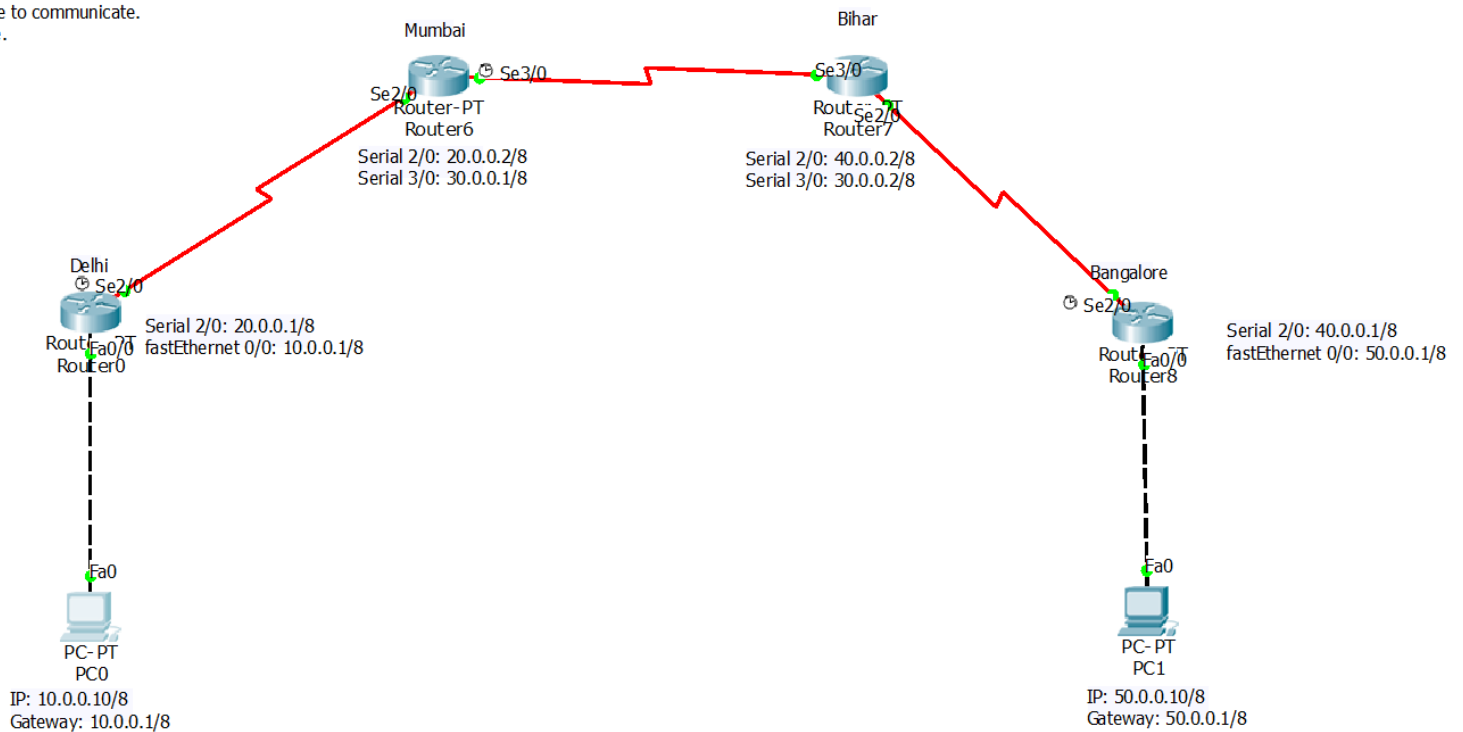


You have 4 research laboratories located at Bangalore, Mumbai, Bihar and Delhi where you want the end system at Delhi and Bangalore to communicate. Only routers exist at Mumbai and Bihar to connect Delhi and Bangalore. Create a topology for connecting these four locations by assigning Class A addresses and configure the router with default route. Also show how the End systems communicate with each other.

alore to communicate.
lore.



Delhi

```
Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fastEthernet 0/0
Router(config-if)#ip address 10.0.0.1 255.0.0.0
Router(config-if)#no shut

Router(config-if)#
```

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

```
Router(config-if)#exit
Router(config)#interface Serial 2/0
Router(config-if)#ip address 20.0.0.1 255.0.0.0
Router(config-if)#no shut
```

%LINK-5-CHANGED: Interface Serial2/0, changed state to down

```
Router(config-if)#exit
Router(config)#
```

```
Router#enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 30.0.0.0 255.0.0.0 20.0.0.2
Router(config)#ip route 40.0.0.0 255.0.0.0 20.0.0.2
Router(config)#ip route 50.0.0.0 255.0.0.0 20.0.0.2
Router(config)#exit
```

```
Router#show ip route
```

Gateway of last resort is not set

```
C 10.0.0.0/8 is directly connected, FastEthernet0/0
C 20.0.0.0/8 is directly connected, Serial2/0
S 30.0.0.0/8 [1/0] via 20.0.0.2
S 40.0.0.0/8 [1/0] via 20.0.0.2
S 50.0.0.0/8 [1/0] via 20.0.0.2
```

Mumbai

```
Router(config)#ip route 10.0.0.0 255.0.0.0 20.0.0.
Router(config)#ip route 40.0.0.0 255.0.0.0 30.0.0.2
Router(config)#ip route 50.0.0.0 255.0.0.0 30.0.0.2
```

```
Router#show ip route
```

Gateway of last resort is not set

S 10.0.0.0/8 [1/0] via 20.0.0.1
C 20.0.0.0/8 is directly connected, Serial2/0
C 30.0.0.0/8 is directly connected, Serial3/0
S 40.0.0.0/8 [1/0] via 30.0.0.2
S 50.0.0.0/8 [1/0] via 30.0.0.2

Bihar

Router(config-if)#exit
Router(config)#ip route 20.0.0.0 255.0.0.0 30.0.0.1
Router(config)#ip route 10.0.0.0 255.0.0.0 30.0.0.1
Router(config)#ip route 50.0.0.0 255.0.0.0 40.0.0.1
Router(config)#exit

Router#show ip route

Gateway of last resort is not set

S 10.0.0.0/8 [1/0] via 30.0.0.1
S 20.0.0.0/8 [1/0] via 30.0.0.1
C 30.0.0.0/8 is directly connected, Serial3/0
C 40.0.0.0/8 is directly connected, Serial2/0
S 50.0.0.0/8 [1/0] via 40.0.0.1
Router#

Bangalore

Router(config-if)#exit
Router(config)#ip route 30.0.0.0 255.0.0.0 40.0.0.2
Router(config)#ip route 20.0.0.0 255.0.0.0 40.0.0.2
Router(config)#ip route 10.0.0.0 255.0.0.0 40.0.0.2
Router(config)#exit

Router#show ip route

Gateway of last resort is not set

S 10.0.0.0/8 [1/0] via 40.0.0.2

S 20.0.0.0/8 [1/0] via 40.0.0.2

S 30.0.0.0/8 [1/0] via 40.0.0.2

C 40.0.0.0/8 is directly connected, Serial2/0

C 50.0.0.0/8 is directly connected, FastEthernet0/0

