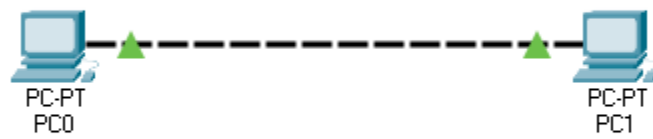


Name: Sagar Bhatia

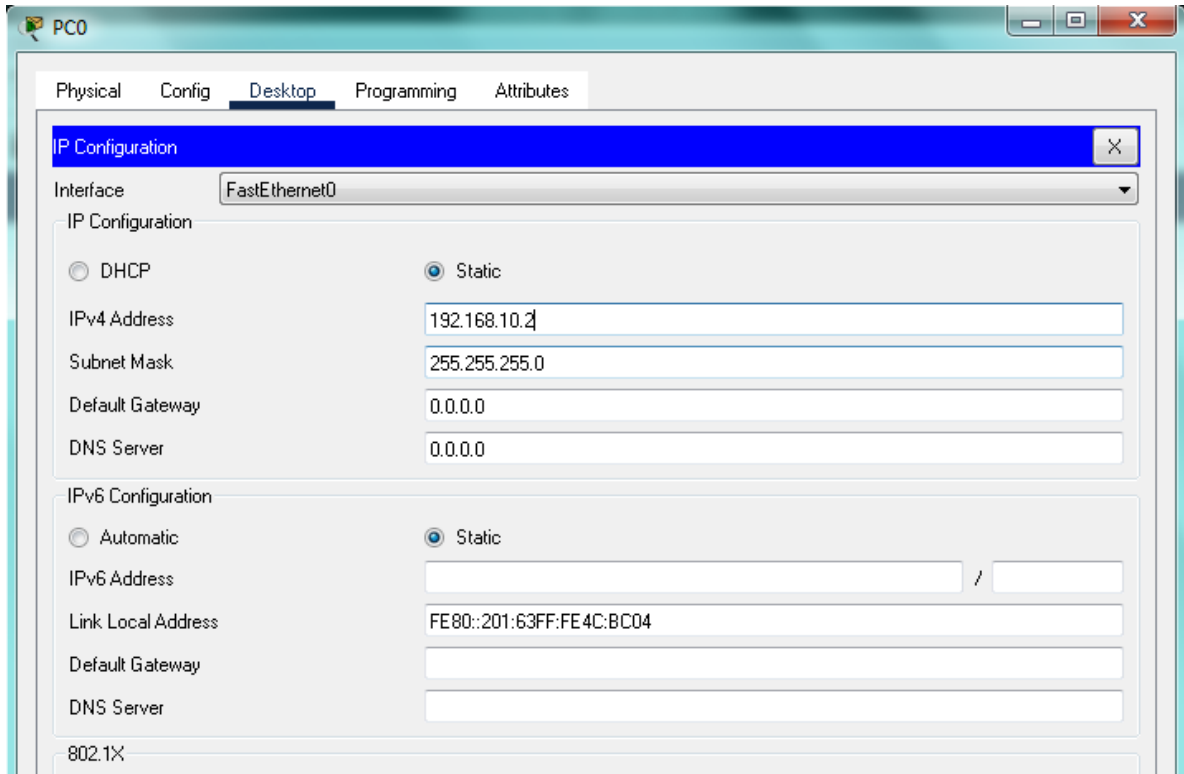
Course: MCA-2-B

Question 2: Design a network to connect with two PCs.

Step 1: Establishing a connection between pc0 and pc1.

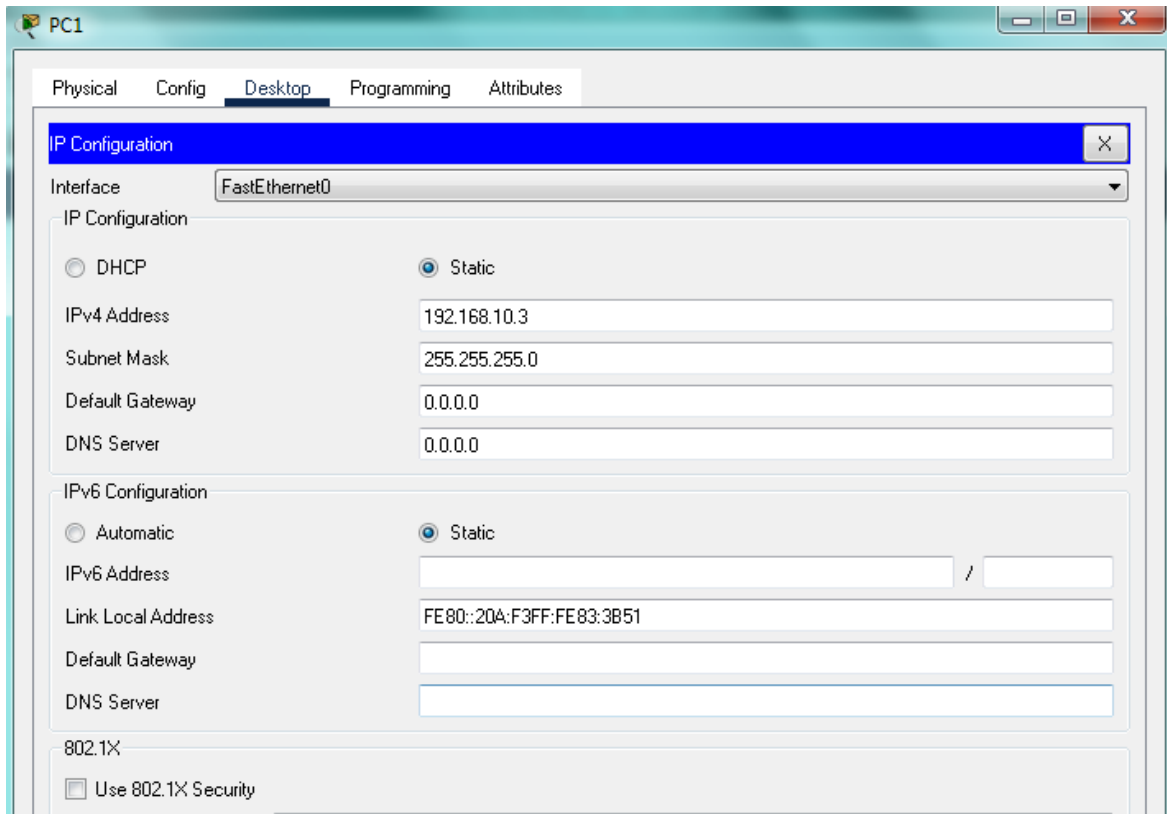


Step 2: Providing IP address and subnet mask to both the PCs.



The screenshot shows the configuration window for PC0. The 'Desktop' tab is selected. The 'IP Configuration' section is expanded, showing the 'FastEthernet0' interface. The 'Static' radio button is selected under 'IP Configuration'. The 'IPv4 Address' is set to 192.168.10.2, 'Subnet Mask' is 255.255.255.0, 'Default Gateway' is 0.0.0.0, and 'DNS Server' is 0.0.0.0. The 'IPv6 Configuration' section is also expanded, showing the 'Static' radio button selected. The 'IPv6 Address' is empty, 'Link Local Address' is FE80::201:63FF:FE4C:BC04, 'Default Gateway' is empty, and 'DNS Server' is empty. The '802.1X' section is partially visible at the bottom.

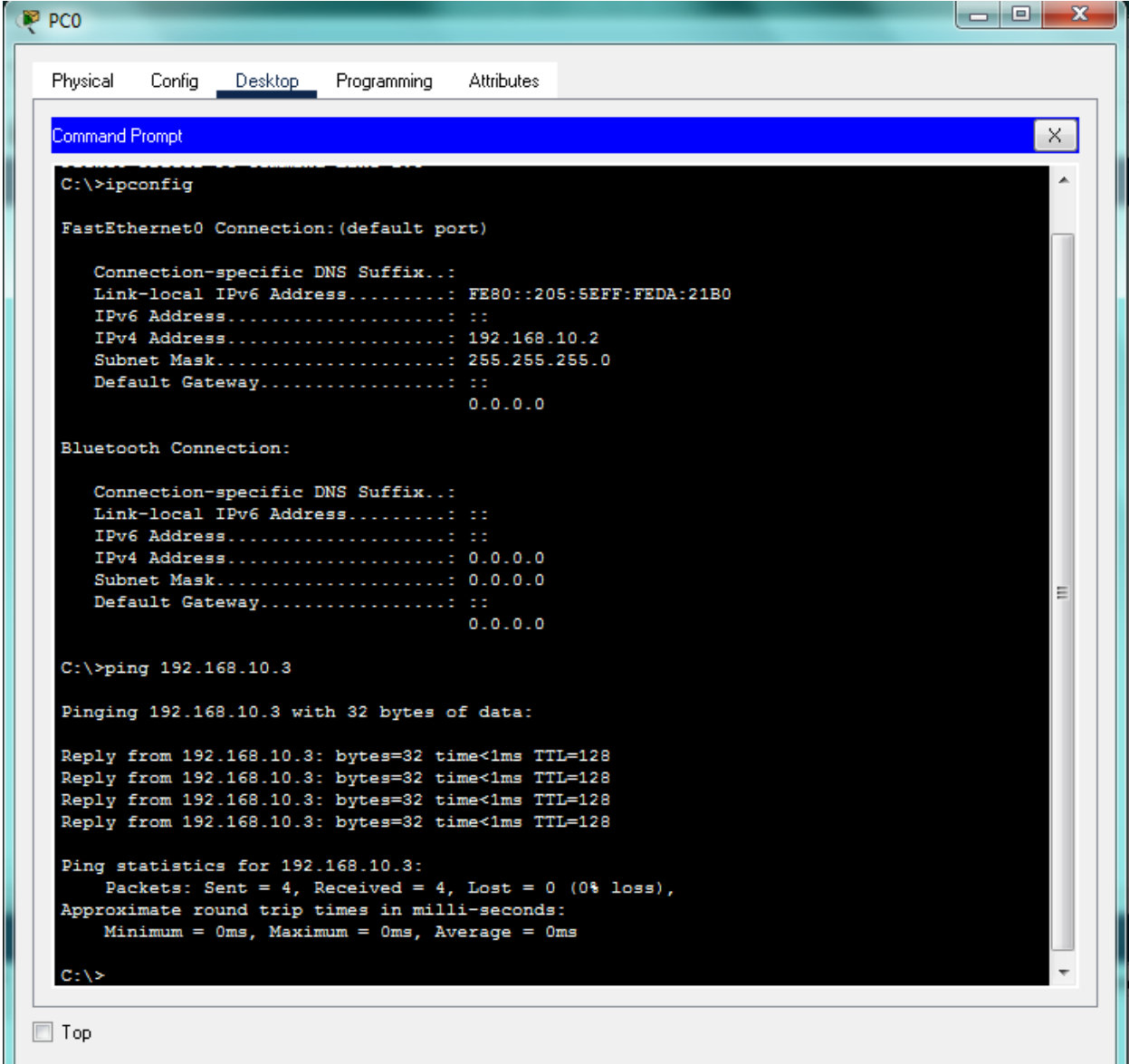
Field	Value
Interface	FastEthernet0
IP Configuration	Static
IPv4 Address	192.168.10.2
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
DNS Server	0.0.0.0
IPv6 Configuration	Static
IPv6 Address	
Link Local Address	FE80::201:63FF:FE4C:BC04
Default Gateway	
DNS Server	
802.1X	



The screenshot shows the configuration window for PC1. The 'Desktop' tab is selected. The 'IP Configuration' section is expanded, showing the 'FastEthernet0' interface. The 'Static' radio button is selected under 'IP Configuration'. The 'IPv4 Address' is set to 192.168.10.3, 'Subnet Mask' is 255.255.255.0, 'Default Gateway' is 0.0.0.0, and 'DNS Server' is 0.0.0.0. The 'IPv6 Configuration' section is also expanded, showing the 'Static' radio button selected. The 'IPv6 Address' is empty, 'Link Local Address' is FE80::20A:F3FF:FE83:3B51, 'Default Gateway' is empty, and 'DNS Server' is empty. The '802.1X' section is partially visible at the bottom, with a checkbox for 'Use 802.1X Security'.

Field	Value
Interface	FastEthernet0
IP Configuration	Static
IPv4 Address	192.168.10.3
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
DNS Server	0.0.0.0
IPv6 Configuration	Static
IPv6 Address	
Link Local Address	FE80::20A:F3FF:FE83:3B51
Default Gateway	
DNS Server	
802.1X	
Use 802.1X Security	<input type="checkbox"/>

Step 3: Configuring the IP address of the PCs and checking connection from pc0 to pc1 and vice versa with the help of ping command.



The screenshot shows a window titled "PC0" with tabs for Physical, Config, Desktop, Programming, and Attributes. The "Desktop" tab is active, displaying a "Command Prompt" window. The command prompt shows the execution of the `ipconfig` command, displaying network configuration for FastEthernet0 and Bluetooth connections. It then shows the execution of the `ping 192.168.10.3` command, resulting in four successful replies with 0% loss. Ping statistics are also displayed at the bottom of the command prompt output.

```
C:\>ipconfig

FastEthernet0 Connection: (default port)

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: FE80::205:SEFF:FEDA:21B0
    IPv6 Address . . . . .: ::
    IPv4 Address. . . . .: 192.168.10.2
    Subnet Mask . . . . .: 255.255.255.0
    Default Gateway . . . . .: ::
                                0.0.0.0

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: ::
    IPv4 Address. . . . .: 0.0.0.0
    Subnet Mask . . . . .: 0.0.0.0
    Default Gateway . . . . .: ::
                                0.0.0.0

C:\>ping 192.168.10.3

Pinging 192.168.10.3 with 32 bytes of data:

Reply from 192.168.10.3: bytes=32 time<1ms TTL=128
Reply from 192.168.10.3: bytes=32 time<1ms TTL=128
Reply from 192.168.10.3: bytes=32 time<1ms TTL=128
Reply from 192.168.10.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

☐ Top

```
C:\>ipconfig
```

```
FastEthernet0 Connection: (default port)
```

```
Connection-specific DNS Suffix...:
Link-local IPv6 Address . . . . .: FE80::290:21FF:FEA4:2E62
IPv6 Address . . . . .: ::
IPv4 Address . . . . .: 192.168.10.3
Subnet Mask . . . . .: 255.255.255.0
Default Gateway . . . . .: ::
                                0.0.0.0
```

```
Bluetooth Connection:
```

```
Connection-specific DNS Suffix...:
Link-local IPv6 Address . . . . .: ::
IPv6 Address . . . . .: ::
IPv4 Address . . . . .: 0.0.0.0
Subnet Mask . . . . .: 0.0.0.0
Default Gateway . . . . .: ::
                                0.0.0.0
```

```
C:\>ping 192.168.10.2
```

```
Pinging 192.168.10.2 with 32 bytes of data:
```

```
Reply from 192.168.10.2: bytes=32 time<1ms TTL=128
Reply from 192.168.10.2: bytes=32 time<1ms TTL=128
Reply from 192.168.10.2: bytes=32 time<1ms TTL=128
Reply from 192.168.10.2: bytes=32 time<1ms TTL=128
```

```
Ping statistics for 192.168.10.2:
```

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