# EXPERIMENT-5(BUS TOPOLOGY)

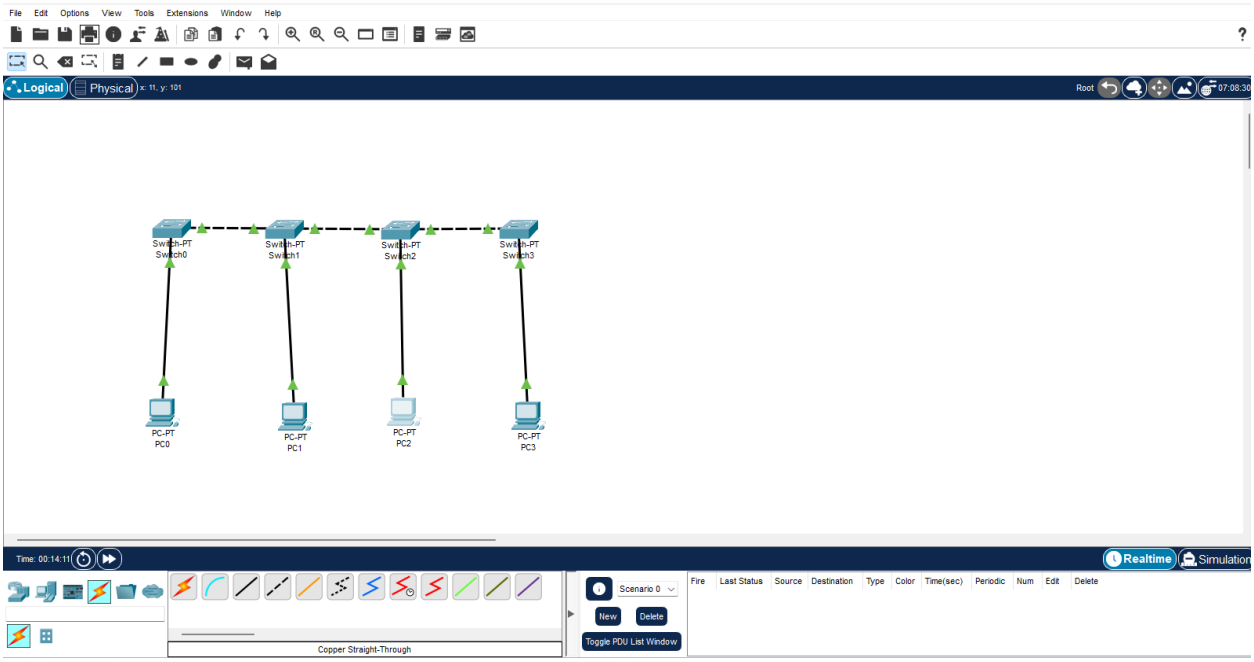
**Steps to Configure and Setup Bus Topology:**

**Step 1:** First, open the cisco packet tracer desktop and select the devices given below:

| S.NO | Device | Model-Name |
|---|---|---|
| 1. | PC | PC |
| 2. | Switch | PT-Switch |

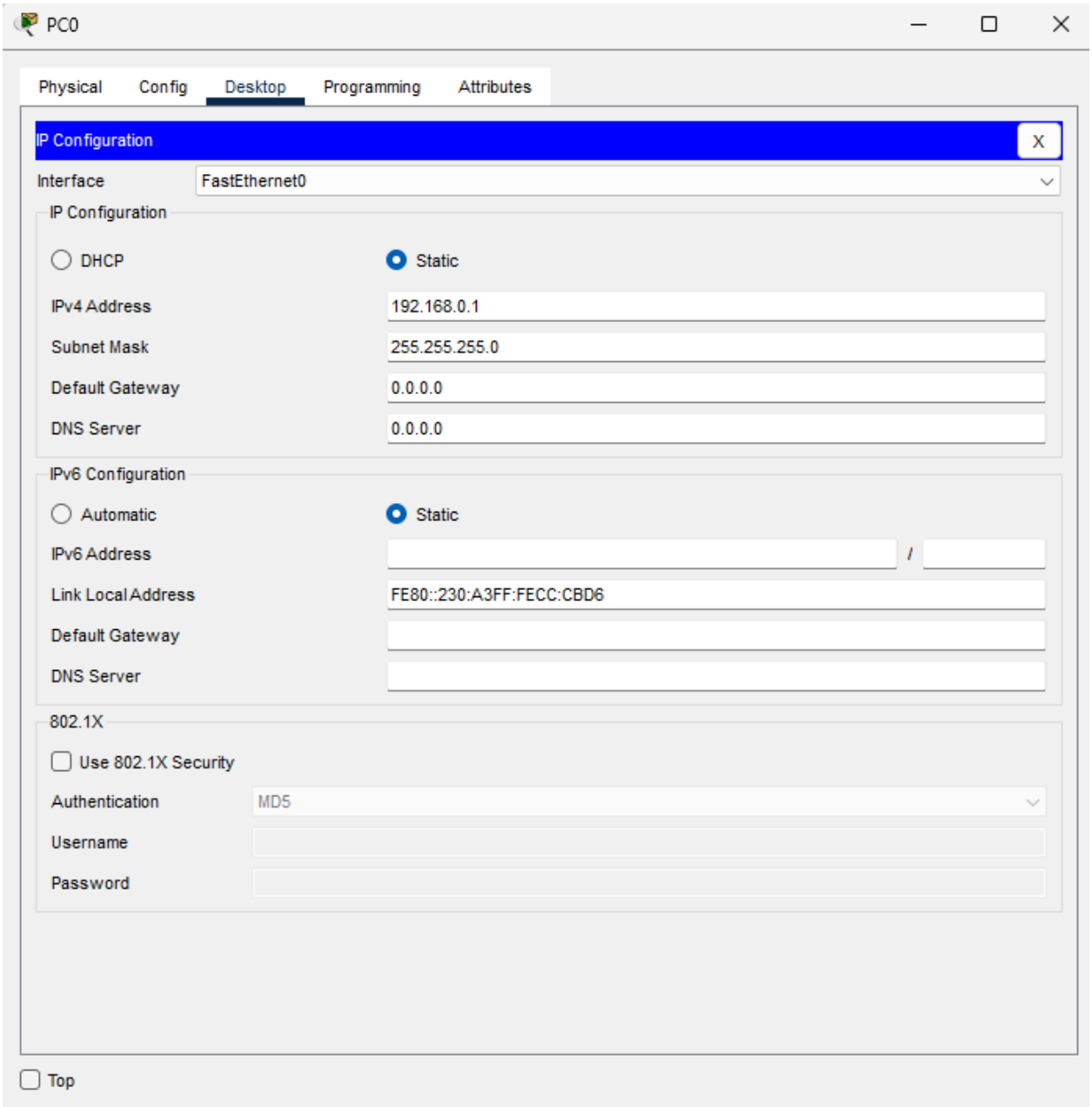
| Device | IPv4 Address | Subnet Mask |
|---|---|---|
| pc0 | 192.168.0.1 | 255.255.255.0 |
| pc1 | 192.168.0.2 | 255.255.255.0 |
| pc2 | 192.168.0.3 | 255.255.255.0 |
| pc3 | 192.168.0.4 | 255.255.255.0 |

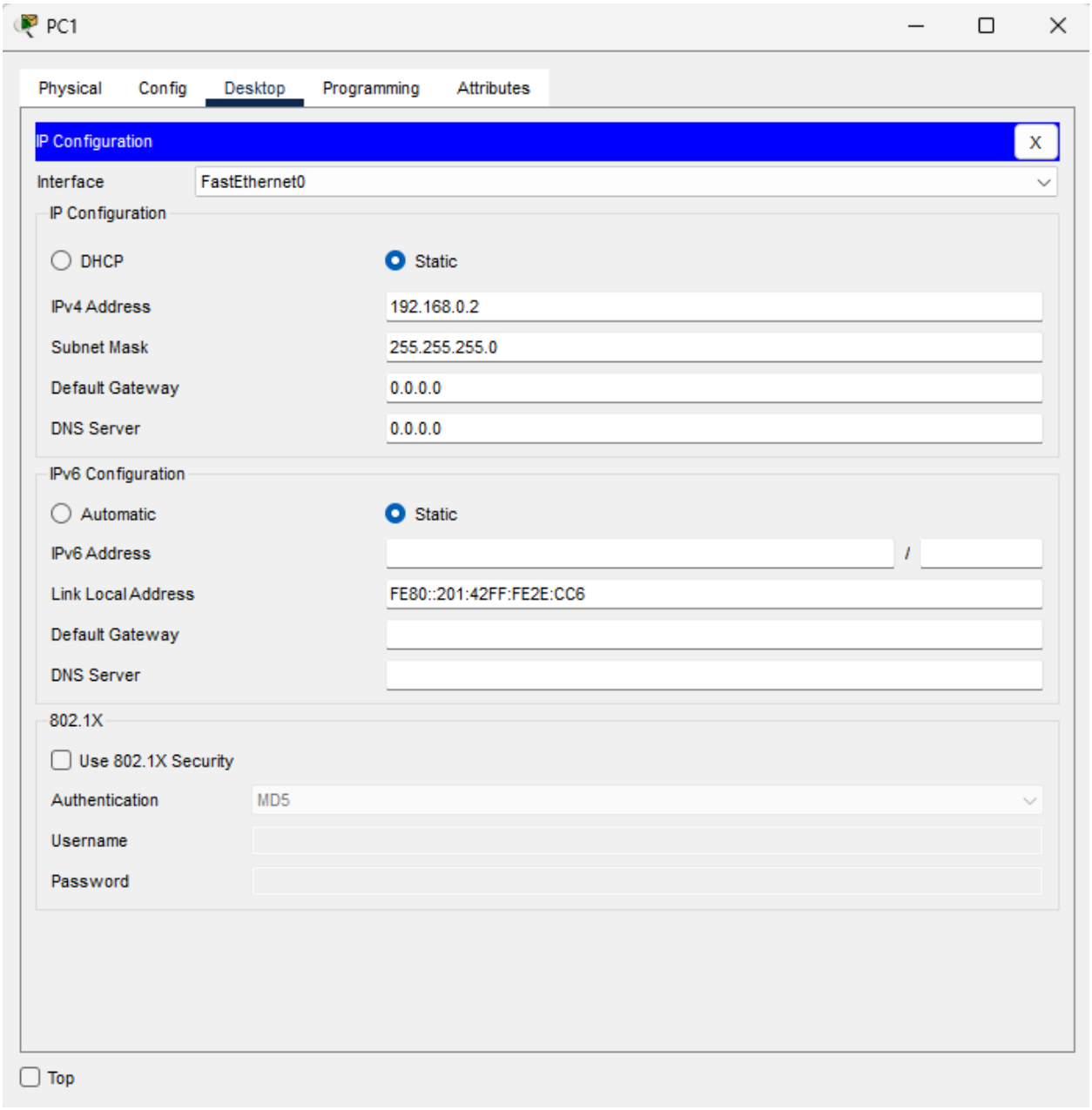
Then, create a network topology as shown below image:
Use an Automatic connecting cable to connect the devices with others.

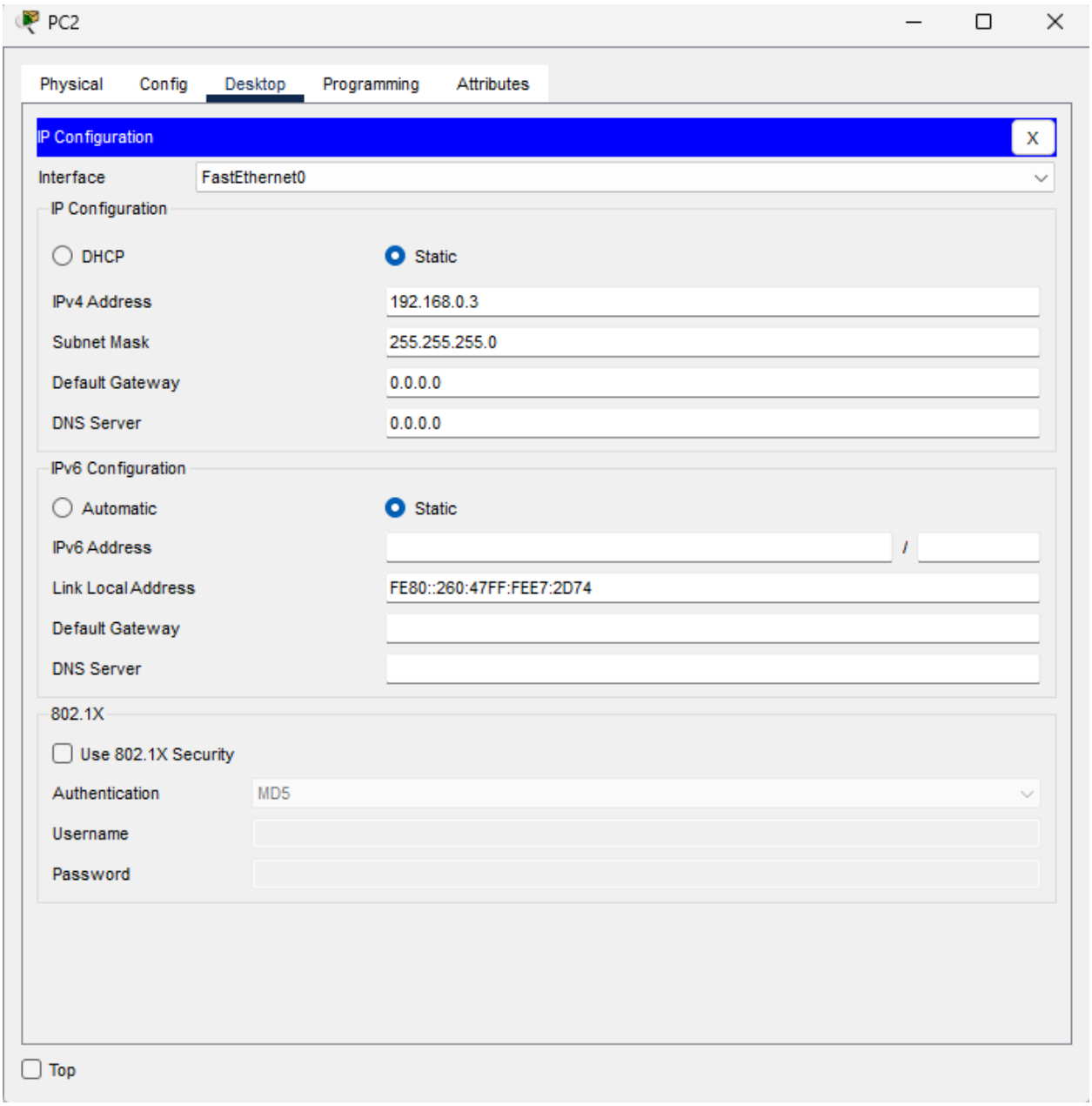


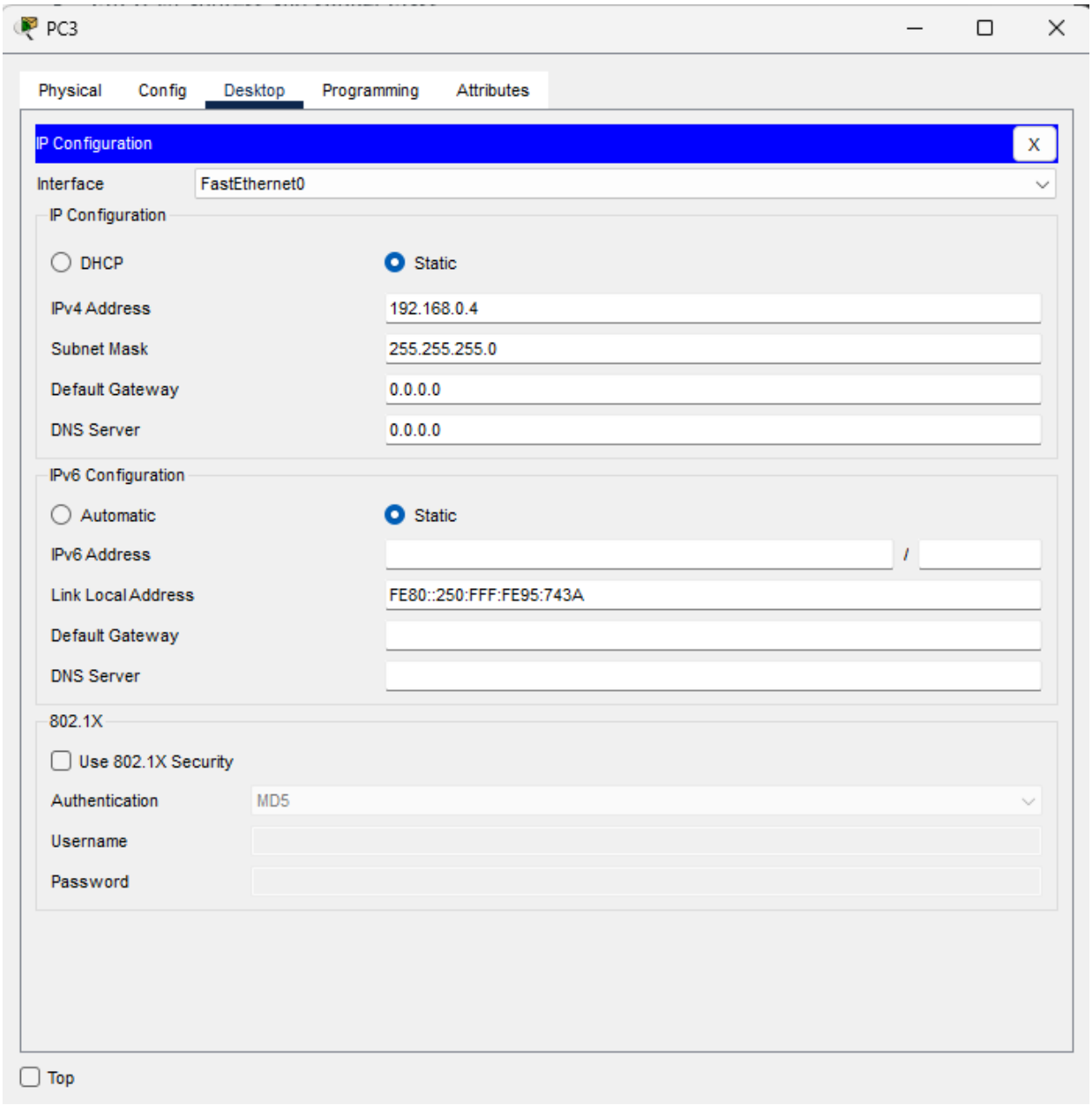
**Step 2:** Configure the PCs (hosts) with IPv4 address and Subnet Mask according to the IP addressing table given above.

- To assign an IP address in PC0, click on PC0.
- Then, go to desktop and then IP configuration and there you will IPv4
- configuration.
- Fill IPv4 address and subnet mask.



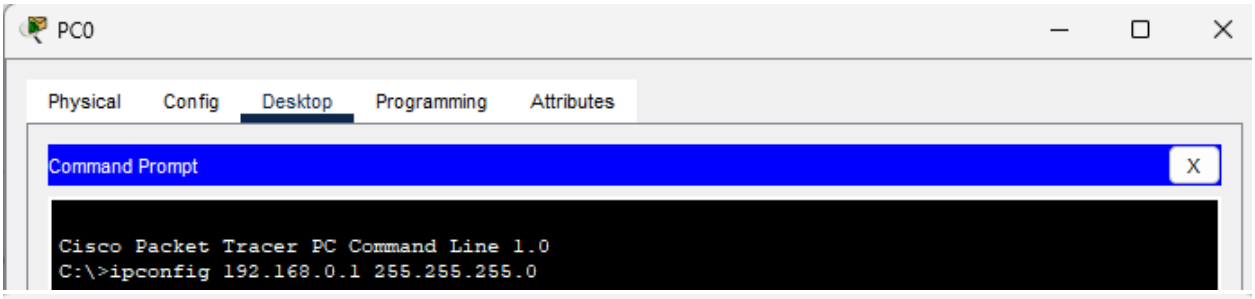

PC1
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.0.2
Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
/
Link Local Address
FE80::201:42FF:FE2E:CC6
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top

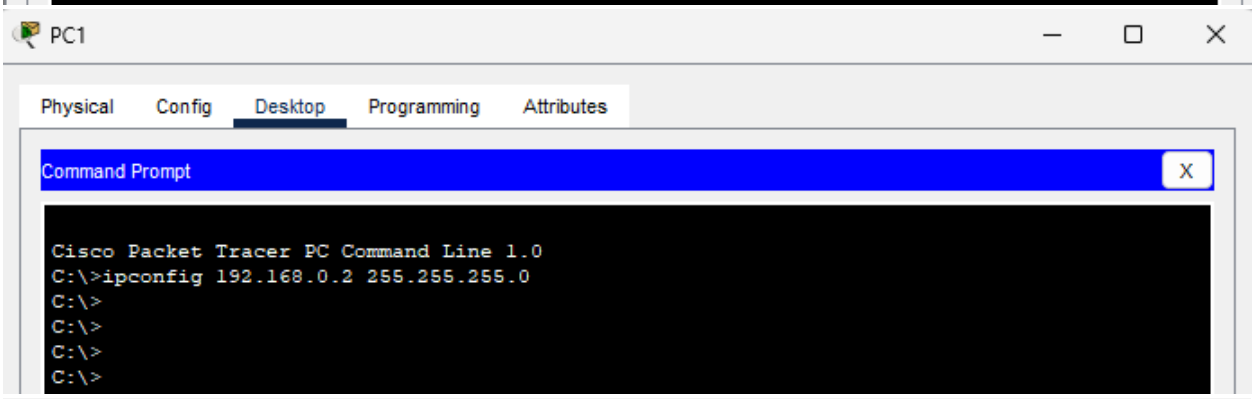

PC2
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.0.3
Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
/
Link Local Address
FE80::260:47FF:FEE7:2D74
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top

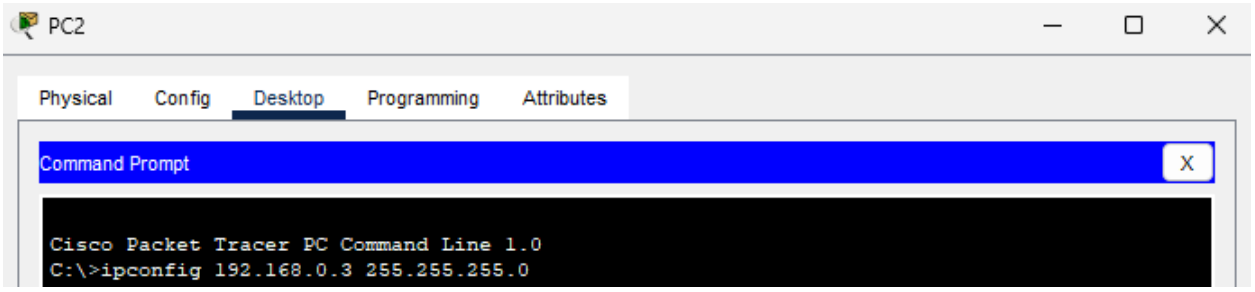


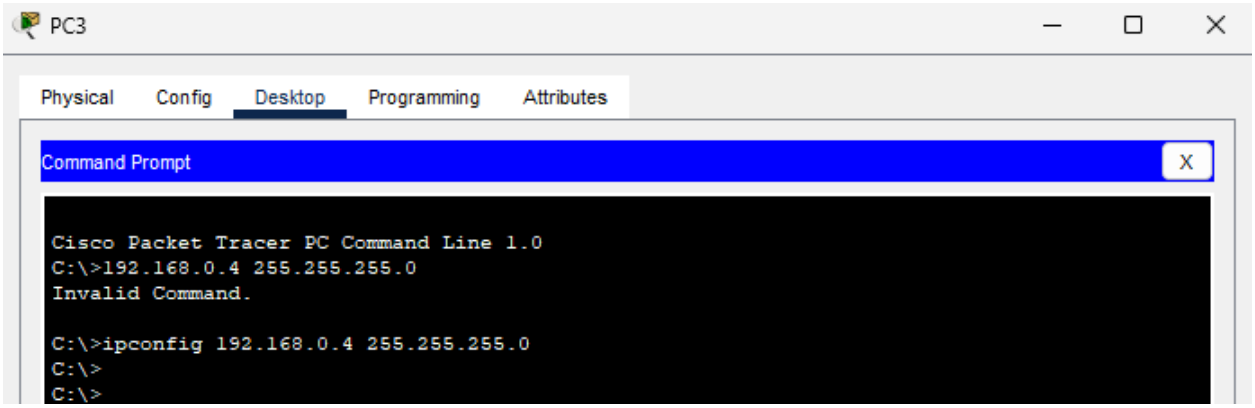

- Assigning an IP address using the ipconfig command, or we can also assign an
- IP address with the help of a command.
- Go to the command terminal of the PC.

- Then, type ipconfig <IPv4 address><subnet mask><default gateway>(if needed)
- Example: ipconfig 192.168.0.1 255.255.255.0



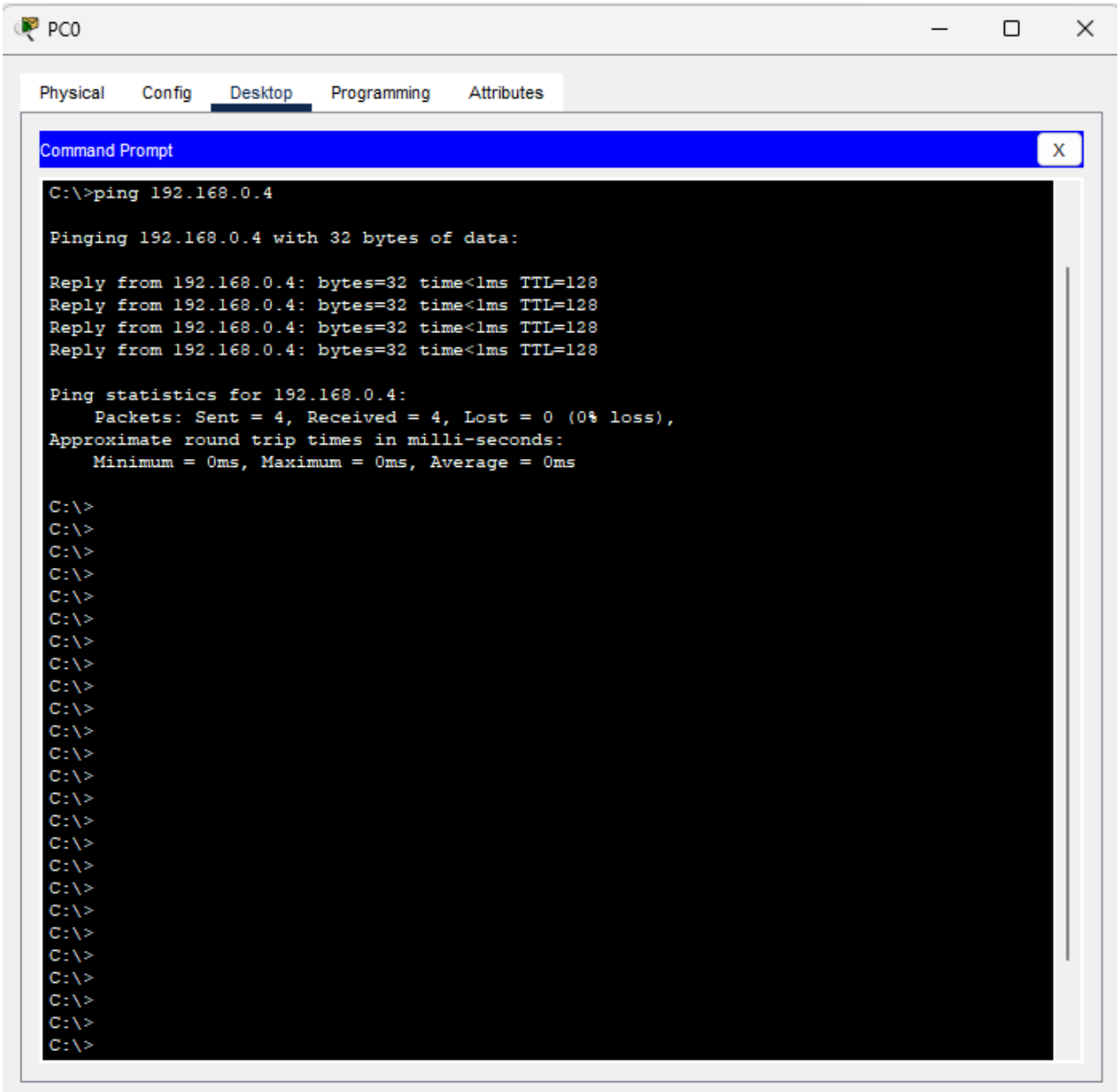



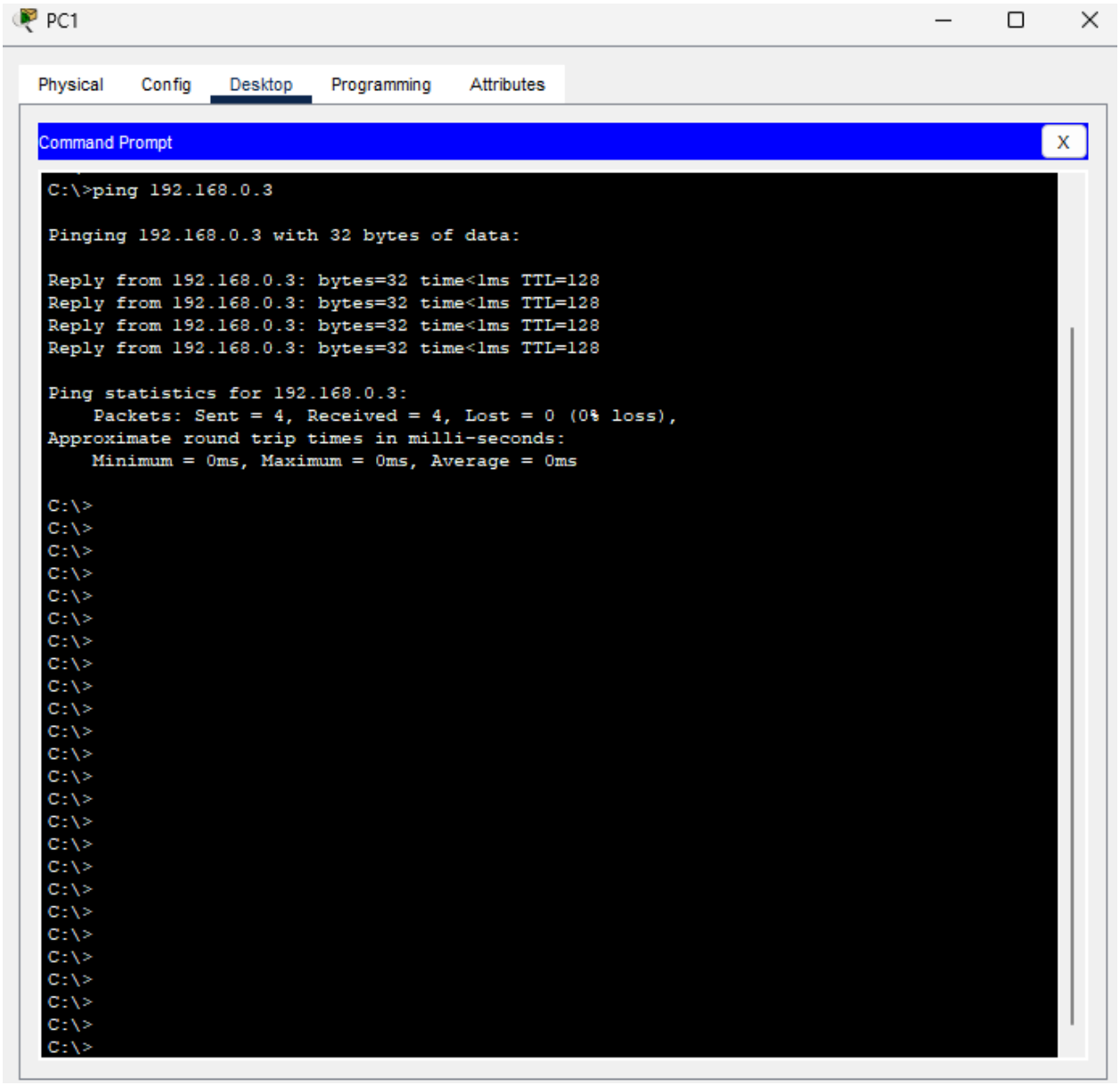



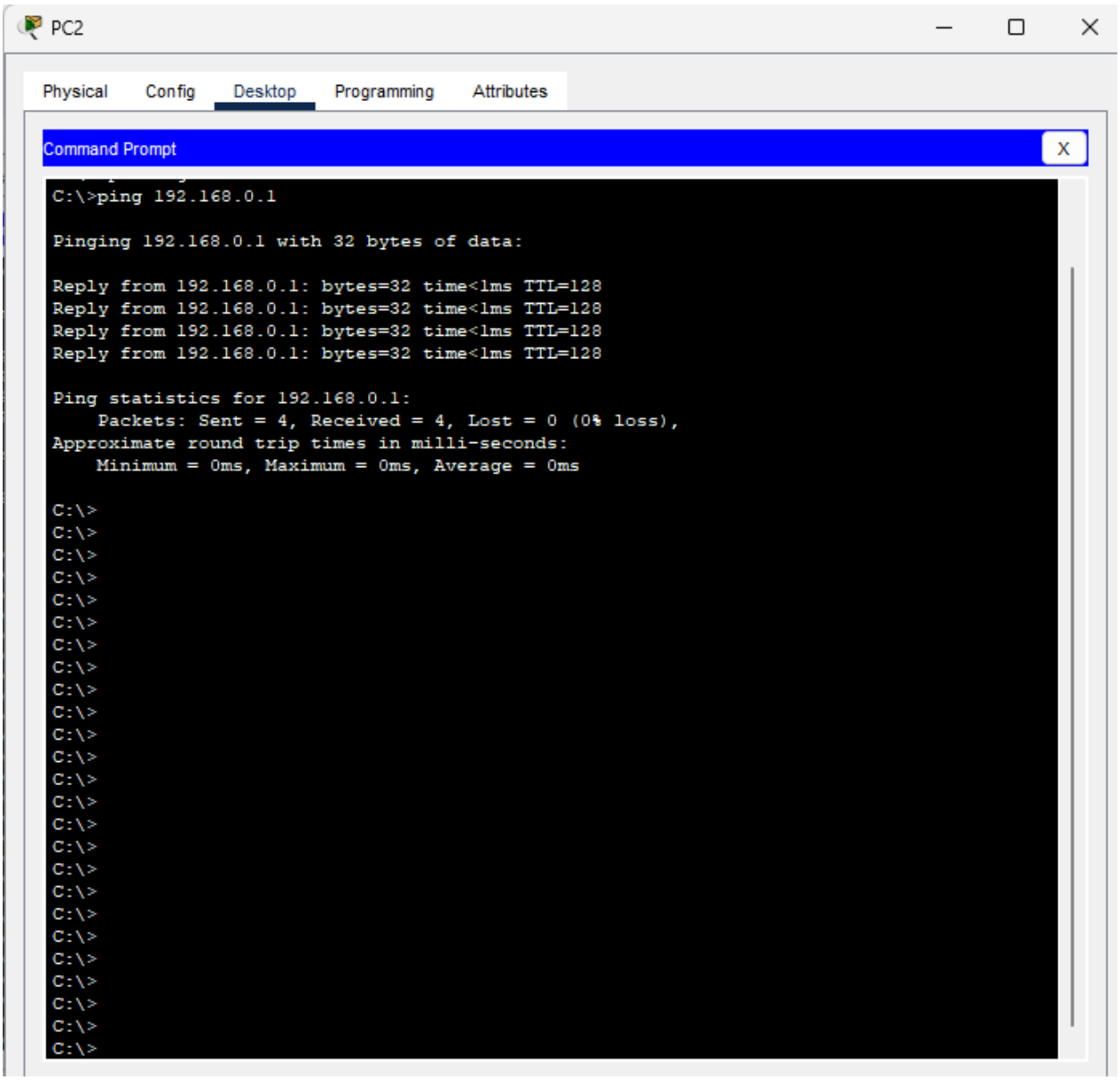
- Repeat the same procedure with other PCs to configure them thoroughly.

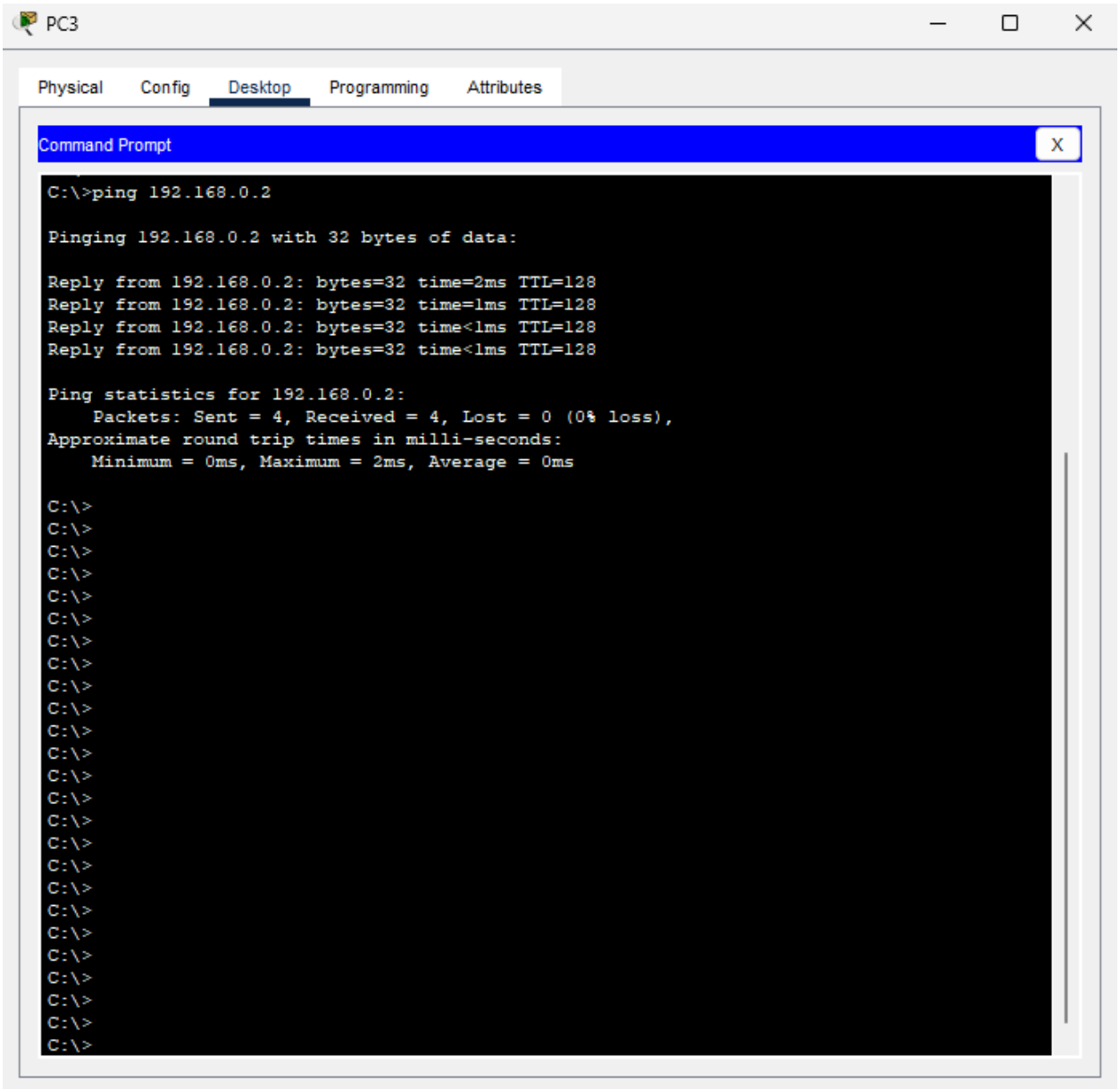
**Step 3:** Verify the connection by pinging the IP address of any host in PC0.

- Use the ping command to verify the connection.
- As we can see we are getting replies from a targeted node on both PCs.
- Hence the connection is verified.




PC1
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
C:\>ping 192.168.0.3
Pinging 192.168.0.3 with 32 bytes of data:
Reply from 192.168.0.3: bytes=32 time<1ms TTL=128
Reply from 192.168.0.3: bytes=32 time<1ms TTL=128
Reply from 192.168.0.3: bytes=32 time<1ms TTL=128
Reply from 192.168.0.3: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.0.3:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>


PC2
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
C:\>ping 192.168.0.1
Pinging 192.168.0.1 with 32 bytes of data:
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.0.1:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>


PC3
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
C:\>ping 192.168.0.2
Pinging 192.168.0.2 with 32 bytes of data:
Reply from 192.168.0.2: bytes=32 time=2ms TTL=128
Reply from 192.168.0.2: bytes=32 time=1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.0.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 2ms, Average = 0ms
C:\>