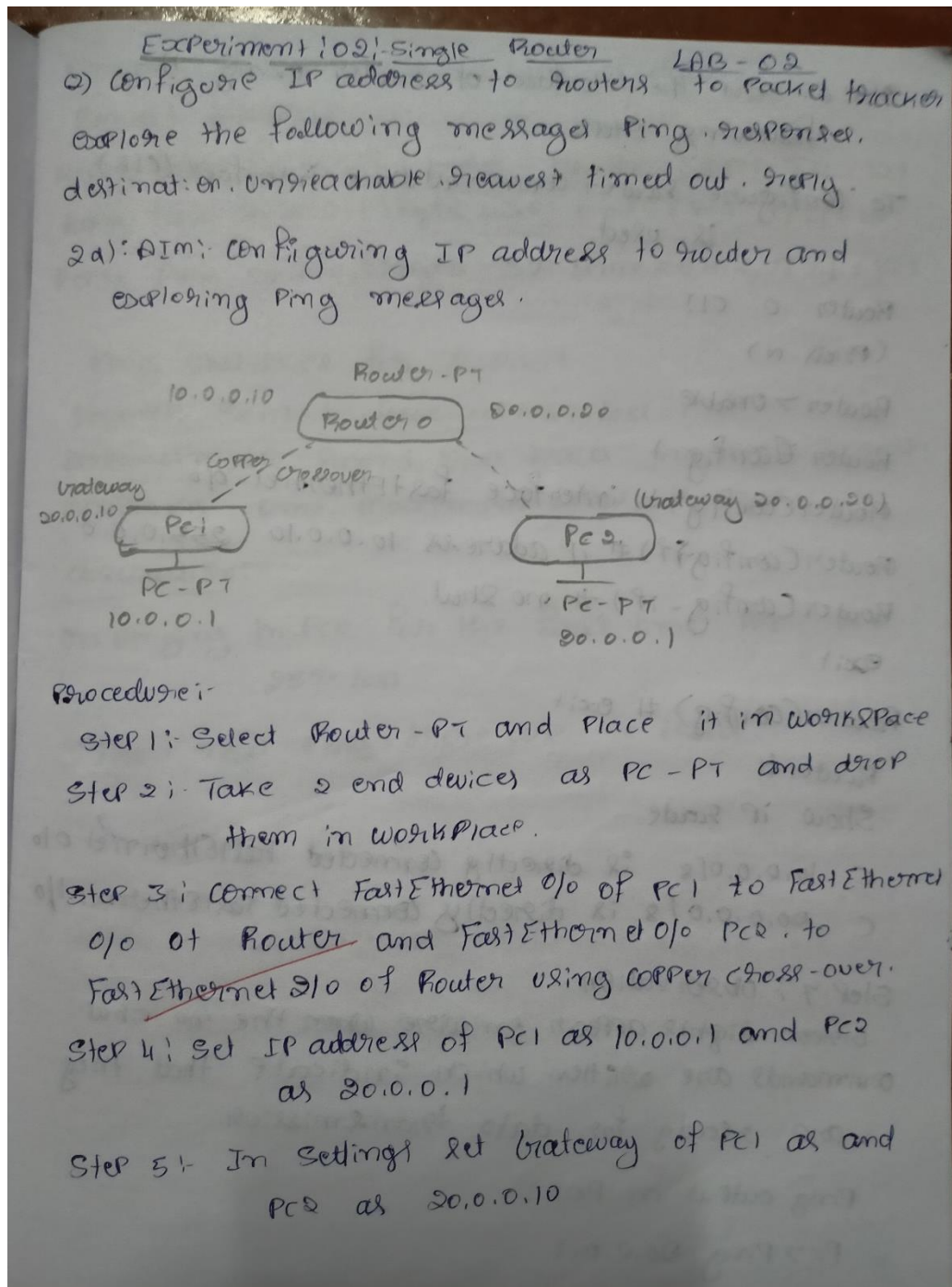


## LAB 2

**Configure IP address to routers (one and three) in packet tracer.  
Explore the following messages: ping responses, destination unreachable, request timed out, reply.**

### OBSERVATION



Step 6: Setup the interface of router using the following steps

To configure router command line interface (CLI) is used

Router 0 CLI

(Press N)

Router > enable

Router (config) #

Router (config) # interface FastEthernet 0/0

Router (config-if) # ip address 10.0.0.10 255.0.0.0

Router (config-if) # no shut

exit

Router (config) # exit

Router #

Show ip route

C 10.0.0.0/8 is directly connected FastEthernet 0/0

C 20.0.0.0/8 is directly connected FastEthernet 1/0

Step 7: Observation

Green lights appear on wire when the no shut commands are written which indicate that they are ready for data transmission.

Ping output in PC0:

PC> Ping 20.0.0.1

Pinging 20.0.0.1 with 32 bytes of data

Request timed out.

Reply from 20.0.0.1: bytes = 32 time = 0ms TTL = 127

Reply from 20.0.0.1: bytes = 32 time = 0ms TTL = 127

Reply from 20.0.0.1: bytes = 32 time = 0ms TTL = 127

Ping Statistics for 20.0.0.1

Packets: Sent = 4, Received = 3, Loss = 1

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 1ms, Average =

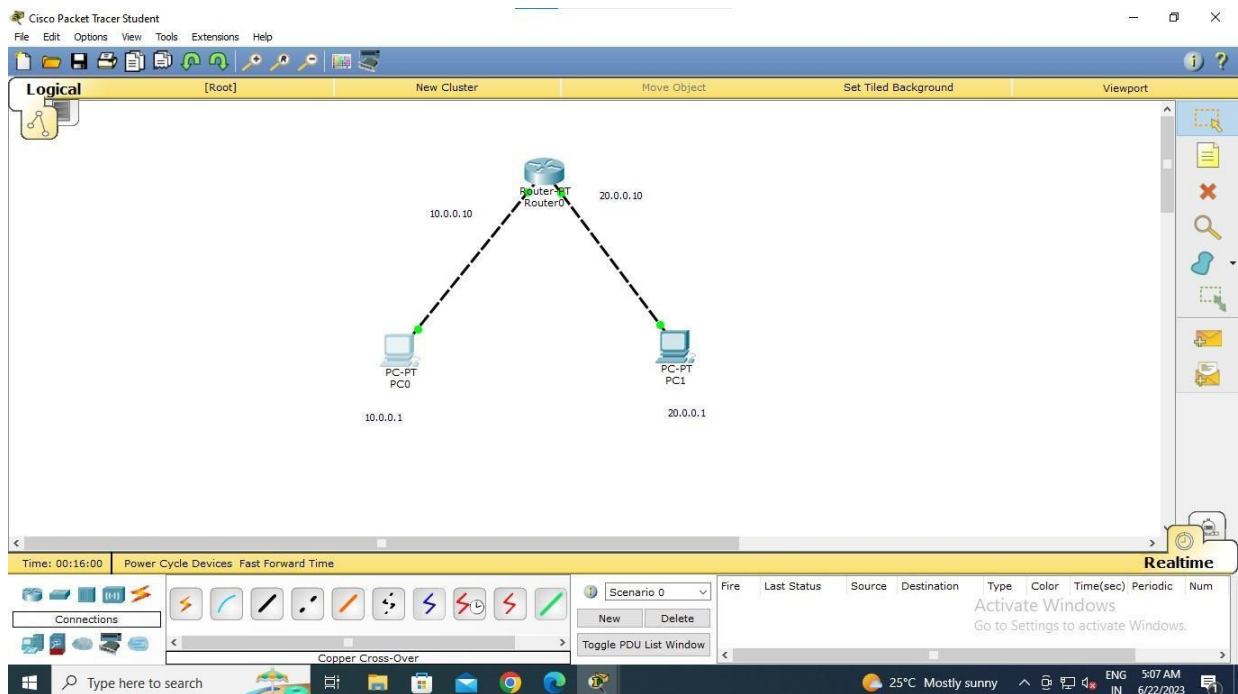
Observation:-

On Pinging in PC0 for the first time there is a  
25% loss

From next ping, there are no losses.

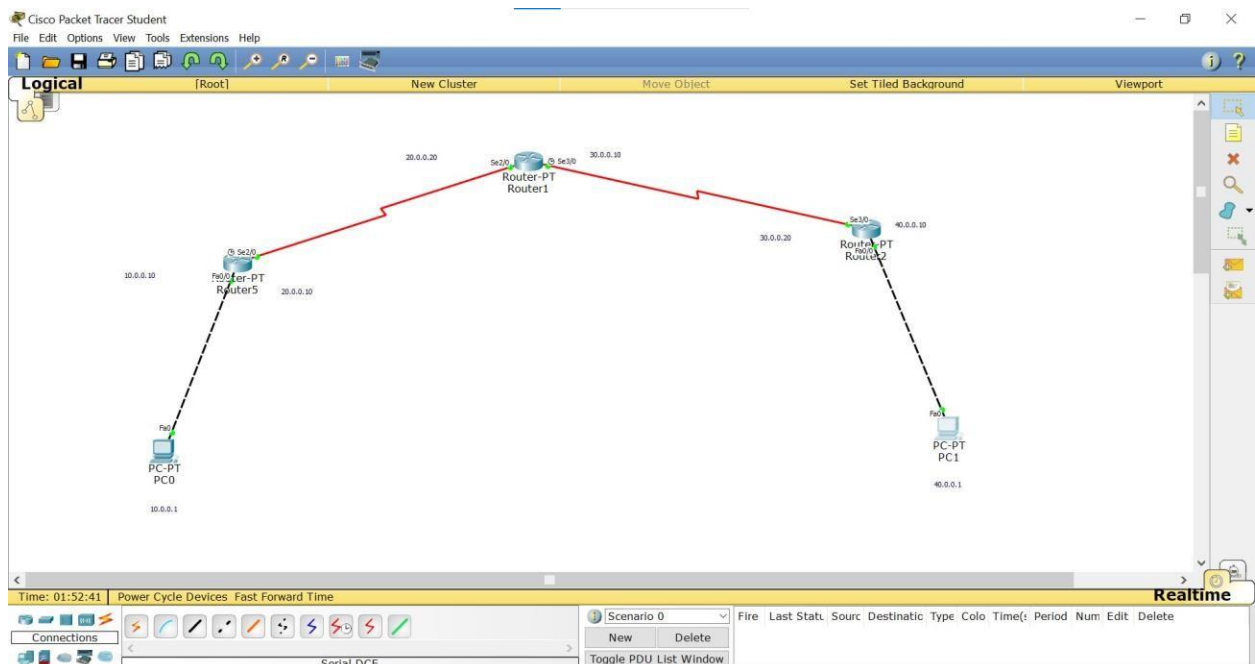
**Output :**

## TOPOLOGY:



## PROGRAM 2.1

## PROGRAM 2.2





## PROGRAM 2.1

The image displays the Cisco Packet Tracer Student interface. The top window shows a Command Prompt for PC0, where a ping command has been executed. The output shows a 25% loss in packets, with a minimum round trip time of 0ms and a maximum of 10ms.

```
Packet Tracer PC Command Line 1.0
PC>ping 20.0.0.1

Pinging 20.0.0.1 with 32 bytes of data:

Request timed out.
Reply from 20.0.0.1: bytes=32 time=0ms TTL=127
Reply from 20.0.0.1: bytes=32 time=0ms TTL=127
Reply from 20.0.0.1: bytes=32 time=10ms TTL=127

Ping statistics for 20.0.0.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 3ms

PC>
```

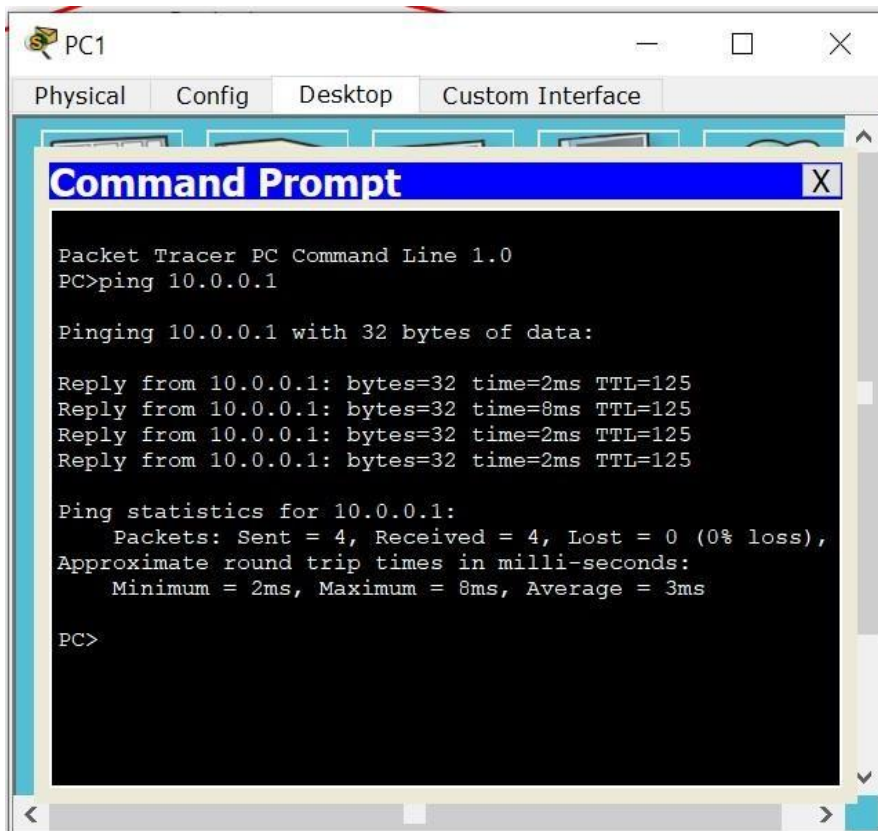
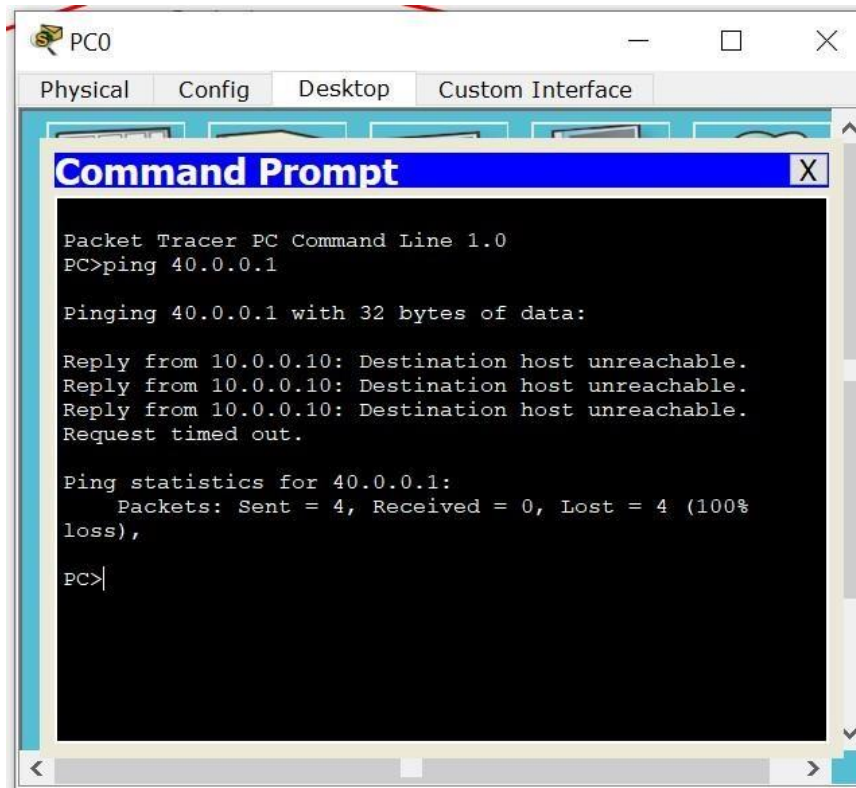
The bottom window shows the network diagram. A central Router0 is connected to two PCs, PC0 and PC1. PC0 has IP 10.0.0.1 and PC1 has IP 20.0.0.1. The Router0 interfaces are 10.0.0.10 and 20.0.0.10. The Event List panel on the right shows a list of events, including a successful ping from PC0 to PC1.

| Vis. | Time(sec) | Last Device | At Device | Type | Info |
|------|-----------|-------------|-----------|------|------|
|      | 465.354   | Router0     | PC1       | CDP  |      |
|      | 525.353   | --          | Router0   | CDP  |      |
|      | 525.353   | --          | Router0   | CDP  |      |
|      | 525.354   | Router0     | PC0       | CDP  |      |
|      | 525.354   | Router0     | PC1       | CDP  |      |
|      | 585.355   | --          | Router0   | CDP  |      |
|      | 585.355   | --          | Router0   | CDP  |      |
|      | 585.356   | Router0     | PC0       | CDP  |      |
|      | 585.356   | Router0     | PC1       | CDP  |      |

The Event List panel also includes a table for the simulation results:

| Fire | Last Status | Source | Destination | Type | Color | Time(sec) | Periodic | Num |
|------|-------------|--------|-------------|------|-------|-----------|----------|-----|
|      | Successful  | PC0    | PC1         | ICMP | Win   | 0.000     | N        | 0   |

## PROGRAM 2.2



Cisco Packet Tracer Student

File Edit Options View Tools Extensions Help

Logical (Root) New Cluster Move Object Set Tiled Background Viewport

Simulation Panel

Event List

| Vis. | Time(sec) | Last De | At Dev  | Type    | Info |
|------|-----------|---------|---------|---------|------|
|      | 28.315    | --      | Rout... | CDP     |      |
|      | 28.316    |         | Router5 | PC0     | CDP  |
|      | 28.316    |         | Router5 | Rout... | CDP  |
|      | 45.862    | --      | Rout... | CDP     |      |
|      | 45.862    | --      | Rout... | CDP     |      |

Reset Simulation ☒ Constant Delay Captured to: 45.862 s

Play Controls

Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

ACL Filter, ARP, BGP, CDP, DHCP, DHCPv6, DNS, DTP, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, LACP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgg, POP3, RADIUS, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, VTP

Edit Filters Show All/None

Time: 01:54:00.015 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward Event List Simulation

Connections

Serial DCE

Scenario 0

New Delete

Toggle PDU List Window

| Fire | Last Stat. | Source | Destination | Type  | Color | Time(s) | Period | Num | Edit   | Delete   |
|------|------------|--------|-------------|-------|-------|---------|--------|-----|--------|----------|
| ●    | Successful | PC0    | PC1         | IC... |       | 0.000   | N      | 0   | (ed... | (delete) |