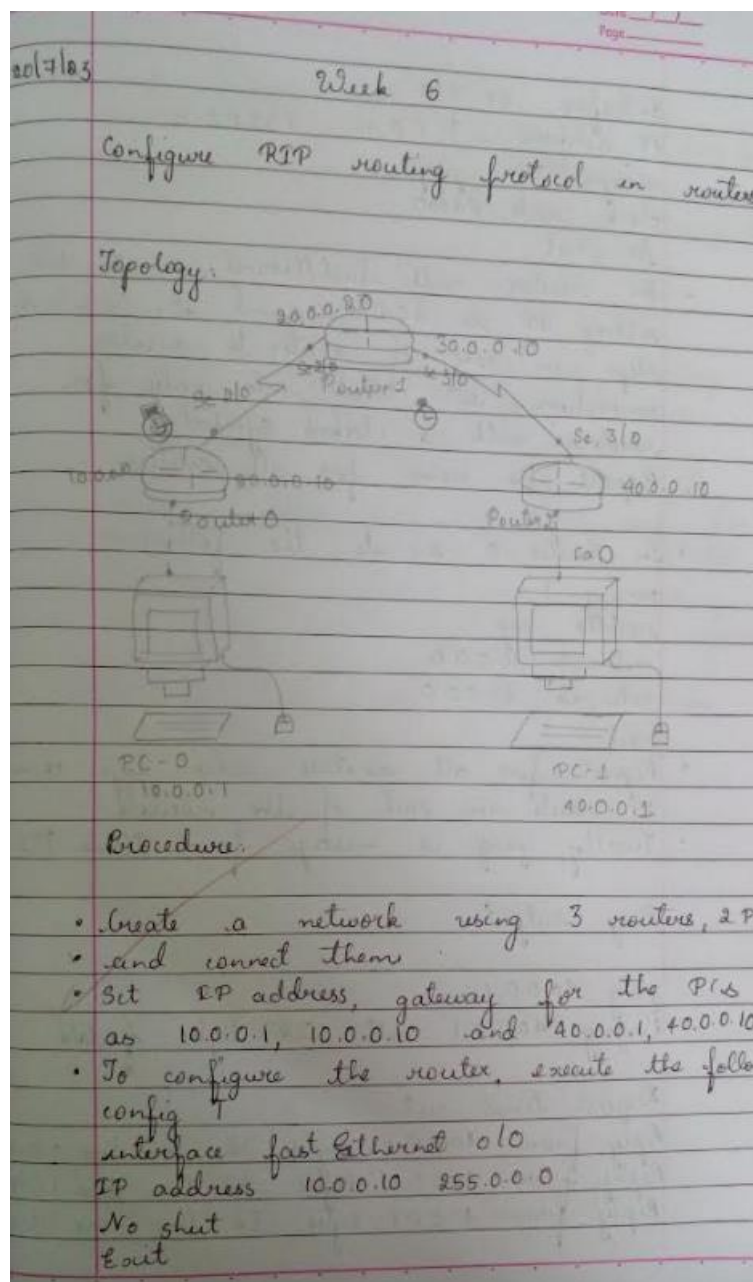


## WEEK 6

### Configure RIP routing Protocol in Routers

Observation :



Interface se 2/0  
 IP address 20.0.0.10 255.0.0.0  
 encapsulation ppp  
 clock rate 64000  
 No shut

- For router with fastEthernet execute the setting IP as 20.0.0.10 and 40.0.0.1. Execute the steps in case of router to router connection, set clock rate only for routers with a clocked symbol. Repeat the same for all routers.
- In Router 0, execute the following config  

```

conf t
router rip
network 10.0.0.0
network 20.0.0.0
exit

```
- Repeat for all routers and type show IP route in each of the routers.
- Finally, ping a message from R2 to R1.

Ping output:

```

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=9ms, TTL=64
Reply from 40.0.0.1: bytes=32, time=8ms, TTL=64
Reply from 40.0.0.1: bytes=32, time=10ms, TTL=64

```

Ping statistics for 40.0.0.1  
 Packets: Sent = 4, Received = 3, Lost = 1 (25% loss)  
 Approximate round trip times in milliseconds:  
 Minimum = 5 ms, Maximum = 10 ms, Average = 7 ms

Observation:

- RIP uses hop count as a routing metric to find best path between source and destination.
- Hop count is the number of hops available between source and destination and the path with least hop count is selected.
- Updates of network are exchanged periodically and that of routing information is always a broadcast.
- Routing tables are sent in updates.
- The routers always trust routing information which is received from neighbouring routers.

*Scout*

## Topology :



## Output :

```
Command Prompt

Packet Tracer PC Command Line 1.0
PC>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=10ms TTL=125
Reply from 40.0.0.1: bytes=32 time=9ms TTL=125
Reply from 40.0.0.1: bytes=32 time=10ms TTL=125

Ping statistics for 40.0.0.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 9ms, Maximum = 10ms, Average = 9ms

PC>
```

