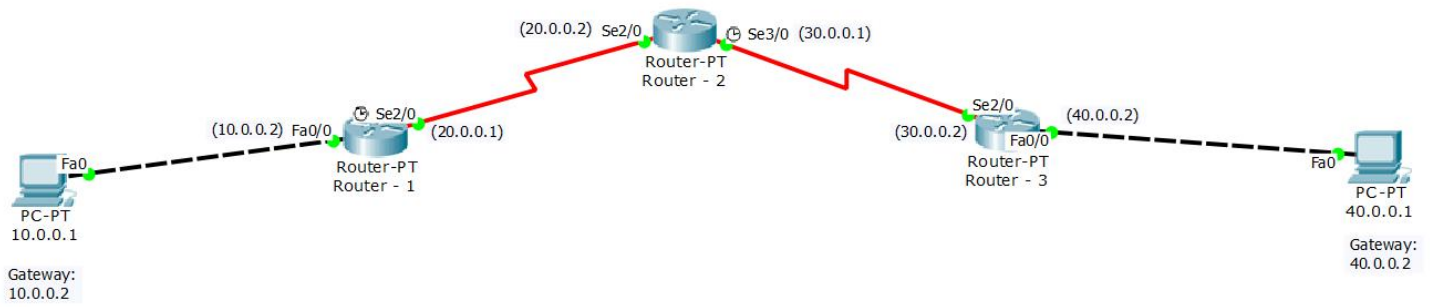


Experiment - 6

Topology:



PC - 1 Configuration:

10.0.0.1

Physical Config Desktop Custom Interface

GLOBAL

- Settings
- Algorithm Settings
- INTERFACE**
- FastEthernet0

Global Settings

Display Name: 10.0.0.1

Gateway/DNS

☐ DHCP

☒ Static

Gateway: 10.0.0.2

DNS Server:

Gateway/DNS Ipv6

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Gateway:

IPv6 DNS Server:

10.0.0.1

Physical Config Desktop Custom Interface

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

FastEthernet0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0090.0C19.753B

IP Configuration

☐ DHCP

☒ Static

IP Address 10.0.0.1

Subnet Mask 255.0.0.0

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address /

Link Local Address: FE80::290:CFF:FE19:753B

PC - 2 Configuration:

40.0.0.1

Physical Config Desktop Custom Interface

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

Global Settings

Display Name 40.0.0.1

Gateway/DNS

☐ DHCP

☒ Static

Gateway 40.0.0.2

DNS Server

Gateway/DNS IPv6

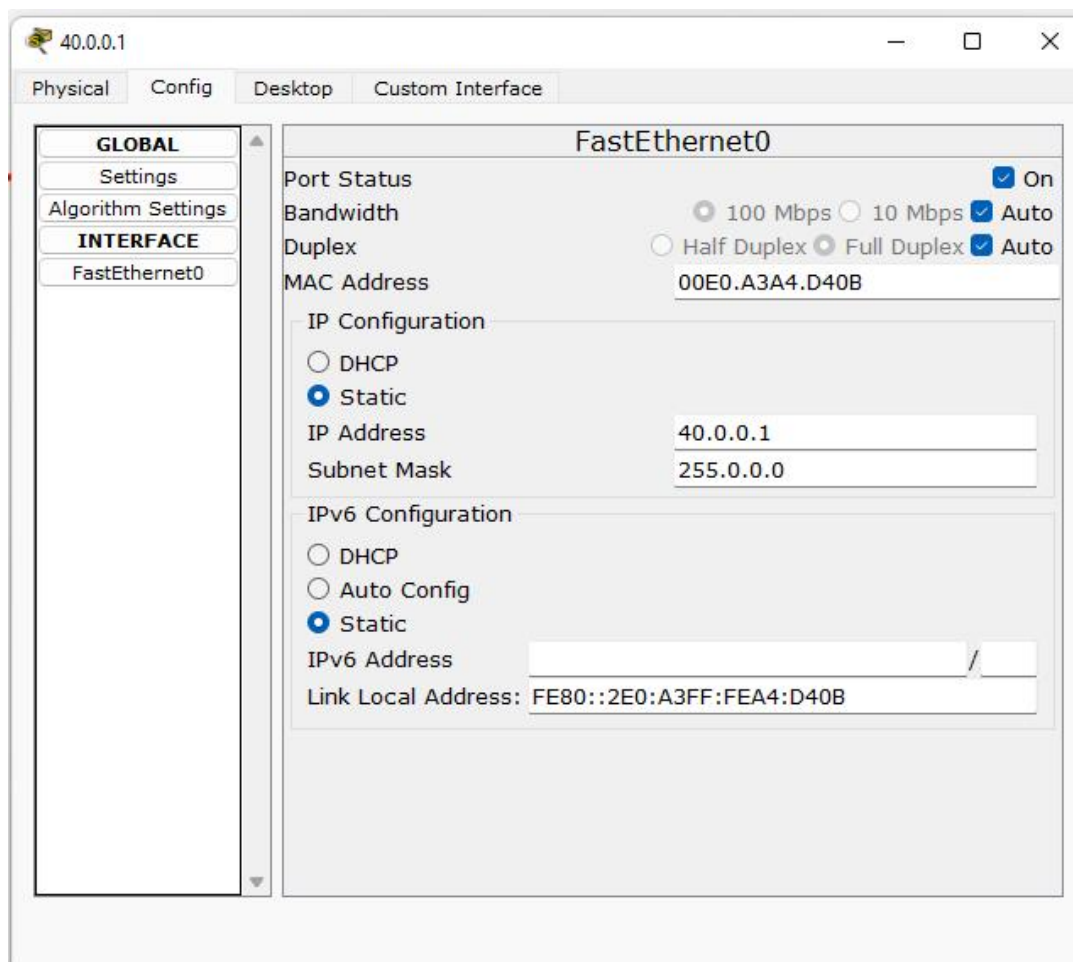
☐ DHCP

☐ Auto Config

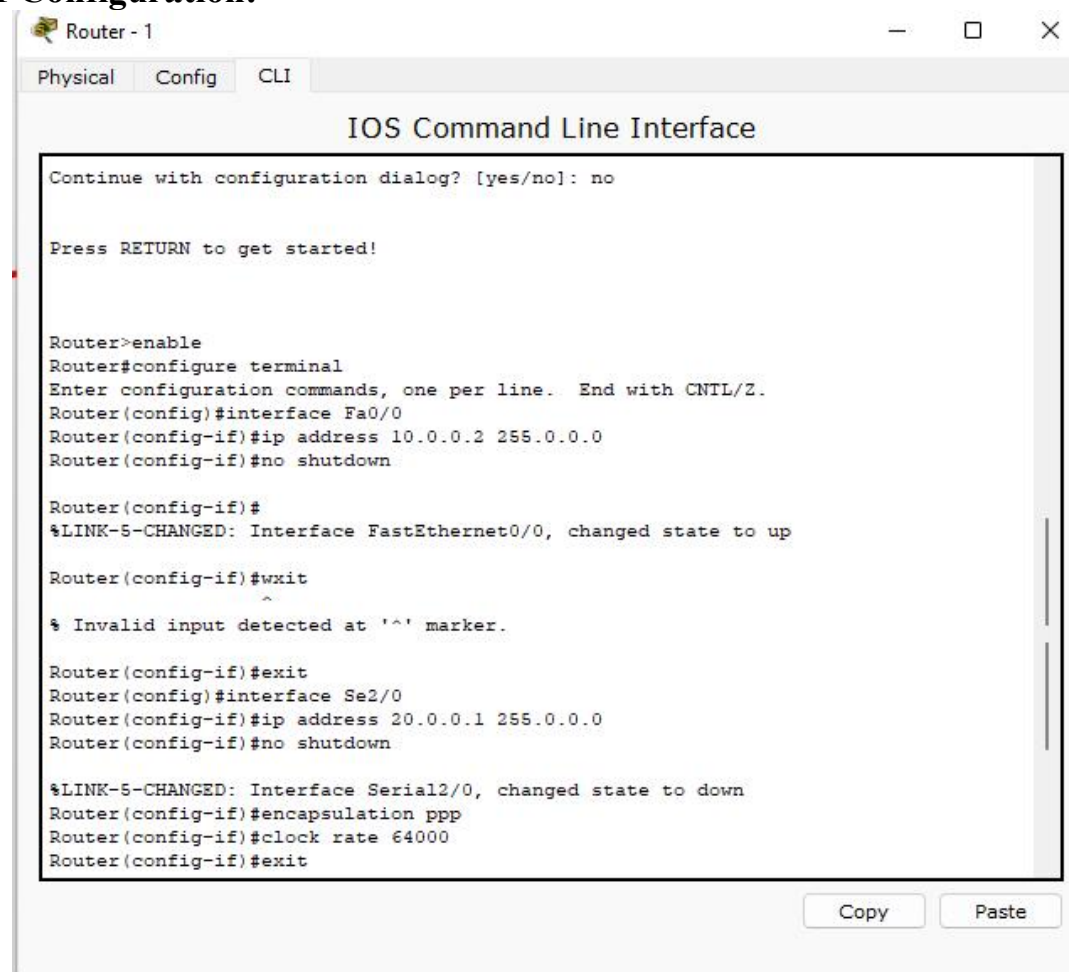
☒ Static

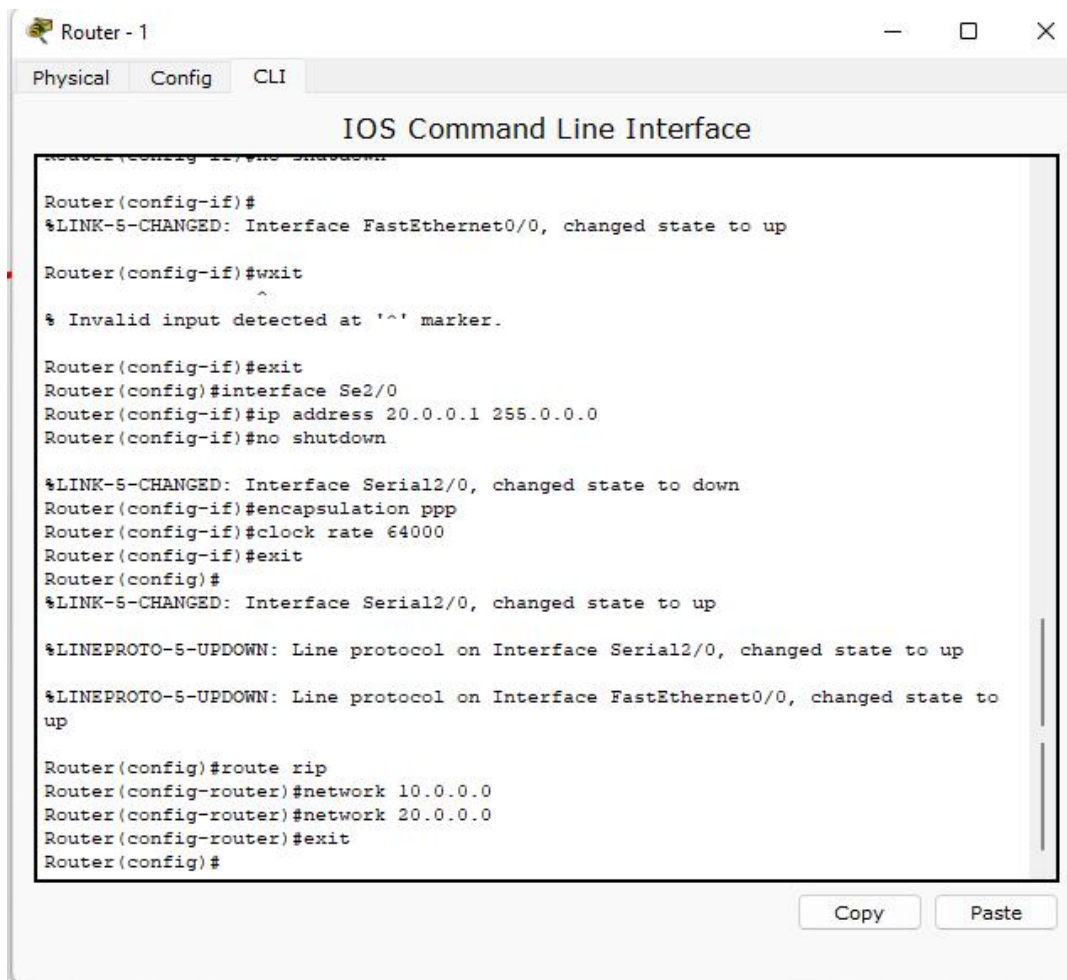
IPv6 Gateway

IPv6 DNS Server

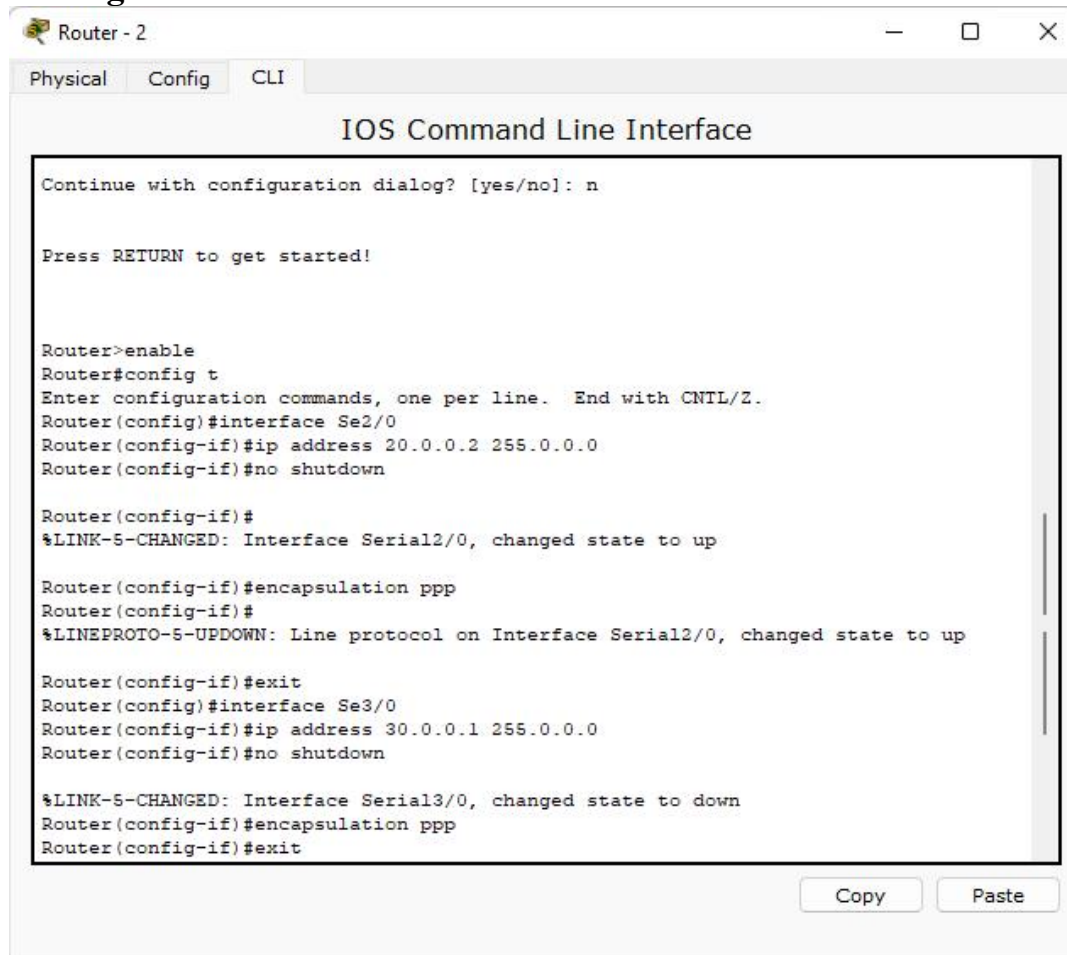


Router - 1 Configuration:





Router - 2 Configuration:



Router - 2

Physical Config CLI

IOS Command Line Interface

```
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

Router(config-if)#encapsulation ppp
Router(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router(config-if)#exit
Router(config)#interface Se3/0
Router(config-if)#ip address 30.0.0.1 255.0.0.0
Router(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial3/0, changed state to down
Router(config-if)#encapsulation ppp
Router(config-if)#exit
Router(config)#
%LINK-5-CHANGED: Interface Serial3/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

Router(config)#interface Se3/0
Router(config-if)#clock rate 64000
Router(config-if)#exit
Router(config)#route rip
Router(config-router)#network 20.0.0.0
Router(config-router)#network 30.0.0.0
Router(config-router)#exit
Router(config)#
```

Copy Paste

Router - 3 Configuration:

Router - 3

Physical Config CLI

IOS Command Line Interface

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

Press RETURN to get started!

Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Se2/0
Router(config-if)#ip address 30.0.0.2 255.0.0.0
Router(config-if)#no shutdown

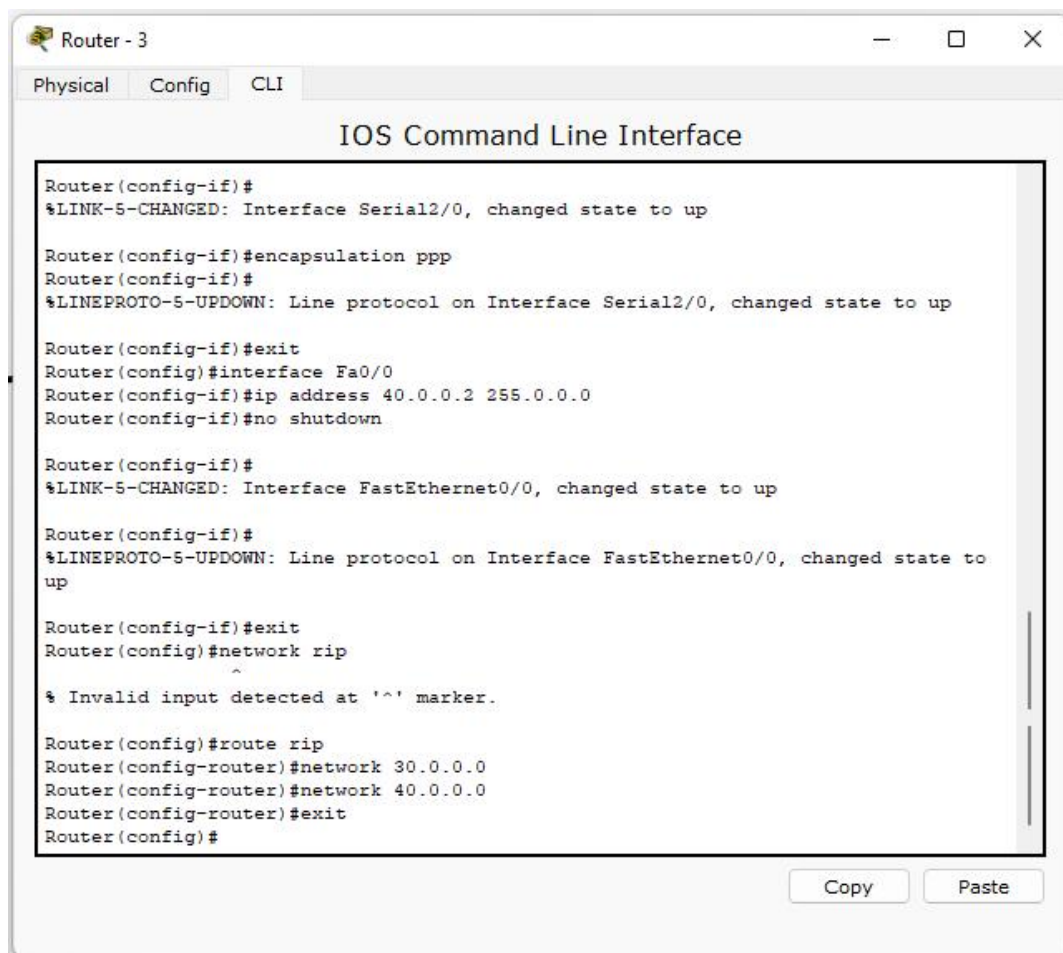
Router(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

Router(config-if)#encapsulation ppp
Router(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router(config-if)#exit
Router(config)#interface Fa0/0
Router(config-if)#ip address 40.0.0.2 255.0.0.0
Router(config-if)#no shutdown

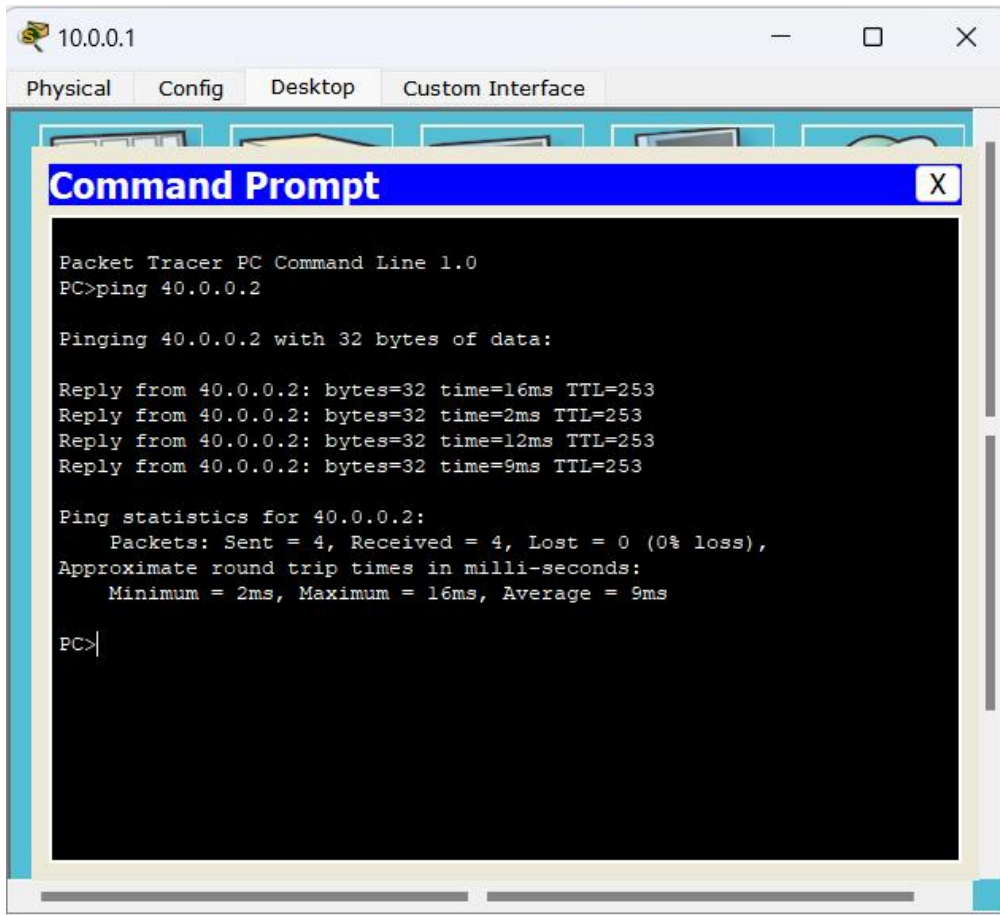
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

Copy Paste



Output:

Ping from PC - 1 to PC - 2:



The screenshot shows a Packet Tracer PC window for IP 10.0.0.1. The 'Desktop' tab is active, displaying a 'Command Prompt' window. The command prompt shows the execution of the 'ping 40.0.0.2' command. The output indicates that four packets were successfully received with 0% loss. The round trip times are: 16ms, 2ms, 12ms, and 9ms, with an average of 9ms.

```
10.0.0.1
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
PC>ping 40.0.0.2

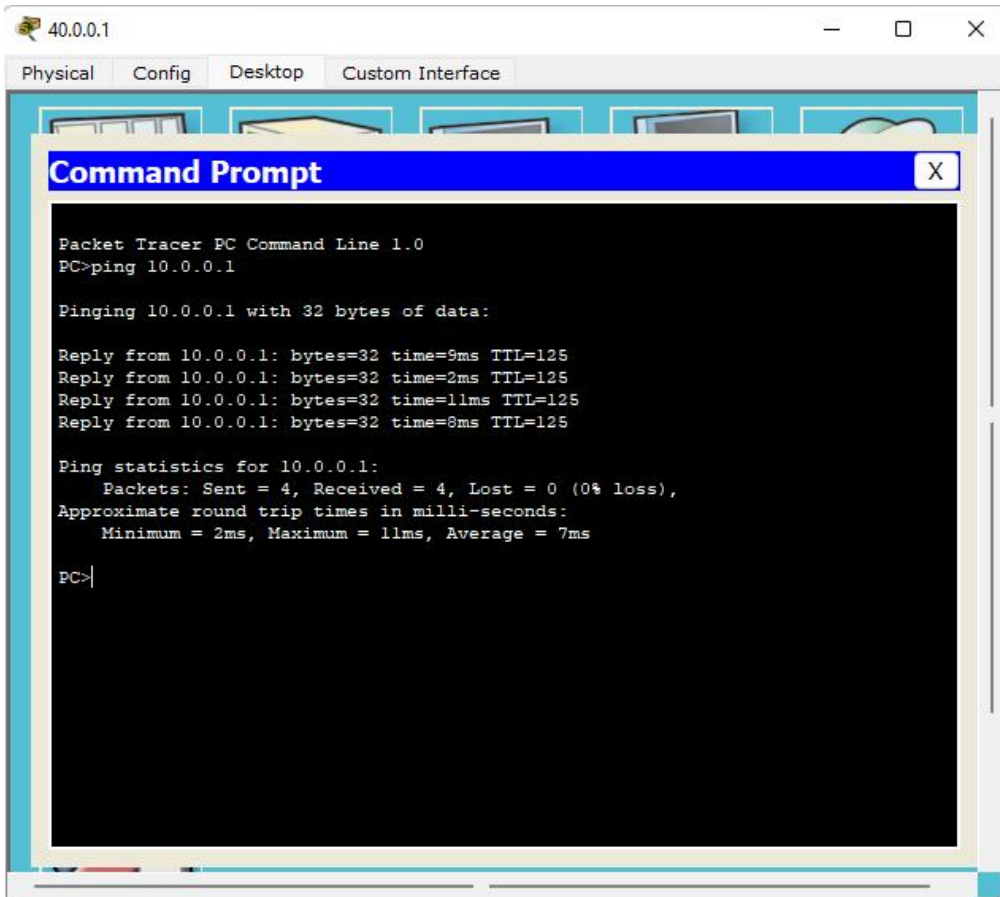
Pinging 40.0.0.2 with 32 bytes of data:

Reply from 40.0.0.2: bytes=32 time=16ms TTL=253
Reply from 40.0.0.2: bytes=32 time=2ms TTL=253
Reply from 40.0.0.2: bytes=32 time=12ms TTL=253
Reply from 40.0.0.2: bytes=32 time=9ms TTL=253

Ping statistics for 40.0.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 16ms, Average = 9ms

PC>
```

Ping from PC - 2 to PC - 1:



The screenshot shows a Packet Tracer PC window for IP 40.0.0.1. The 'Desktop' tab is active, displaying a 'Command Prompt' window. The command prompt shows the execution of the 'ping 10.0.0.1' command. The output indicates that four packets were successfully received with 0% loss. The round trip times are: 9ms, 2ms, 11ms, and 8ms, with an average of 7ms.

```
40.0.0.1
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
PC>ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data:

Reply from 10.0.0.1: bytes=32 time=9ms TTL=125
Reply from 10.0.0.1: bytes=32 time=2ms TTL=125
Reply from 10.0.0.1: bytes=32 time=11ms TTL=125
Reply from 10.0.0.1: bytes=32 time=8ms TTL=125

Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 11ms, Average = 7ms

PC>
```