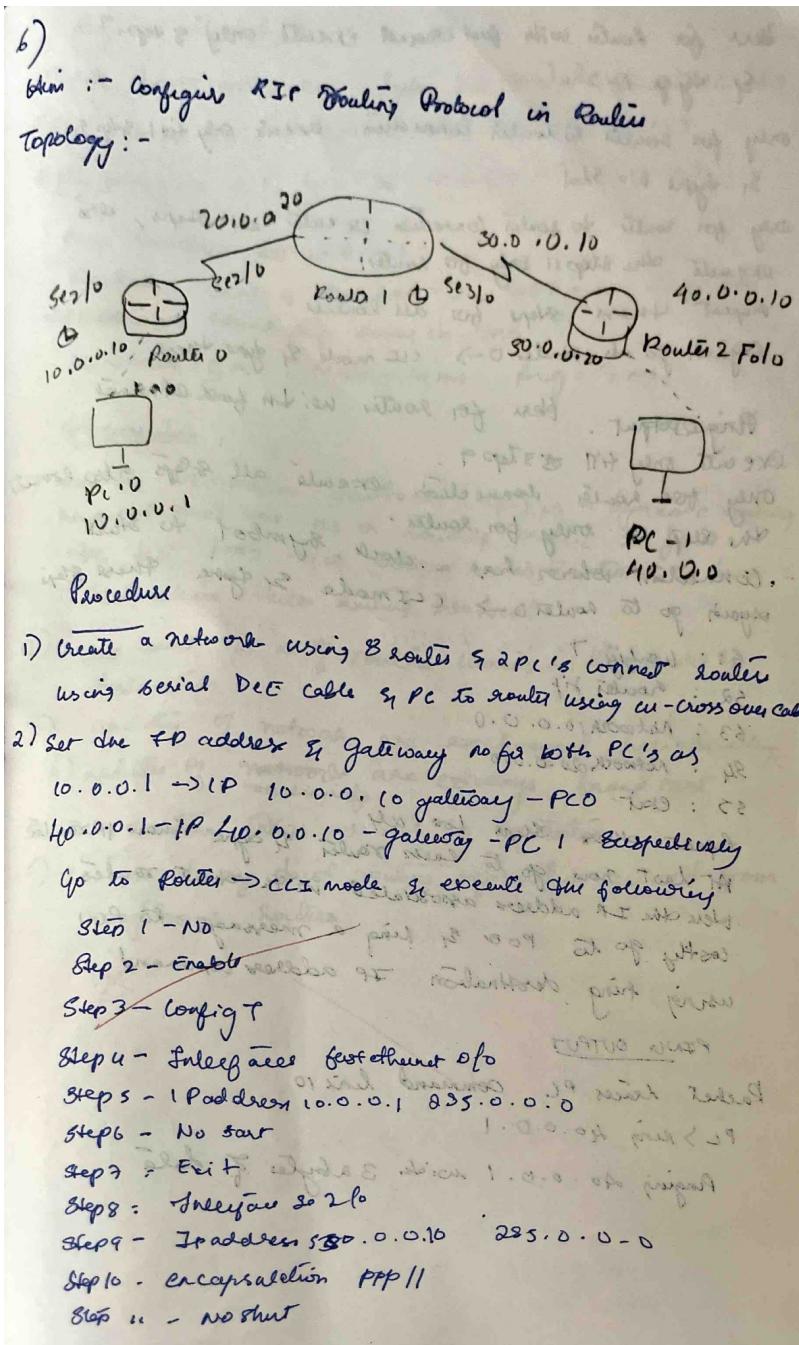


WEEK 6

Configure RIP routing Protocol in Routers.

OBSERVATION:



Here for Router with fast ethernet execute only step 7 & tip,
Si type No shot

only for router to router connection execute only step 8 & tip,
Si type No shot

only for router to router connection execute all steps, ex
execute the step 11 only for router

Repeat these steps for all routers.

Again go to Router 0 \rightarrow CLI mode Si type these

Ping output. Here for router with fast ethernet

execute only till step 9.

Only for router connections execute all steps also even
the step 11 only for routers.

Connection which has a clock symbol to start
again go to Router 0 \rightarrow CLI mode Si type these steps

S1 : ~~loopback 1~~ 7 (Router 0 is executing S1 step)

S2 : Router tip

S3 : Network 10.0.0.0

S4 : Network 10.0.0.0 ~~forward~~ & Router 0 is step 7

S5 : exit 0.0 - ~~forward~~ 0.0.0.0 910 - 10.0.0.0

Repeat others, Steps for all

At last now go to each router Si type show ip route
See the IP address associated with that routes

Lastly go to PC & ping a message to PC!

using ping destination IP address command

PING OUTPUT

T(ping) - S(ping)

Router becomes PC Command line 10
0.0.0.255 1.0.0.0 next hop 1 - 2 gate

PC > ping 10.0.0.1 ~~not yet~~ - 2 gate

Pinging 10.0.0.1 with 32 bytes of data
0.0.0.255 next hop 1 - 2 gate

11999 packets transmitted - 0 lost

Transmission time - 0.000

Request timed out

Reply from 40.0.0.1: bytes 32 times > 8ms TTL = 127

Reply from 40.0.0.1: bytes 32 times 5ms TTL = 125

Reply from 40.0.0.1: bytes = 32 times 10 ms TTL = 125

Ping Statistics for 40.0.0.1:

Packets: Sent = 4 Received = 3, lost = 1 (25% loss)

Approximate round trip times in ms.

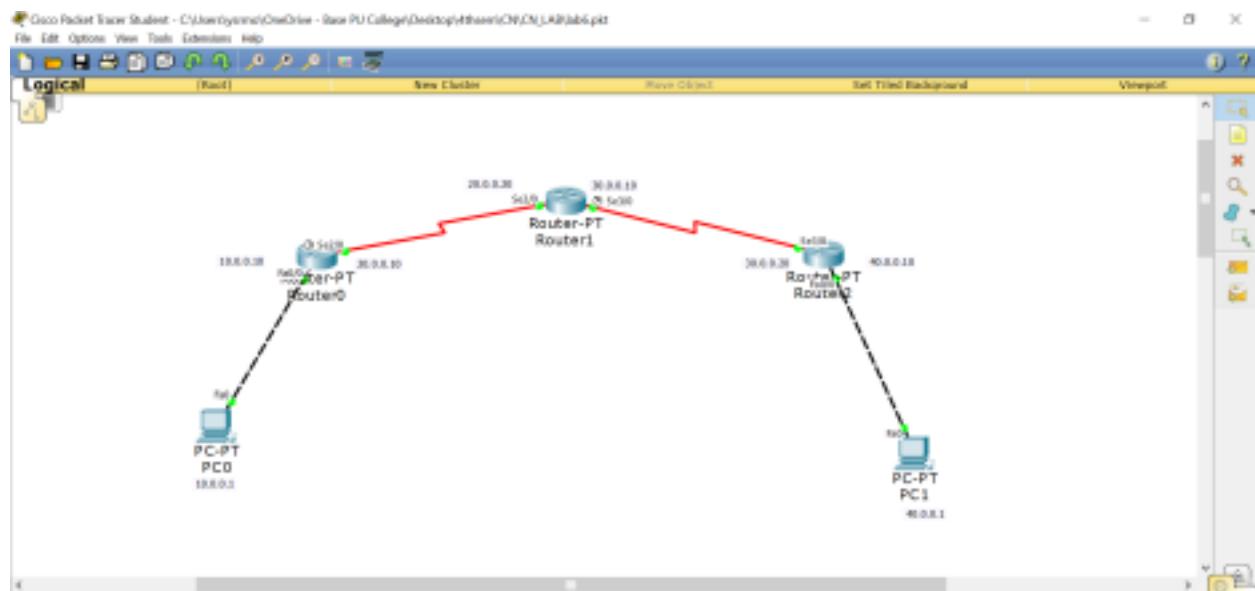
Minimum = 5 ms Max = 10 ms Avg = 7 ms

Observation

- 1) Routing information protocol (RIP) is a dynamic routing protocol that uses as a routing metric to find the best path b/w source & destination. It is a destination Vector routing protocol.
- 2) Hop count is no of routers coming in b/w source & destination.
- 3) Updates of network are exchanged periodically.
- 4) Updates of network are always based on routing info.
- 5) Full routing tables are sent in updates.
- 6) Routers always trust routing information received from neighbours.

Q 25/4

TOPOLOGY:



OUTPUT:

```
PC0>ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:

Request timed out.
Reply from 40.0.0.1: bytes=32 time=8ms TTL=126
Reply from 40.0.0.1: bytes=32 time=6ms TTL=126
Reply from 40.0.0.1: bytes=32 time=10ms TTL=126

Ping statistics for 40.0.0.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 6ms, Maximum = 10ms, Average = 7ms

PC0>
```

