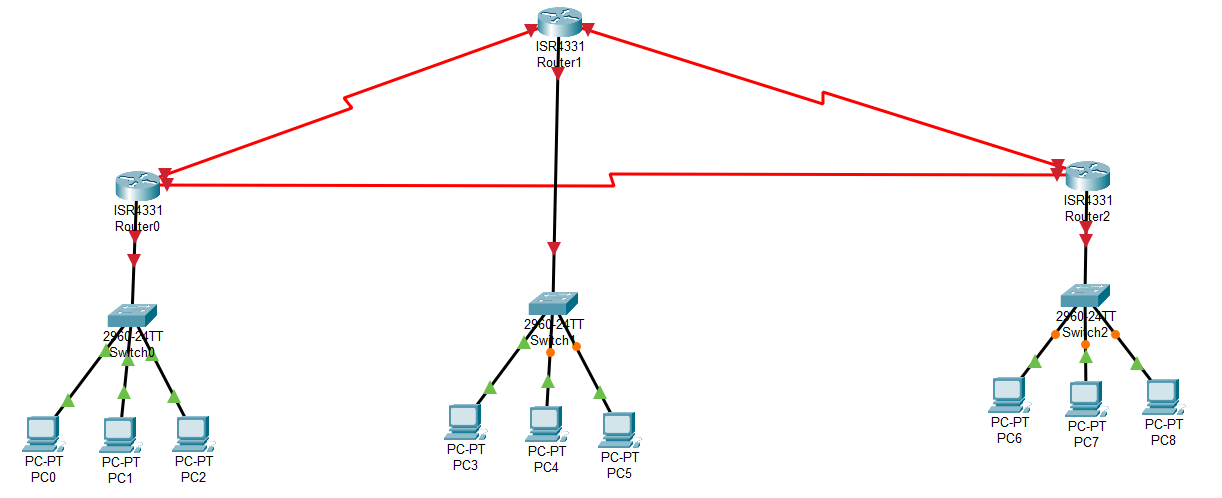
**Step – 2 :-**  To long distance communication we need to connect router using Serial DTE cable. For the serial port we have to open router turn off it and drag and drop WIC-1T on router and turn on router.

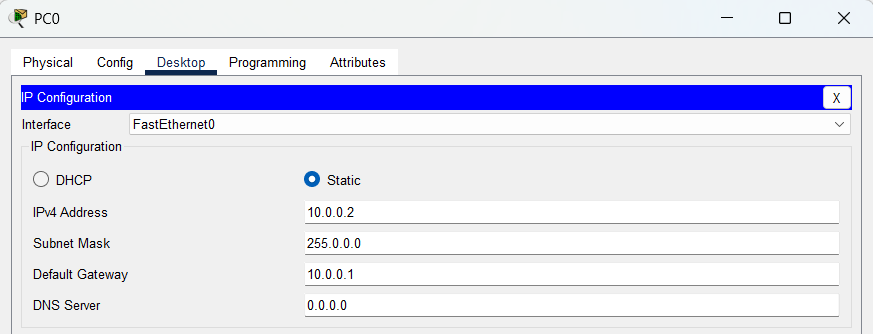
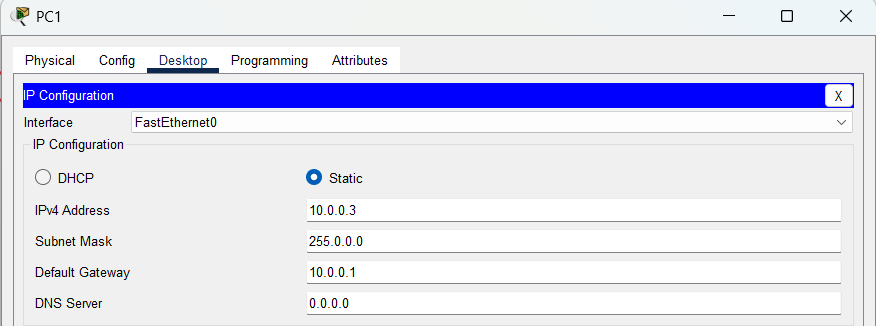
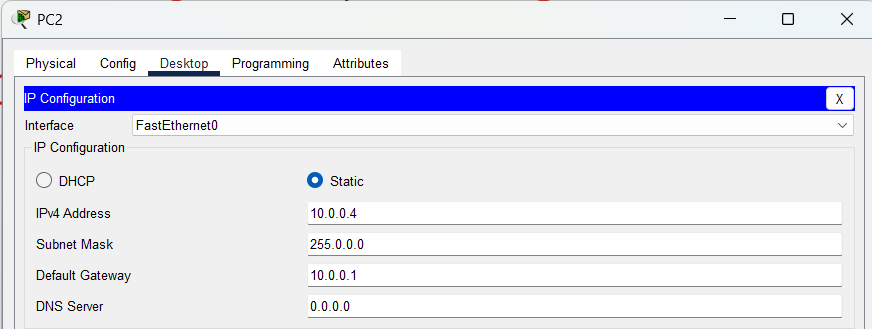
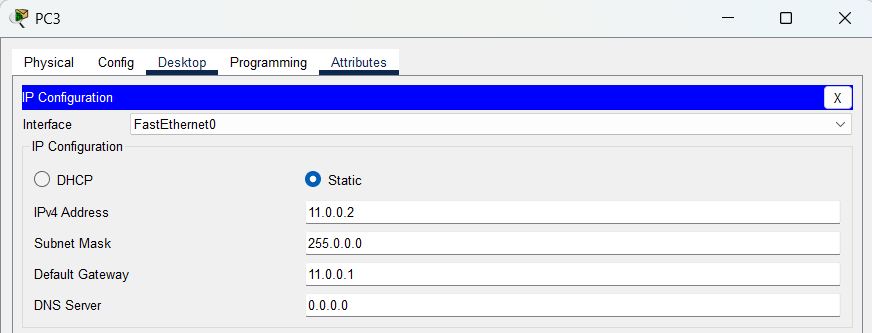
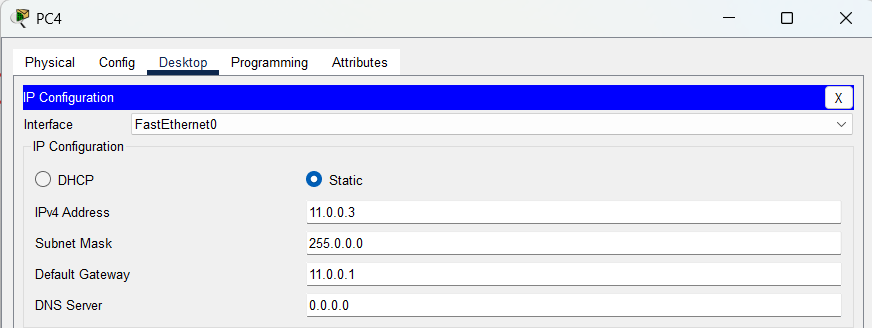
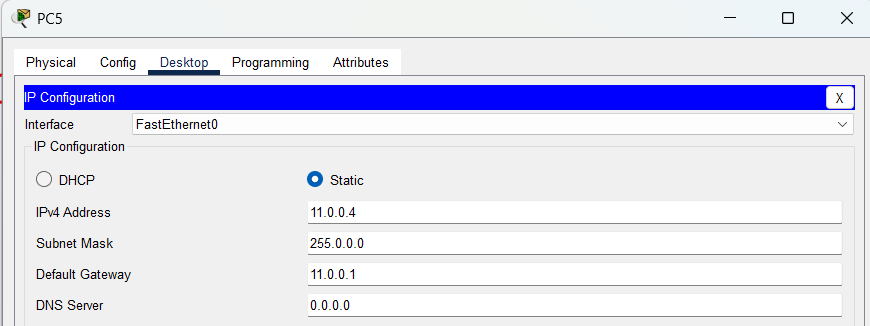
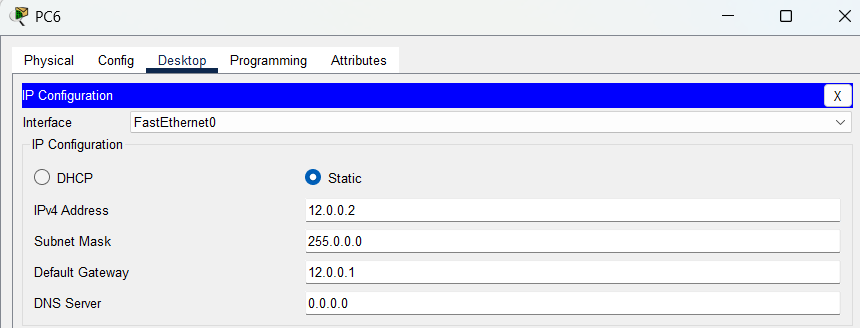
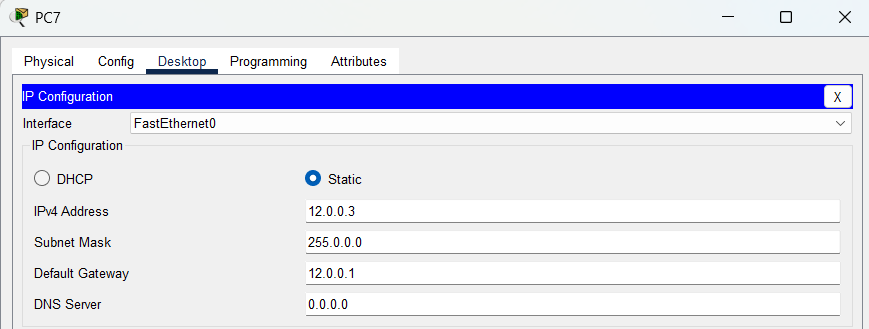
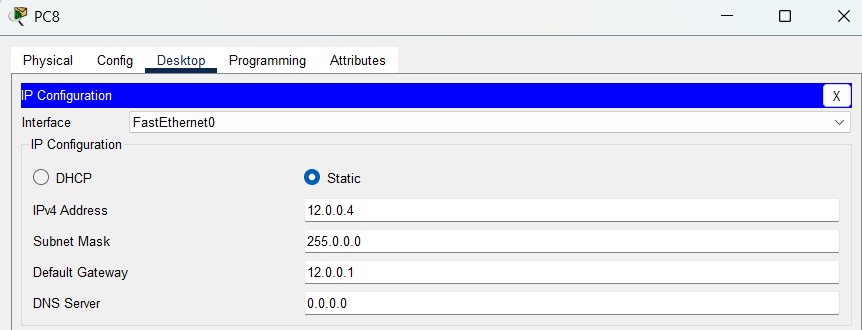


**Step – 3 :-**  Now Connect Two Routers Using Serial DTE Cable.

**Step – 4 :-**  Now Connect the Switches with routers using Copper Straight through cable In GigaEthernet Port.

**Step – 5 :-**  Now Connect PC’s with Switches using copper Straight through cable.

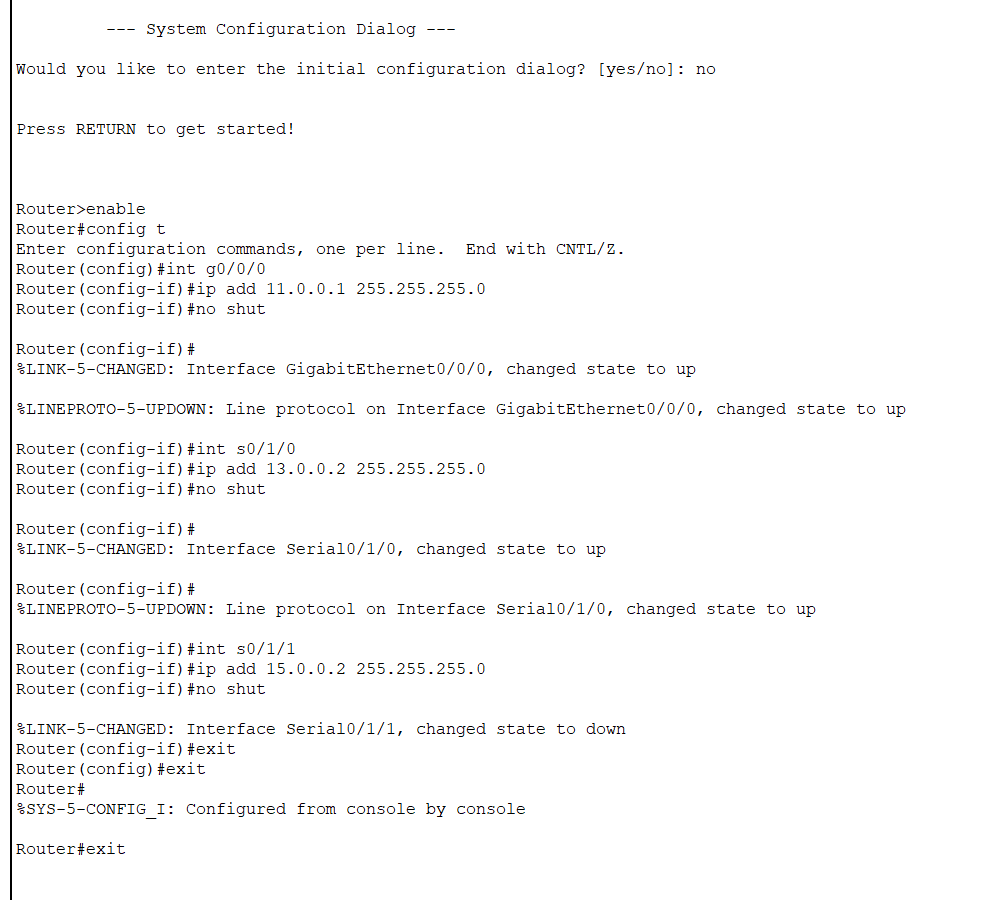


**Step – 6:-**  Now assign the IP address And Subnet mask and Gateway to all PC’s.

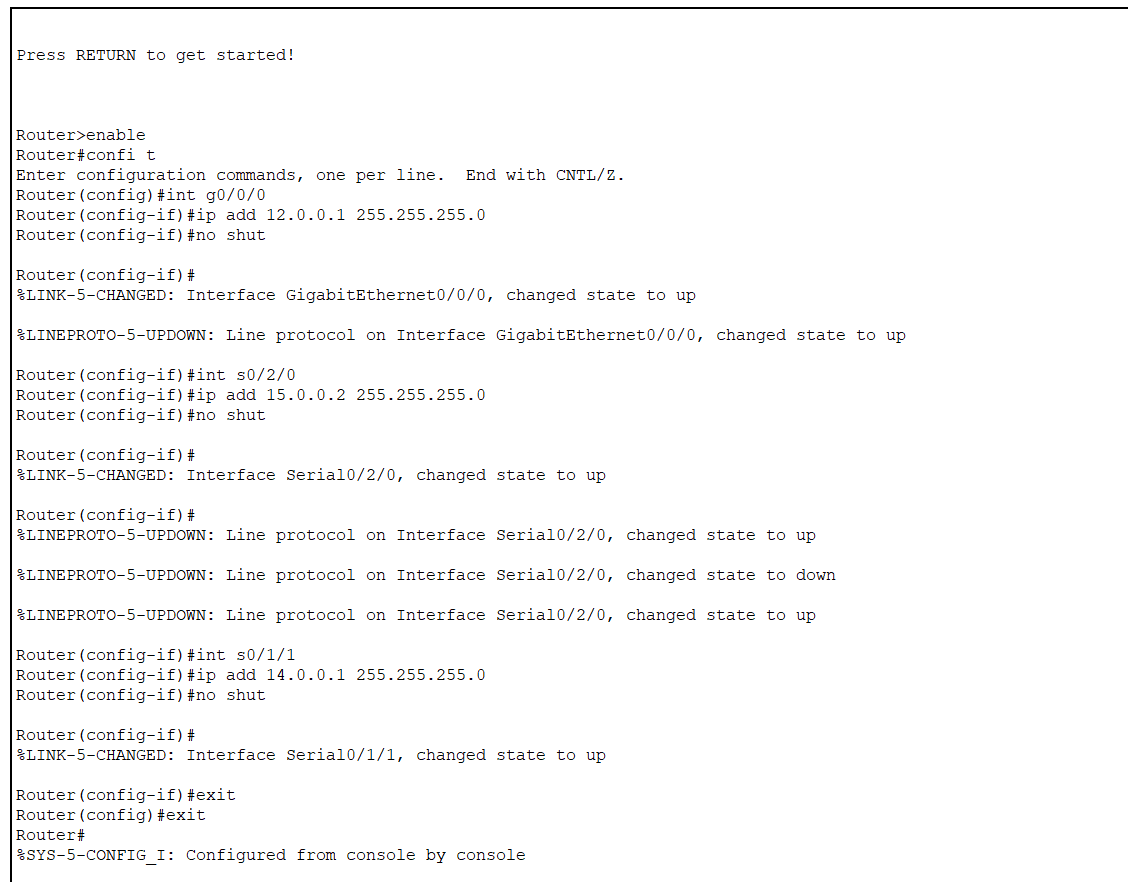
**Step – 7 :-**  Assign IP Address to Routers

Router – 0 :-

Router – 1 :-



Router – 2 :-



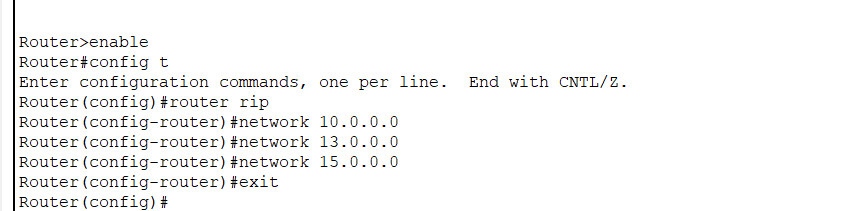
**Step – 8 :-**  now we will configure router for RIP Protocol.

We need to implement routing protocol onto routers so that router can find destination

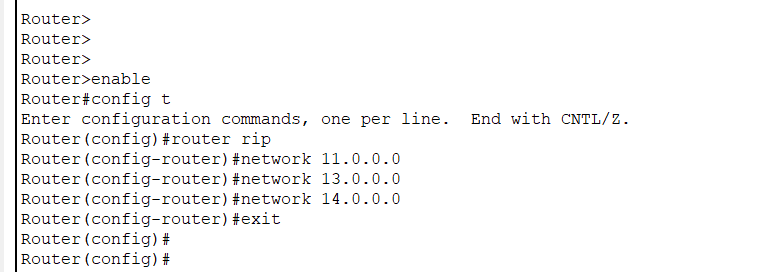
for another network, for that in dynamic routing protocol we have command “router rip”

using that we entered in router-rip configuration mode and then we have command

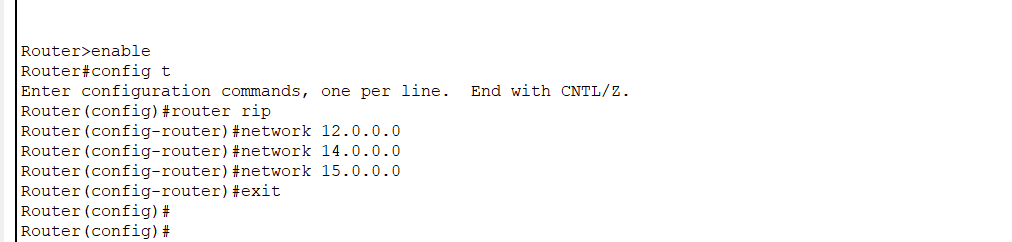
“network <network address>”.

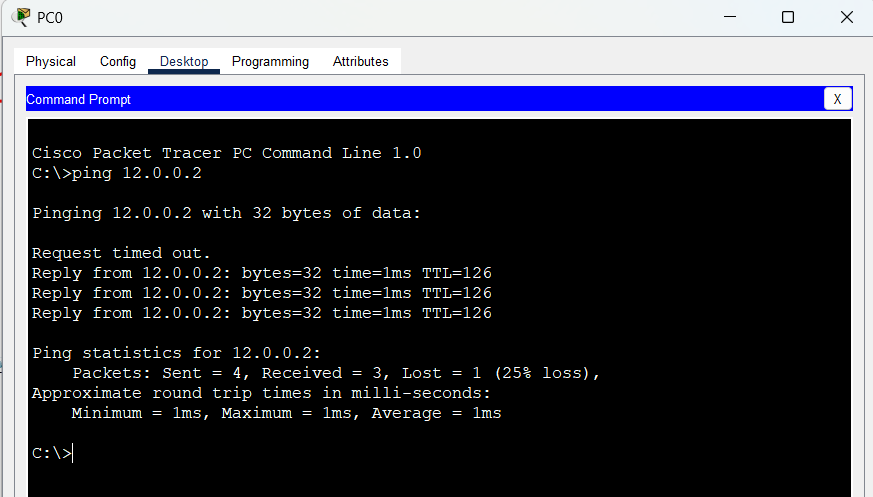
Router - 0

Router – 1 :-

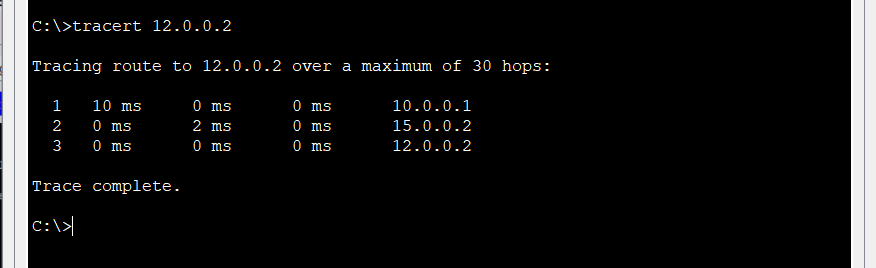


Router-2 :-

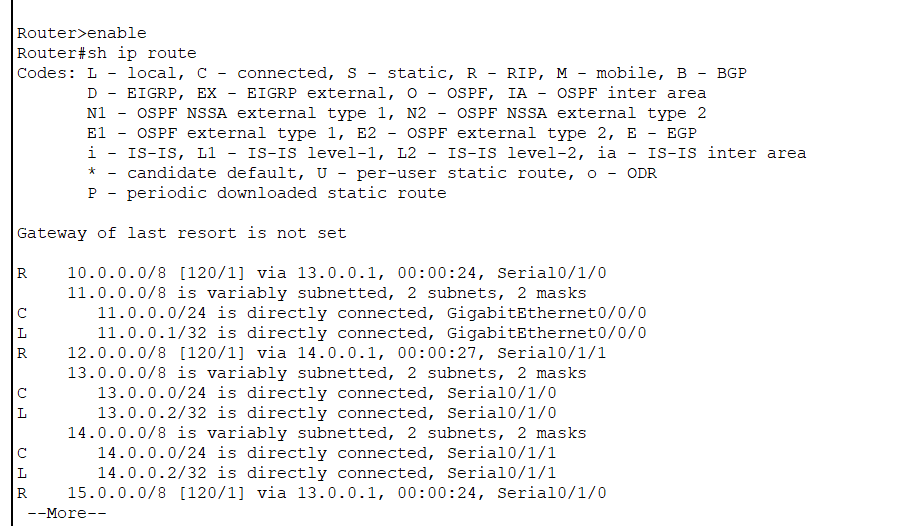


**Step – 9 :-**  now we will check connection using ping command.

**Step – 10 :-**  using tracert ip\_add command we can check how packet will be reach at ip add.



**Step – 11 :-**  using s hip route command we can analys=zethe routing table of router.



**Conclusion :-**

Through this experiment, I learned the importance of routing protocols in facilitating communication between different networks, specifically the Routing Information Protocol (RIP). By examining the output of the "show ip route" command, I analyzed the routing table and identified that:

"R" (RIP) indicates routes learned through the RIP routing protocol.

The routing table displays various network entries, denoting the destination networks and their associated next-hop routers.

"C" (Connected) signifies that the router is directly connected to the mentioned networks and IP addresses (e.g., 11.0.0.0/24 , 13.0.0.0/24 , 14.0.0.0/24 etc.).

"L" (Local) implies that the router is directly connected to specific IP addresses within those networks (e.g., 11.0.0.1/32, 13.0.0.2/32, 14.0.0.2/32, etc.).