Exercise – 13 BGP Protocol

Aim

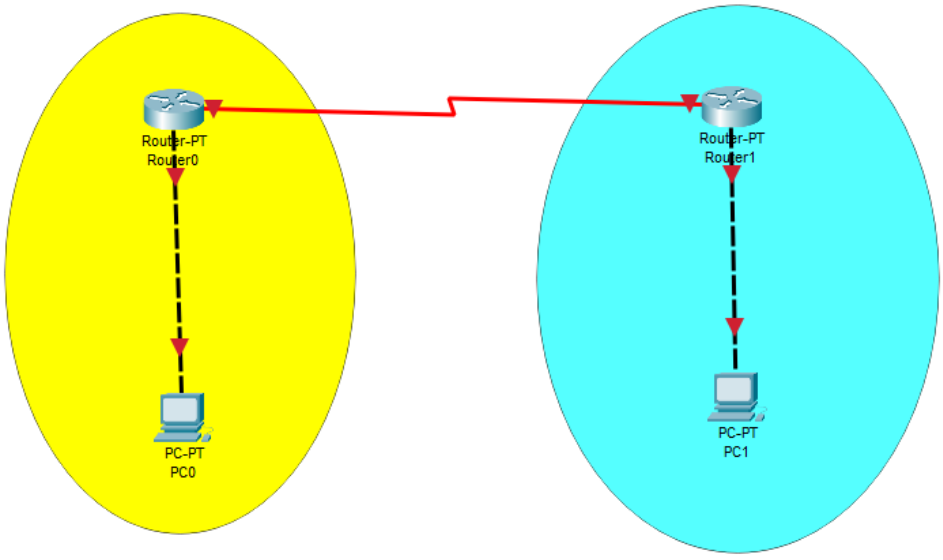
To Configuring BGP protocol

Pre-requisite:

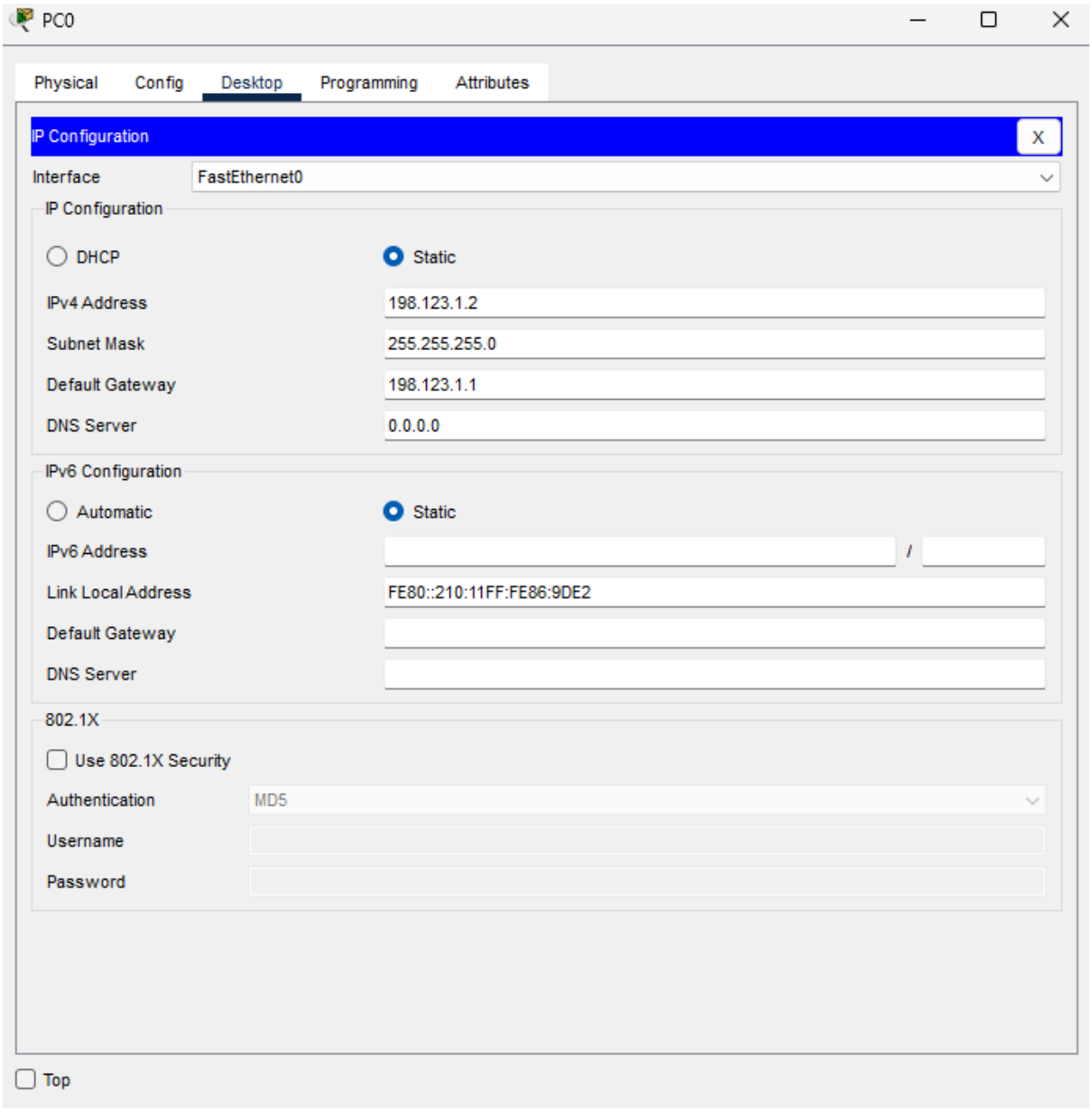
BGP protocol

Procedure:

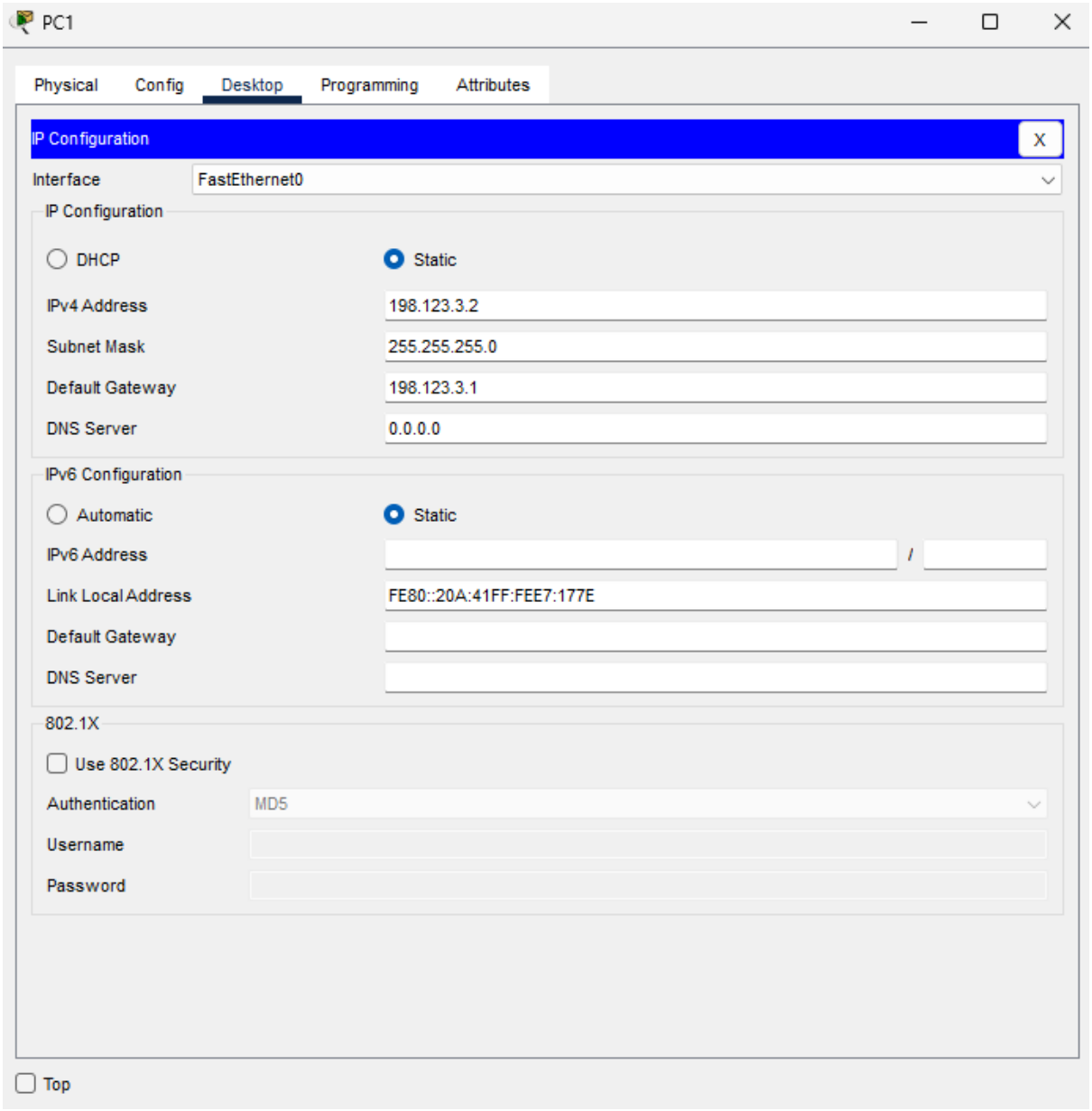
1. From the Network Devices category, select routers, and from the devices drag 2 routers and 2 PC into the workspace.
2. Using the serial DTE cable connect the routers
3. Connect routers using serial DTE cables and connect the PC using copper cross over cables



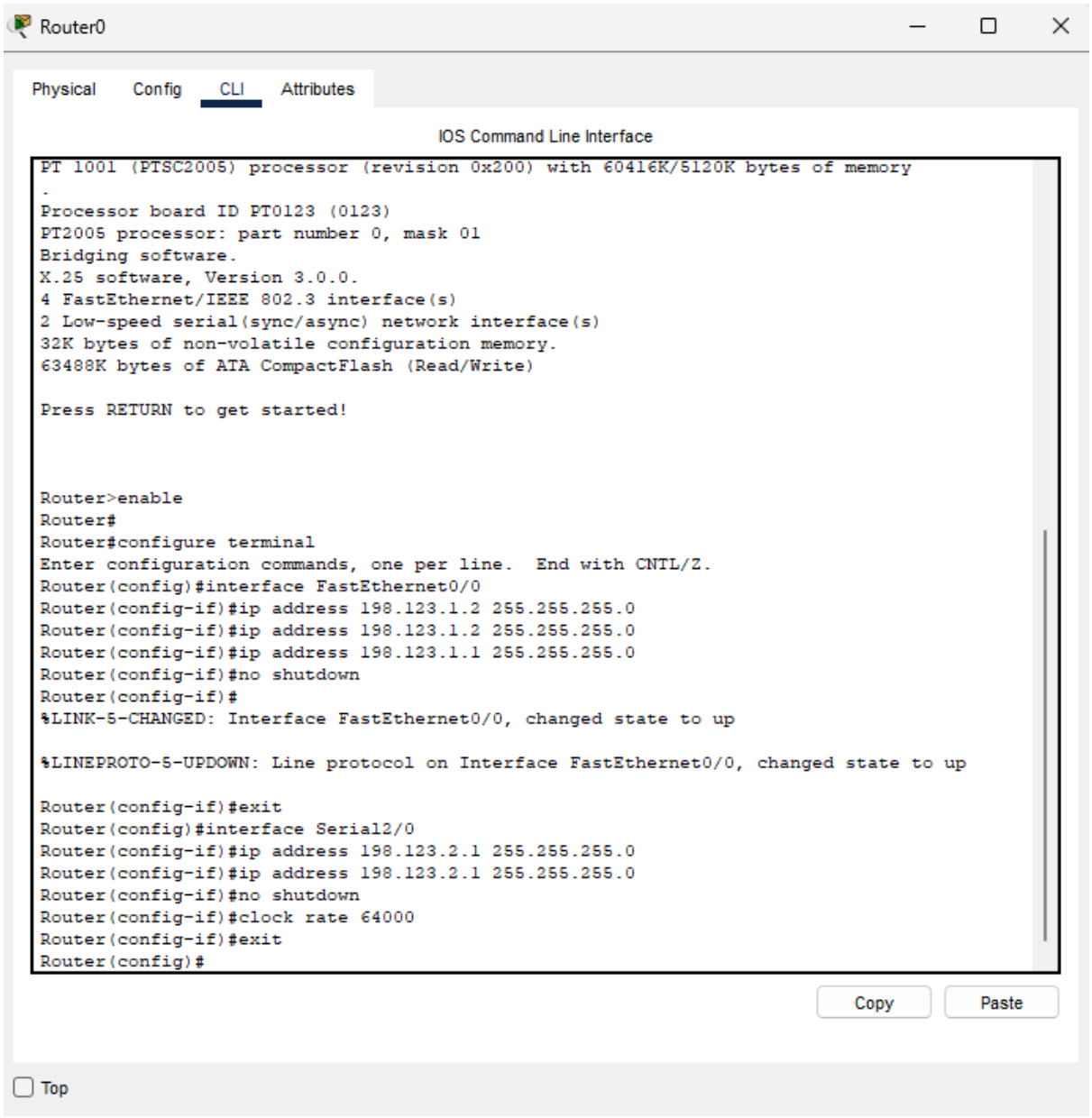
4. Set the IP address of PC0 using ip config


PC0
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
198.123.1.2
Subnet Mask
255.255.255.0
Default Gateway
198.123.1.1
DNS Server
0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
/
Link Local Address
FE80::210:11FF:FE86:9DE2
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top

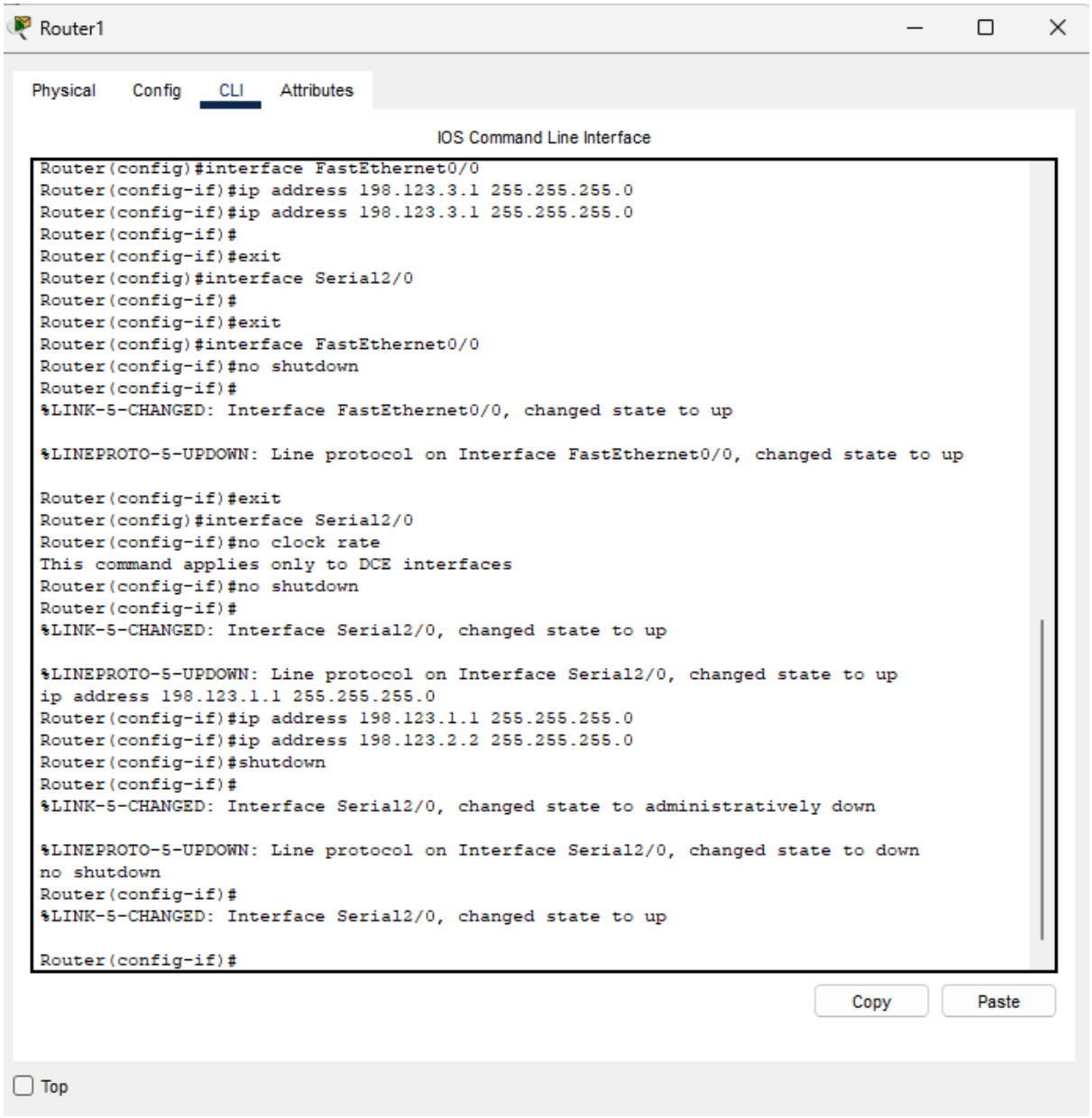
5. Similarly set the Ip address for PC1



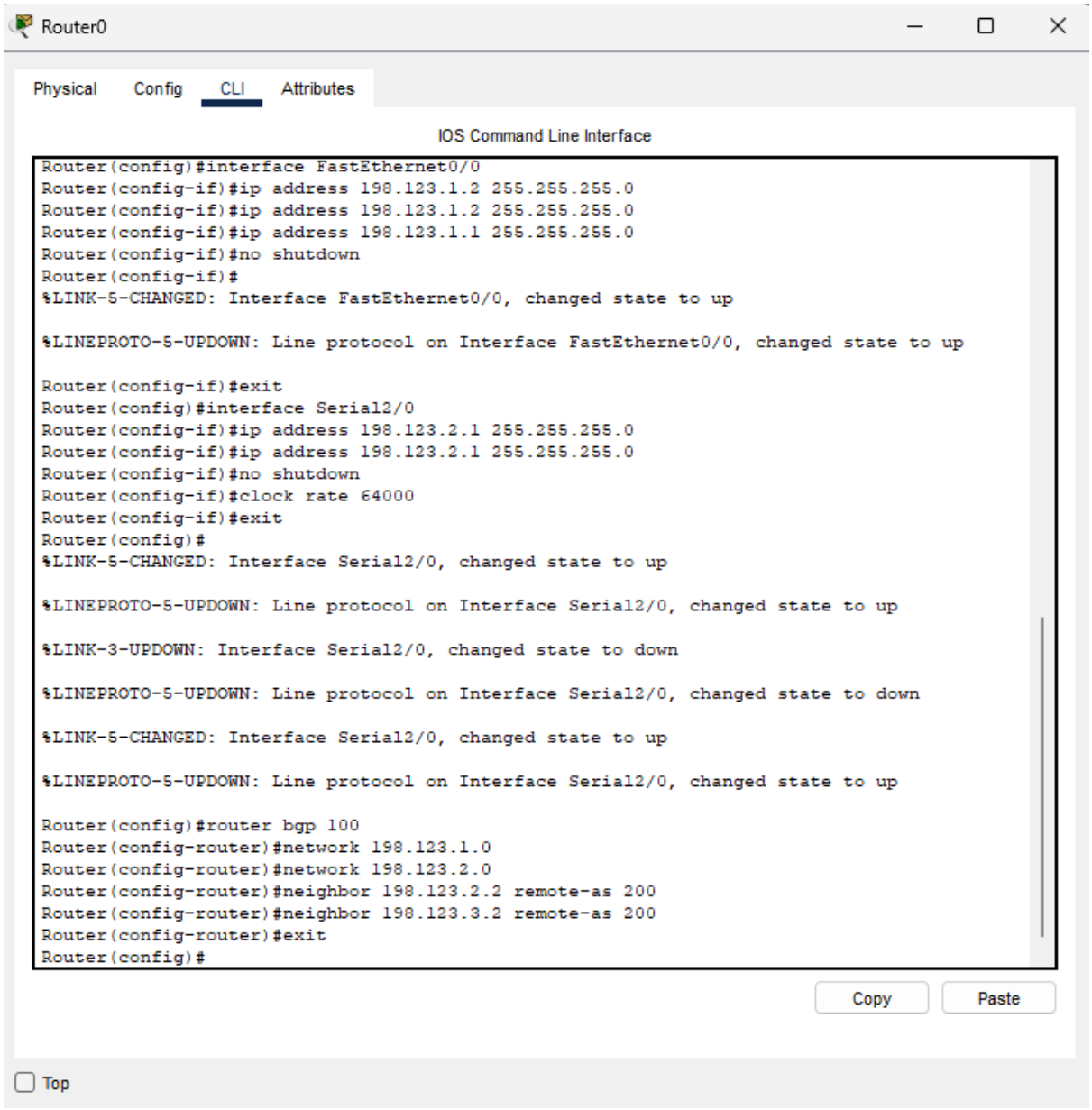
6. Use the following commands to setup router0
    - En
    - Config t
    - interface FastEthernet0/0
    - ip address 198. 123.1.1 255.255.255.0
    - no shut
    - interface Serial2/0
    - ip address 198.123.2.1 255.255.255.0
    - no shutdown
    - clock rate 64000



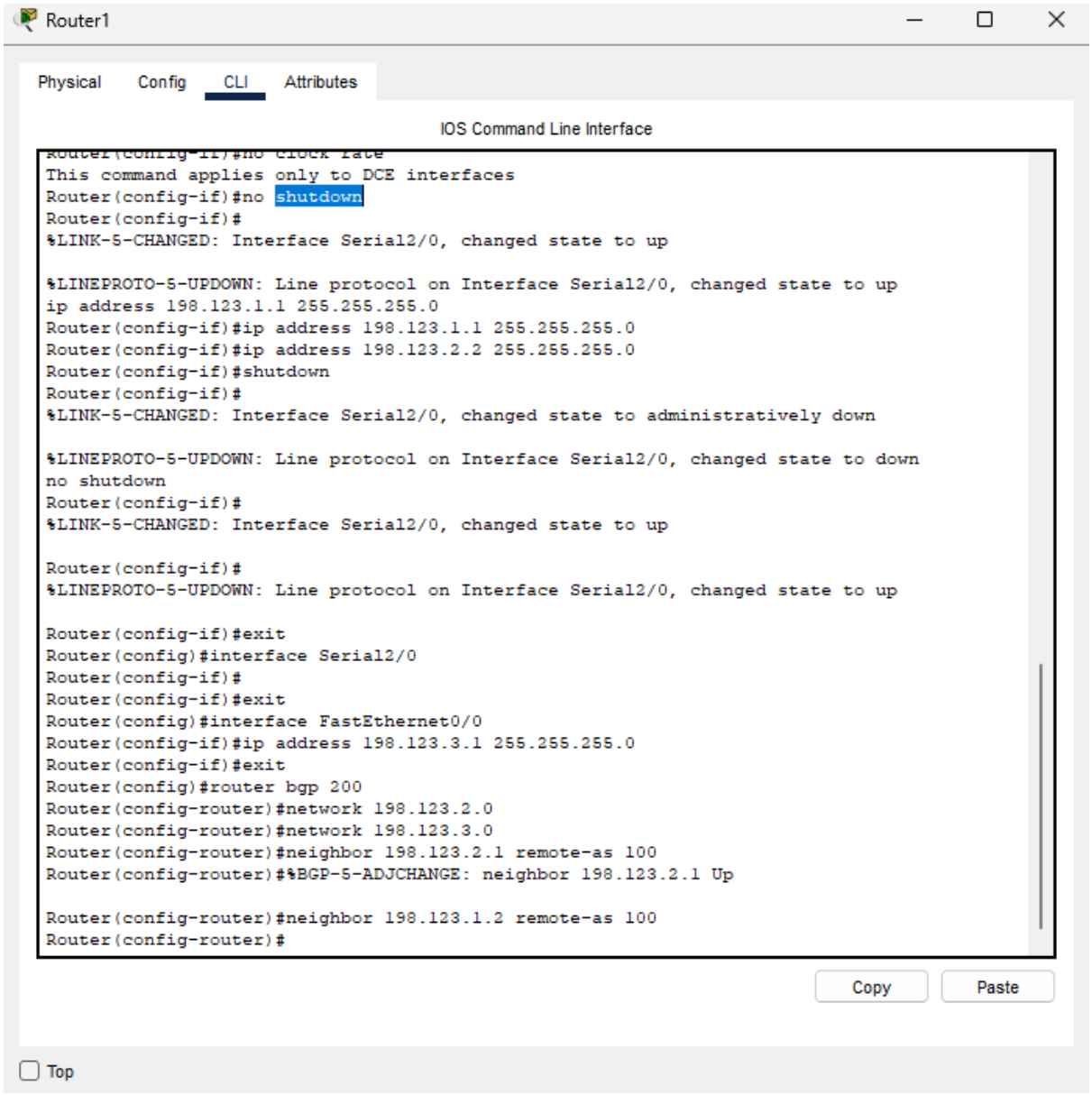
7. Use the following to setup Router R1
    - En
    - Config t
    - interface FastEthernet0/0
    - ip address 198.123.3.1 255.255.255.0
    - no shut
    - interface Serial2/0
    - ip address 198.123.2.2 255.255.255.0
    - no shutdown
    - clock rate 64000



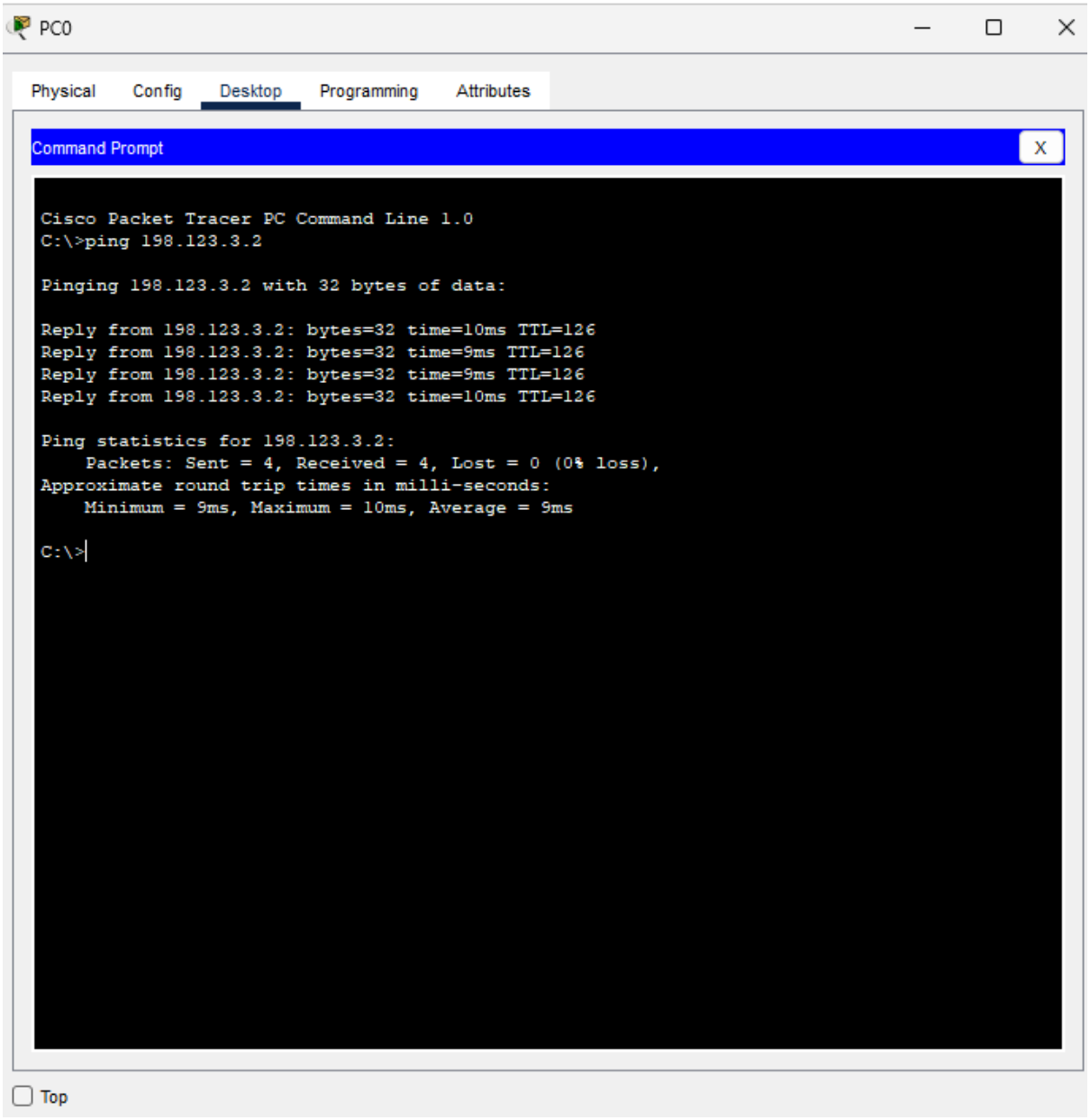
8. To setup BGP protocol use the following commands on Router R0 :--
    - Router bgp 100
    - Network 198.123.1.0
    - Network 198.123.2.0
    - Neighbor 198.123.2.2 remote-as 200
    - Neighbor 198.123.3.2 remote-as 200
    - Exit

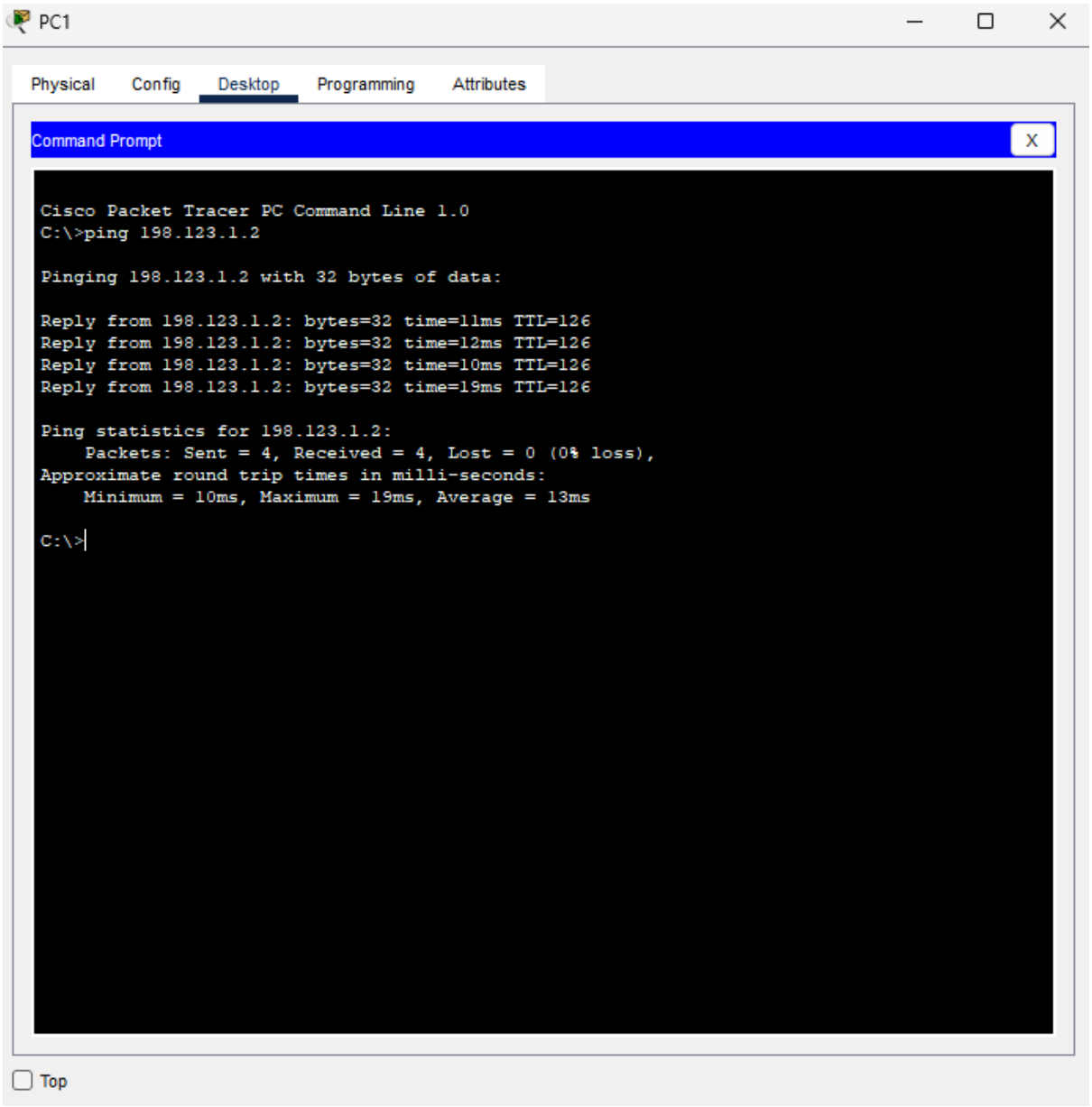


9. To setup BGP protocol use the following commands on Router R2 :--
    - Router bgp 200
    - Network 198.123.2.0
    - Network 198.123.3.0
    - Neighbor 198.123.2.1 remote-as 100
    - Neighbor 198.123.1.2 remote-as 100
    - Exit



10. To test the connection the between the two pc's use ping command
    - Ping 198.123.3.2 from PC0
    - Ping 198.123.1.2 from PC1


PC0
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 198.123.3.2
Pinging 198.123.3.2 with 32 bytes of data:
Reply from 198.123.3.2: bytes=32 time=10ms TTL=126
Reply from 198.123.3.2: bytes=32 time=9ms TTL=126
Reply from 198.123.3.2: bytes=32 time=9ms TTL=126
Reply from 198.123.3.2: bytes=32 time=10ms TTL=126
Ping statistics for 198.123.3.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 9ms, Maximum = 10ms, Average = 9ms
C:\>
Top



Conclusion

We have successfully configured BGP Protocol on two router using cisco packet tracer