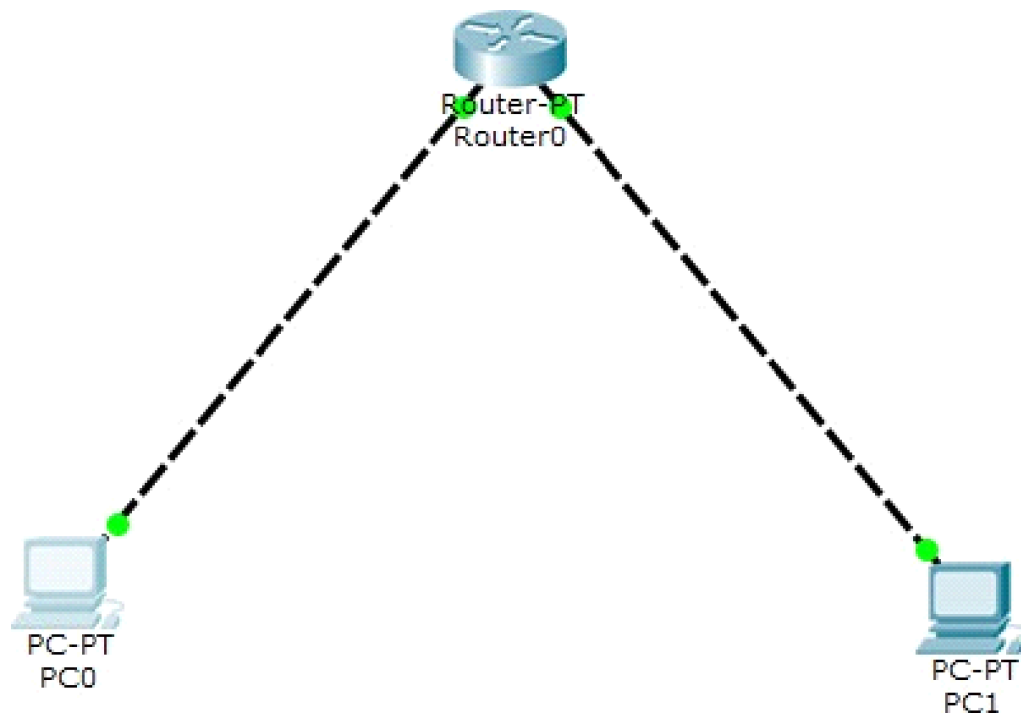


CN LAB 2

Configure IP address to routers in packet tracer. Explore the following messages:
ping responses, destination unreachable, request timed out, reply.

TOPOLOGY 1:



Physical

Config

CLI

IOS Command Line Interface

```
Bridging software.
```

```
X.25 software, Version 3.0.0.
```

```
4 FastEthernet/IEEE 802.3 interface(s)
```

```
2 Low-speed serial(sync/async) network interface(s)
```

```
32K bytes of non-volatile configuration memory.
```

```
63488K bytes of ATA CompactFlash (Read/Write)
```

```
--- System Configuration Dialog ---
```

```
Continue with configuration dialog? [yes/no]: no
```

```
Press RETURN to get started!
```

```
Router>enable
```

```
Router#configure terminal
```

```
Enter configuration commands, one per line. End with CNTL/Z.
```

```
Router(config)#interface Fa0/0
```

```
Router(config-if)#ip address 10.0.0.2 255.0.0.0
```

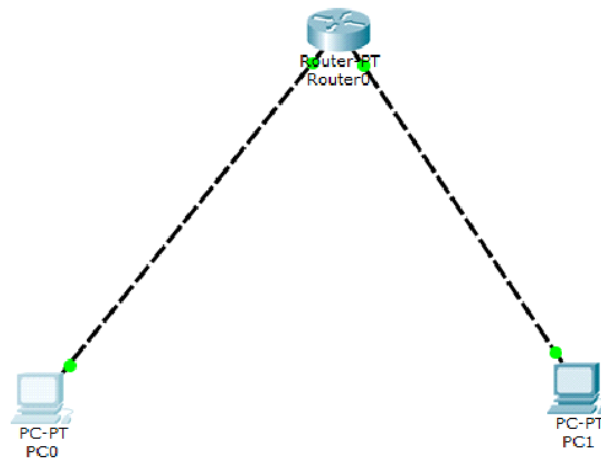
```
Router(config-if)#no shutdown
```

```
Router(config-if)#
```

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
```

OUTPUT WITHOUT SETTING DEFAULT GATEWAY:



PC0

Physical Config Desktop Custom Interface

Command Prompt

```
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, Lost = 1 (25% loss)
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 20.0.0.1

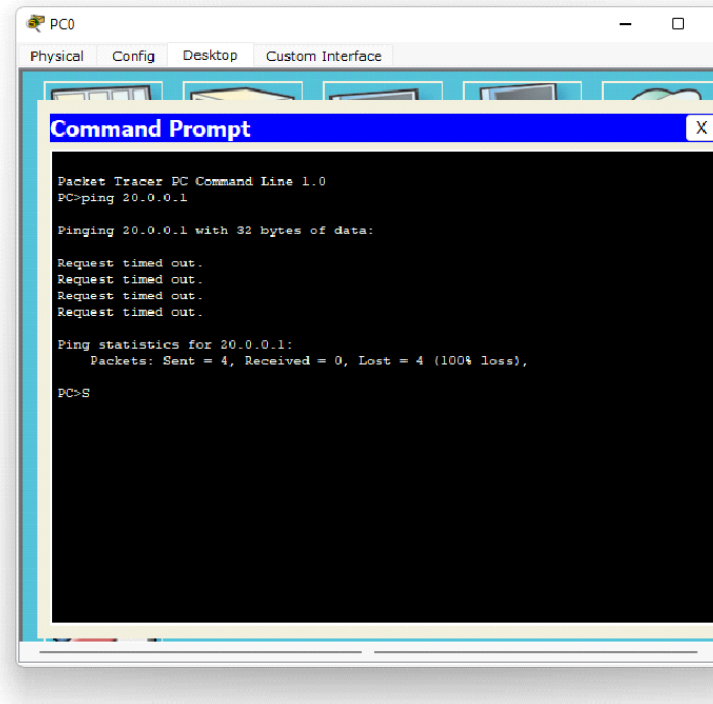
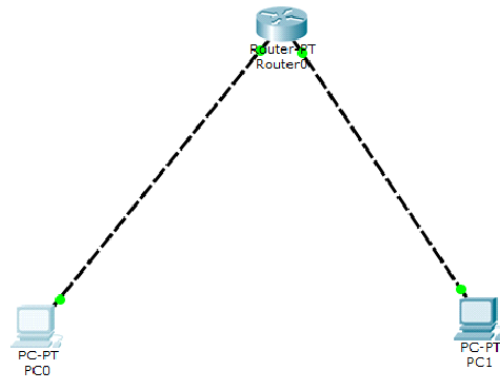
Pinging 20.0.0.1 with 32 bytes of data:

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

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

PC>S
```

OUTPUT AFTER SETTING DEFAULT GATEWAY



OUTCOMES:

- Ping Responses: The configured IP address of the destination device is correct and the network connection is functioning properly thus, we receive a successful ping response. This indicates that the destination device is reachable and responsive.
- Without setting default gateway for the end devices : Request Timed Out- "Request Timed Out" message : thus-the router sent a request but did not receive a response within a specific time frame.
- After setting default gateway for end devices- Reply from: 4 "Reply from..32 bytes" messages are seen. Router has received a valid message or request and thus it generates a reply to acknowledge the receipt. A reply message confirms that the communication is established and the router is functioning properly.