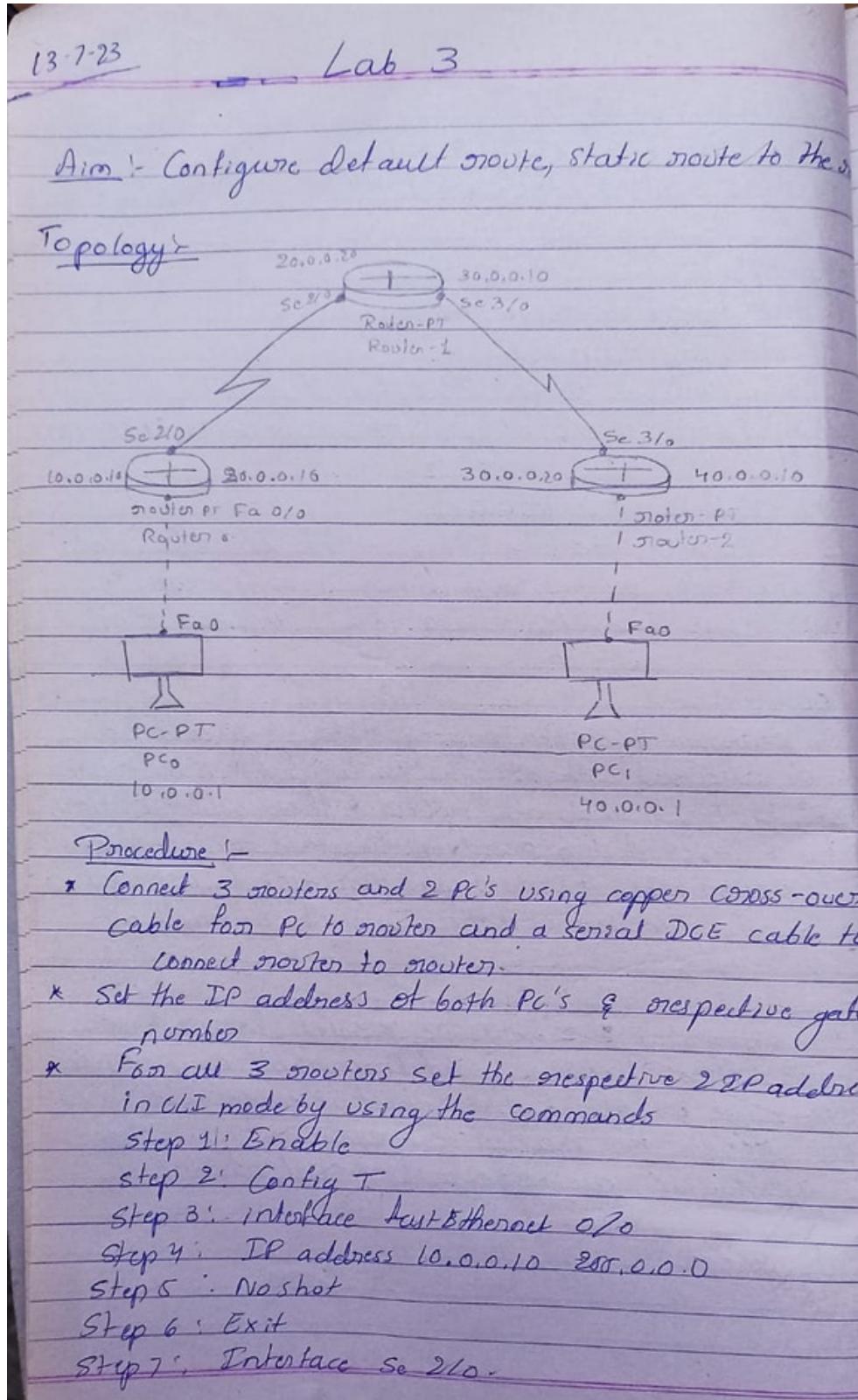


## WEEK 3

Configure default route, static route to the

Router. OBSERVATION:



Step 8: IP address 20.0.0.10 255.0.0.0  
Step 9: No shutdown  
Step 10: Exit  
Step 11: Exit

- \* Repeat these commands for other 2 routers with their respective IP address.
- \* For Router 1, set the IP routes of other IP addresses statically by using following steps.
  - Step 1: Config T
  - Step 2: IP route 10.0.0.0 255.0.0.0 20.0.0.10.
  - Step 3: IP route 40.0.0.0 255.0.0.0 30.0.0.20.
  - Step 4: Exit
  - Step 5: Exit
  - Step 6: Show IP route.

\* For Router 0 & Router 2 we set default IP routes which means it can access any IP address with any subnet mask.

- \* Set the default IP route by following these commands

Step 1: Config T

Step 2: IP route 0.0.0.0 0.0.0.0 20.0.0.20.

Step 3: IP route 0.0.0.0 0.0.0.0 30.0.0.10.

\* Step 2 is given for Router 0 & Step 3 command for Router 1.

\* Go to PC's command prompt & type ping message to send packets across.

Ping output

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 = 1

Reply from 40.0.0.1 : bytes = 32 time = 16ms TTL = 1

Reply from 40.0.0.1 : bytes = 32 time = 2ms TTL = 1

Ping statistics for 40.0.0.1 :

packets : sent = 4, received = 3, lost = 1 (25% loss)

Approximate round trip times in milliseconds:

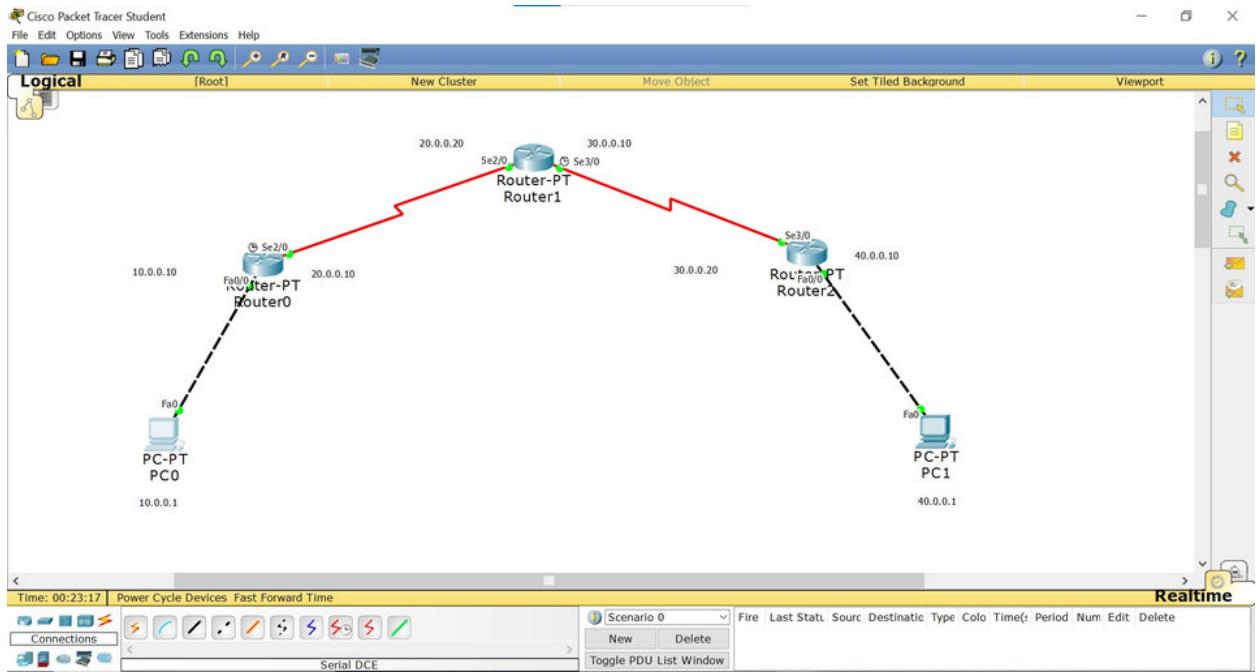
minimum = 2ms, Maximum = 16ms, Average = 6ms

### Observation :

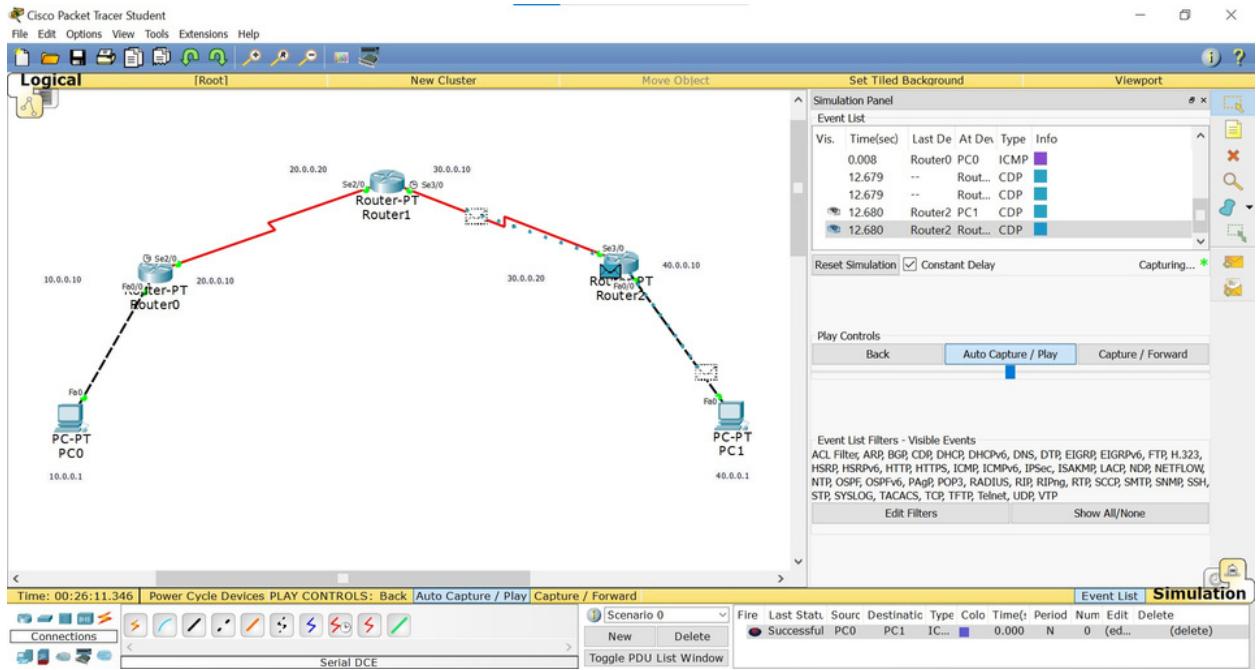
- \* A default route is the route which takes effect when no other route is available for an IP address destination.
- \* If a packet is received, the device first checks the destination address, if the IP destination address is not local the device checks its routing table.
- \* If the remote destination subnet is not listed, the packet is forwarded to the next hop towards the destination using the default route.
- \* The process repeats until the packet is delivered.

N.D.  
3/6/2023

## TOPOLOGY:



## OUTPUT:





Physical

Config

Desktop

Custom Interface

## 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>
```