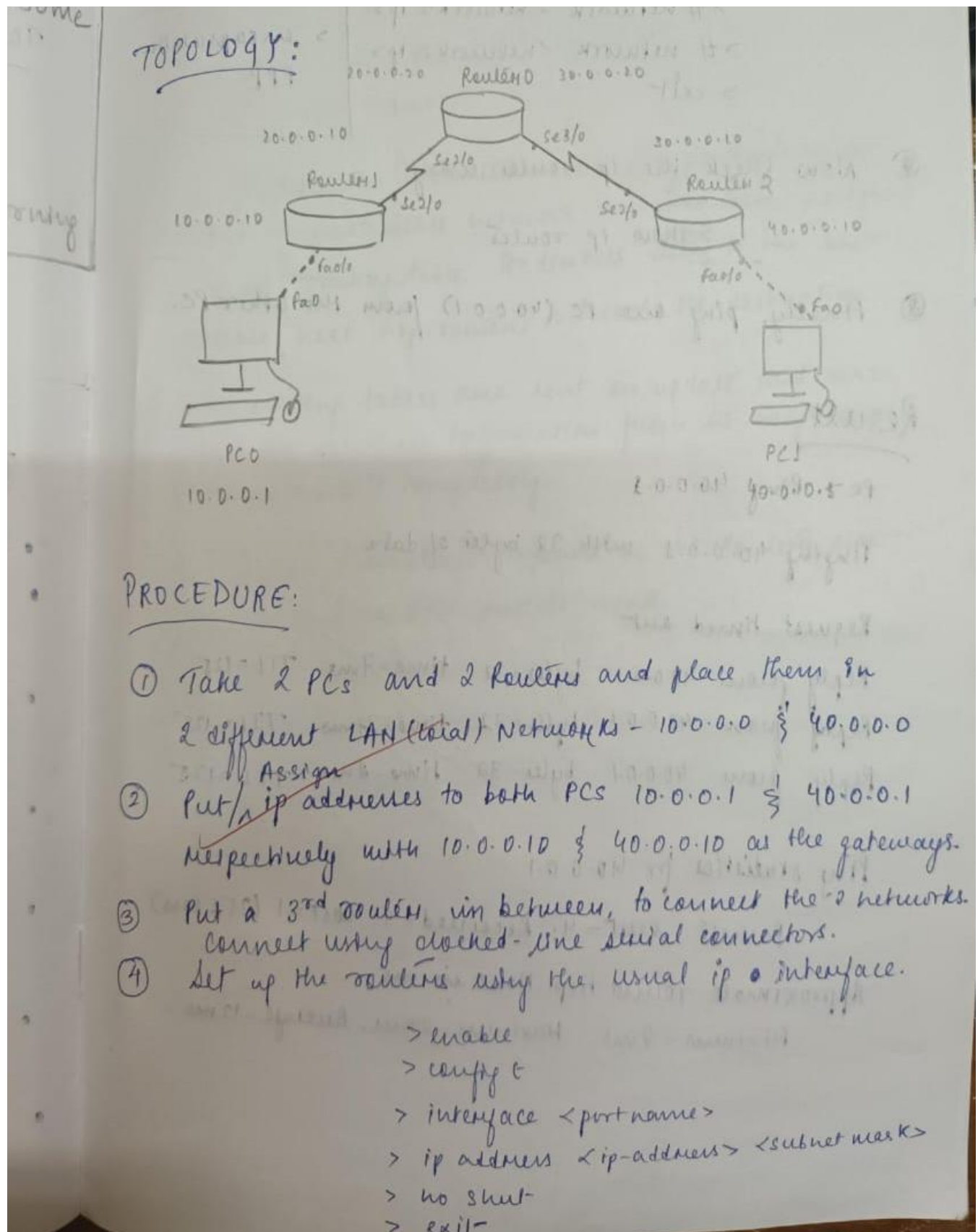


Experiment 5

AIM: Configure RIP routing Protocol in Routers



- ⑤ Encapsulation PPP and clock rate must be set at every node in router-router connection. Clock rate should only be on the clock side.
- ⑥ Now we set up the "hops" automatically using the RIP protocol

```
> router rip
> # network <network 1 ip>
> # network <network 2 ip>
> exit
```

> encapsulation ppp
> clock rate 64000

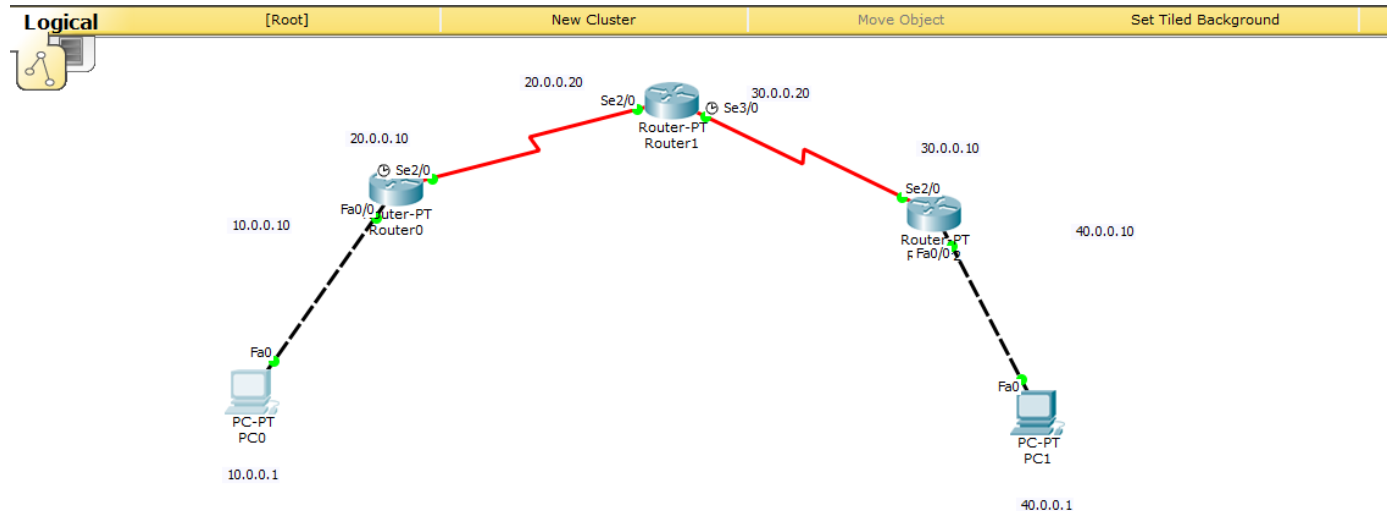
> encapsulation
PPP

- ⑦ Now check the ip routes using

```
> show ip routes
```

- ⑧ Finally, ping one PC (40.0.0.1) from the other PC.

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=7ms TTL=125
Reply from 40.0.0.1: bytes=32 time=27ms TTL=125
Reply from 40.0.0.1: bytes=32 time=2ms 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 = 2ms, Maximum = 27ms, Average = 12ms

PC>
```

OBSERVATION:

Observation

- Routing Information Protocol (RIP) is an active routing protocol that operates hop count as a routing metric, to find the most suitable route between source & destination network.
- So whenever, a router receives a packet/request from a particular network that has been assigned to its routing table, it directs ~~that~~ ^{that} to the best possible next hop (router) to reach its destination.
- Full routing tables are sent on update and when a router receives information from its neighbours, it ~~trusts~~ trusts it completely.
- The "~~Request~~ timed out" appears as the routers are ~~trying~~ to find the best possible route.