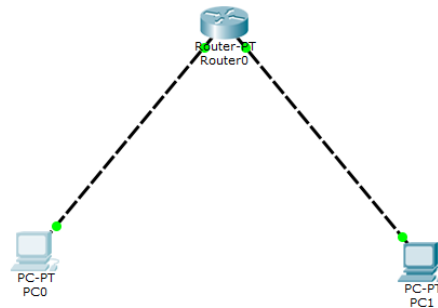


CN LAB 2

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

TOPOLOGY:



OUTPUT WITHOUT SETTING DEFAULT GATEWAY:

```
PC0
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
PC>ipconfi
Invalid Command.

PC>ipconfig

FastEthernet0 Connection: (default port)

Link-local IPv6 Address.....: FE80::201:42FF:FE80:86E3
IP Address.....: 10.0.0.10
Subnet Mask.....: 255.0.0.0
Default Gateway.....: 0.0.0.0

PC>ping 20.0.0.10

Pinging 20.0.0.10 with 32 bytes of data:

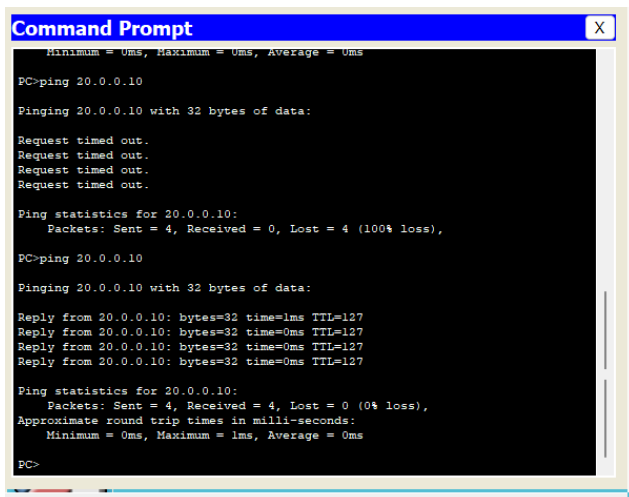
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 20.0.0.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC>
```

The screenshot shows a Packet Tracer PC Command Prompt window for PC0. The window has tabs for Physical, Config, Desktop, and Custom Interface. The Command Prompt shows the output of the 'ipconfig' command, displaying the Link-local IPv6 Address (FE80::201:42FF:FE80:86E3), IP Address (10.0.0.10), Subnet Mask (255.0.0.0), and Default Gateway (0.0.0.0). Below this, the output of the 'ping 20.0.0.10' command is shown, indicating that all four ping requests timed out. The ping statistics show 4 packets sent, 0 received, and 4 lost (100% loss).

OUTPUT AFTER SETTING DEFAULT GATEWAY:



```
Command Prompt
Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 20.0.0.10

Pinging 20.0.0.10 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 20.0.0.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC>ping 20.0.0.10

Pinging 20.0.0.10 with 32 bytes of data:

Reply from 20.0.0.10: bytes=32 time=1ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127

Ping statistics for 20.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>
```

OUTCOMES:

1. 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.
2. 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.
3. 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.