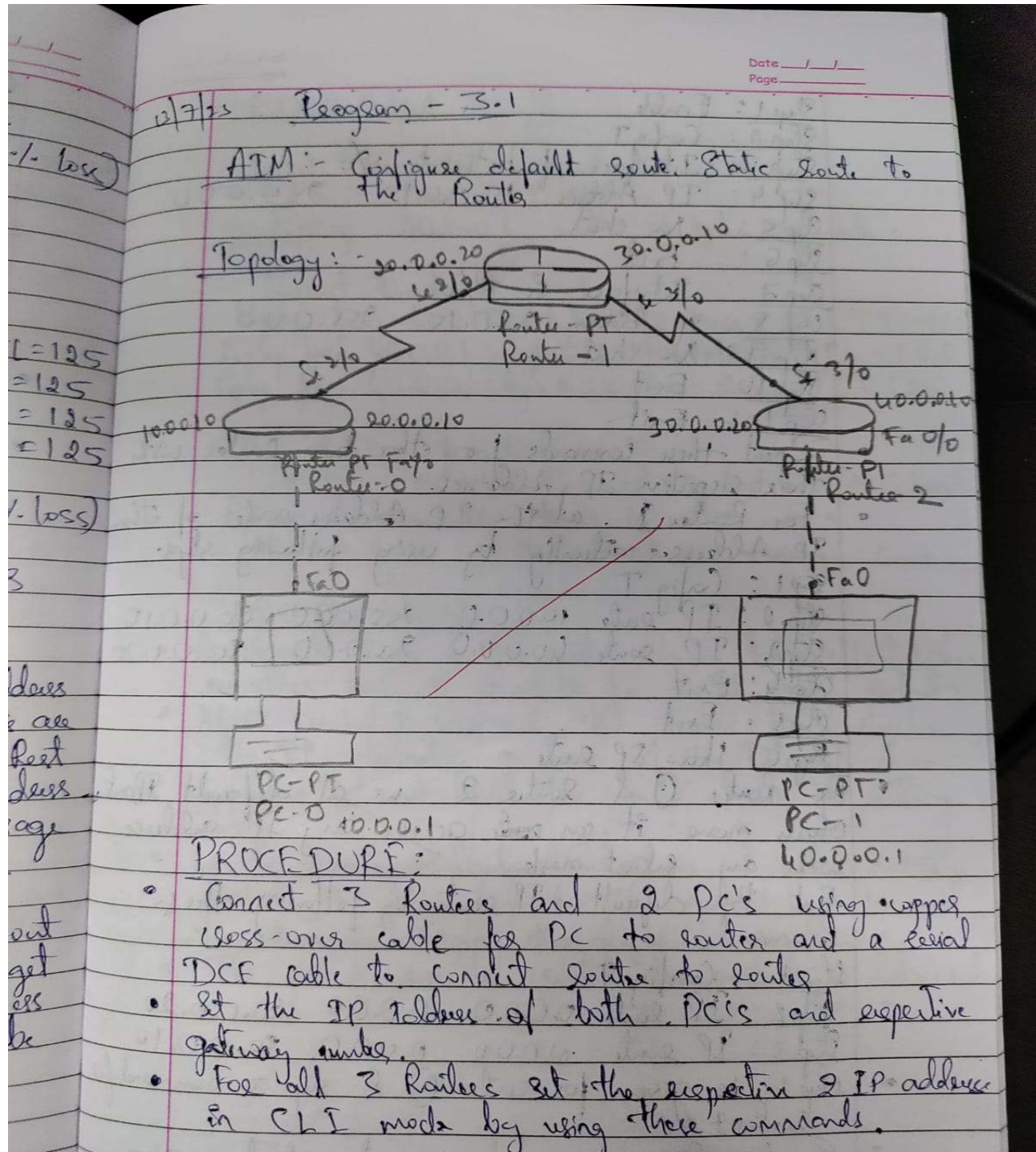


## WEEK 3

Configure default route, static route to the Router.

OBSERVATION:



Step 1: Enable  
 Step 2: Config T  
 Step 3: Interface fastEthernet 0/0  
 Step 4: IP Address 10.0.0.10 255.0.0.0  
 Step 5: No shut  
 Step 6: Exit  
 Step 7: Interface s0/0  
 Step 8: IP Address 30.0.0.10 255.0.0.0  
 Step 9: No shut  
 Step 10: Exit  
 Step 10: Exit.

- Repeat these commands for other two router with their respective IP Addresses.
- For Router 1, at the IP Address route of other IP Addresses actually 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 30.0.0.10  
 Step 4: Exit  
 Step 5: Exit  
 Step 6: Show IP route

- For Router 0 & Router 2 we set default Route which means it can ~~route~~ access any IP address with any subnet mask.
- But the default IP route by following these commands.

Step 1: Config T  
 Step 2: IP route 0.0.0.0 0.0.0.0 20.0.0.10  
 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 2.
- Go to R's command prompt and type ping message to send packets across.



## PING Output

Packet Tracer PC command line P.O

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 = 1ms 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 milliseconds:

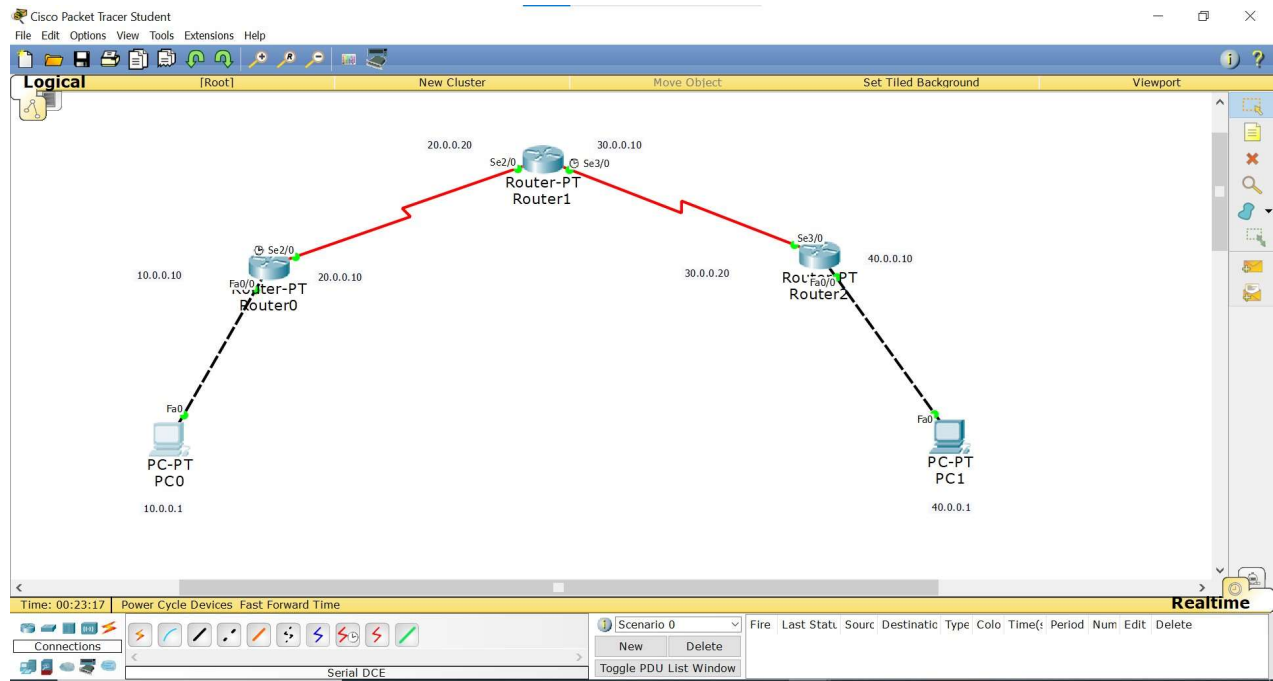
Minimum = 2ms, Maximum = 16ms, Average = 6ms.

## OBSERVATION.

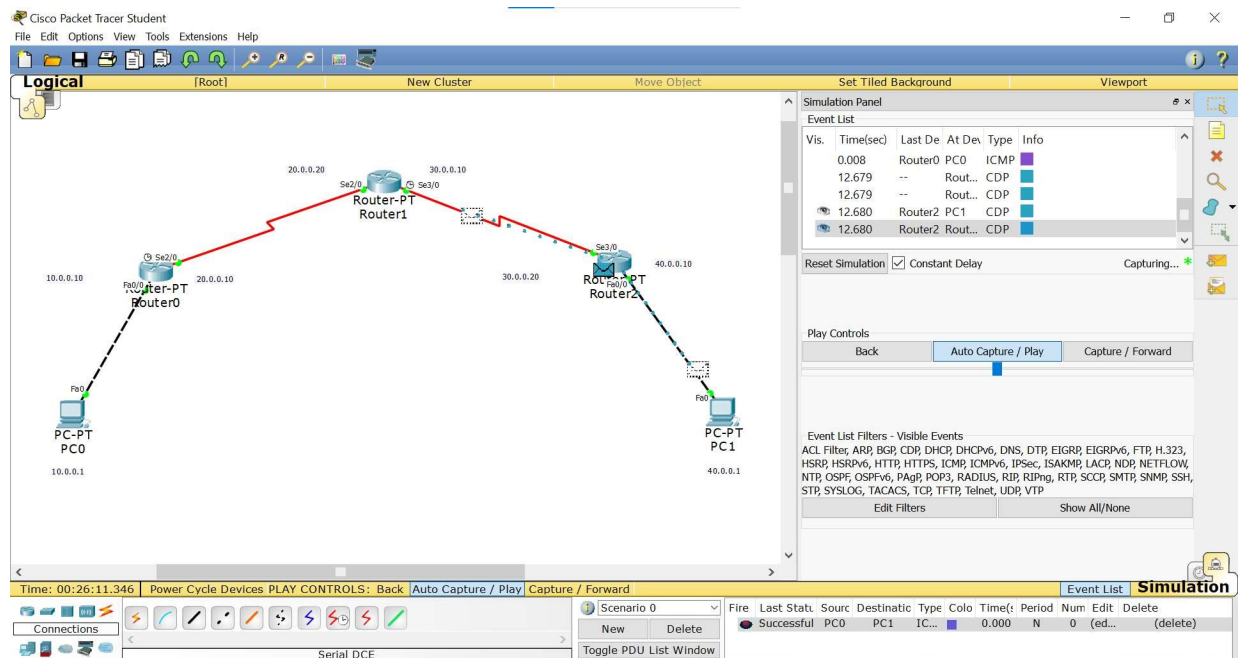
- A default route is the route which takes effect when no other route is available for an IP Address destination.
- If a packet is received, the device first checks the IP destination address, if the IP destination address is not local the device checks its routing Table.
- if the remote destination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

here

## 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>|