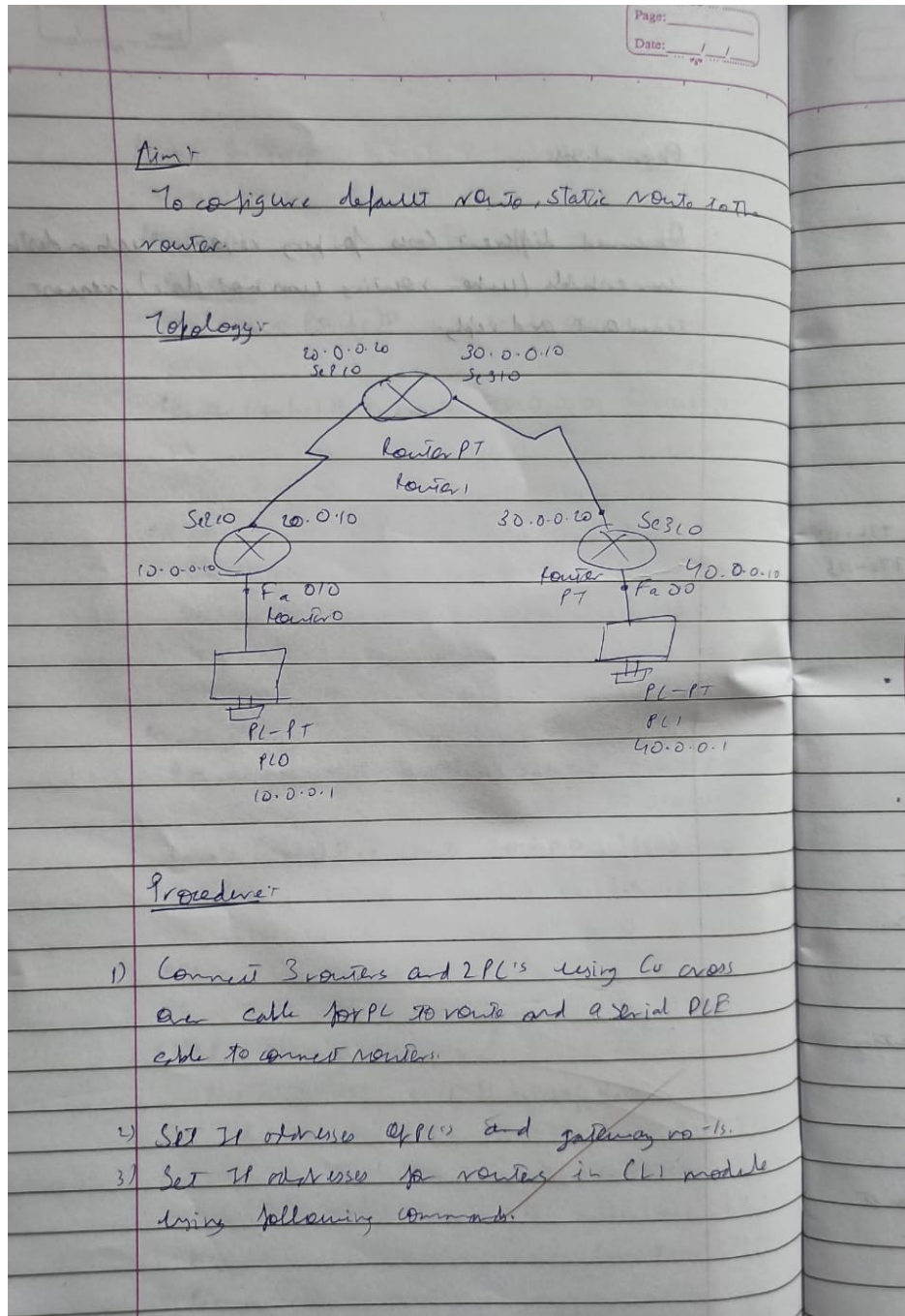


## WEEK 3

Configure default route, static route to the Router.

OBSERVATION:



Enable

Config

Interface fast Ethernet 0/0

IP address 10.0.0.10 255.0.0.0

No shut

exit

interface Se 2/0

IP address 20.0.0.10 255.0.0.0

No shut

exit

exit

- Repeat the same commands for other 2 routers with IP address.

- For router 1 set IP route of other ip addresses by the following steps:

Config

ip route 10.0.0.0 255.0.0.0 20.0.0.10

ip route 40.0.0.0 255.0.0.0 30.0.0.20

exit

exit

- For router 0 and 3 we set default IP address

- For default IP route:

config

ip route 0.0.0.0 0.0.0.0 20.0.0.20

ip route 0.0.0.0 0.0.0.0 30.0.0.20

exit

- Go to command prompt and type ping messages to send packets.

0/p>

ping 40.0.0.1

ping 40.0.0.1 with 32 bytes of data.

Request timed out

Reply from 40.0.0.1 with 32 bytes of data

Reply from 40.0.0.1 bytes=32 time=16ms 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

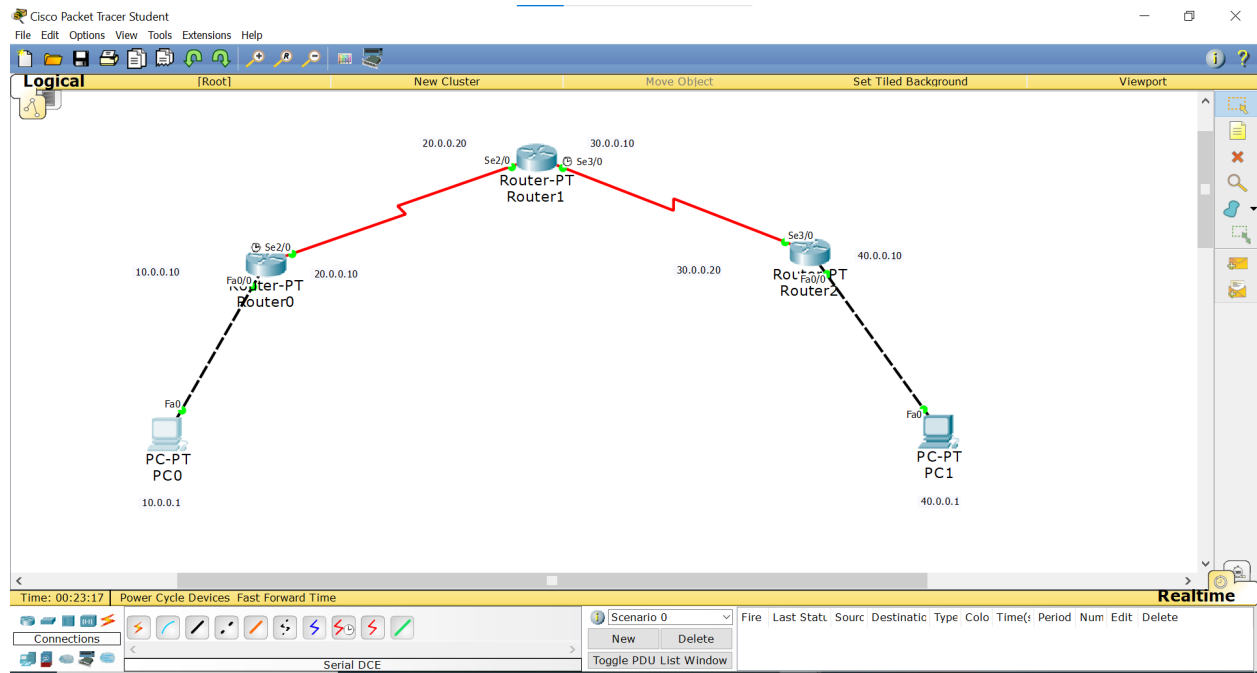
min=2ms, max=16ms, avg.=6ms

Observation

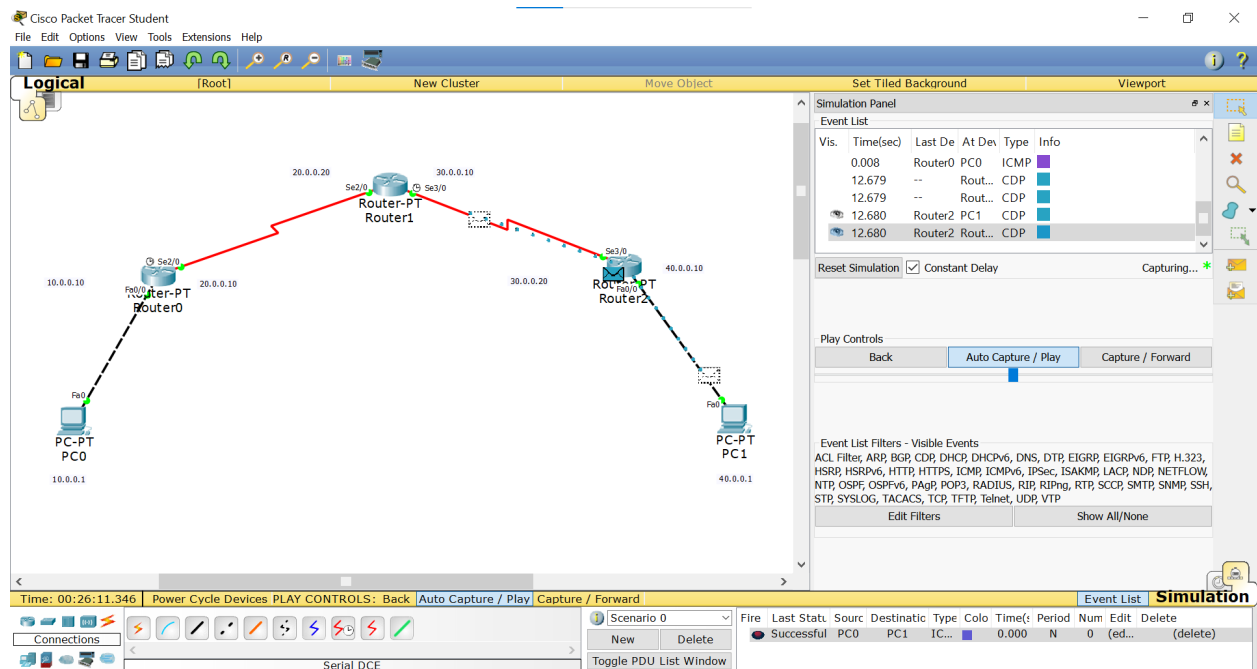
- A default route is the route which packet takes when no route is available for an IP destn.
- If a packet is received device first checks IP destn address if it is found, it searches in routing table.
- If remote destn is not listed, the packet is forwarded to next hop towards destn, using default route.
- It repeats until packet is delivered.



## 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=2ms TTL=125
Reply from 40.0.0.1: bytes=32 time=16ms 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 = 16ms, Average = 6ms

PC>ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:

Reply from 40.0.0.1: bytes=32 time=21ms TTL=125
Reply from 40.0.0.1: bytes=32 time=9ms TTL=125
Reply from 40.0.0.1: bytes=32 time=2ms TTL=125
Reply from 40.0.0.1: bytes=32 time=4ms TTL=125

Ping statistics for 40.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 21ms, Average = 9ms

PC>|
```