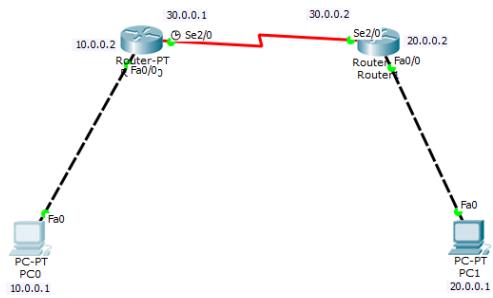


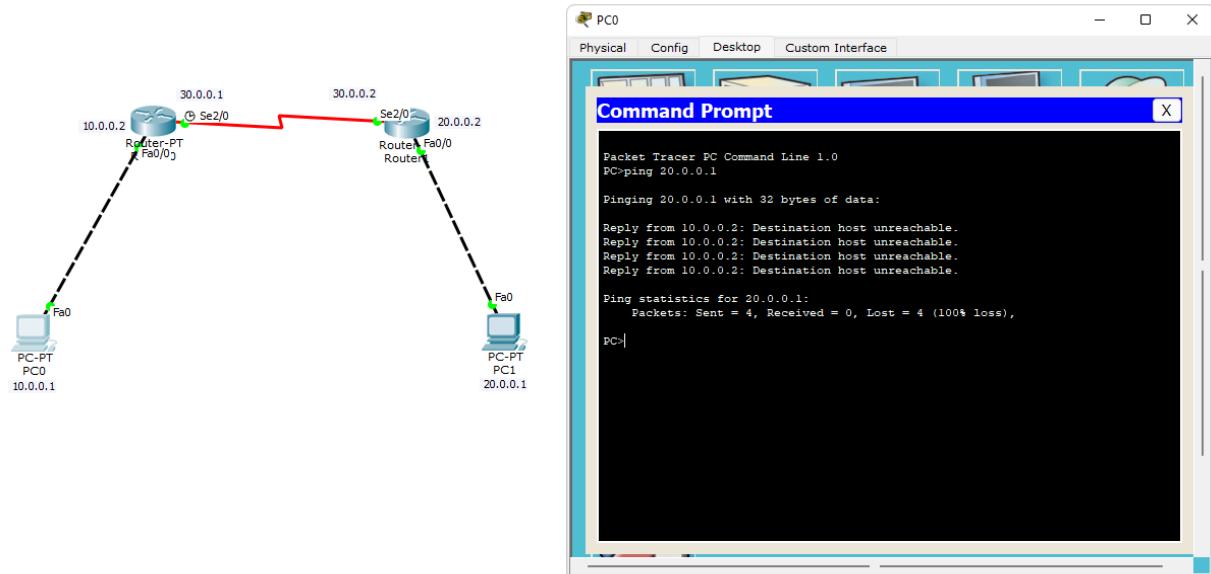
EXP- 3a

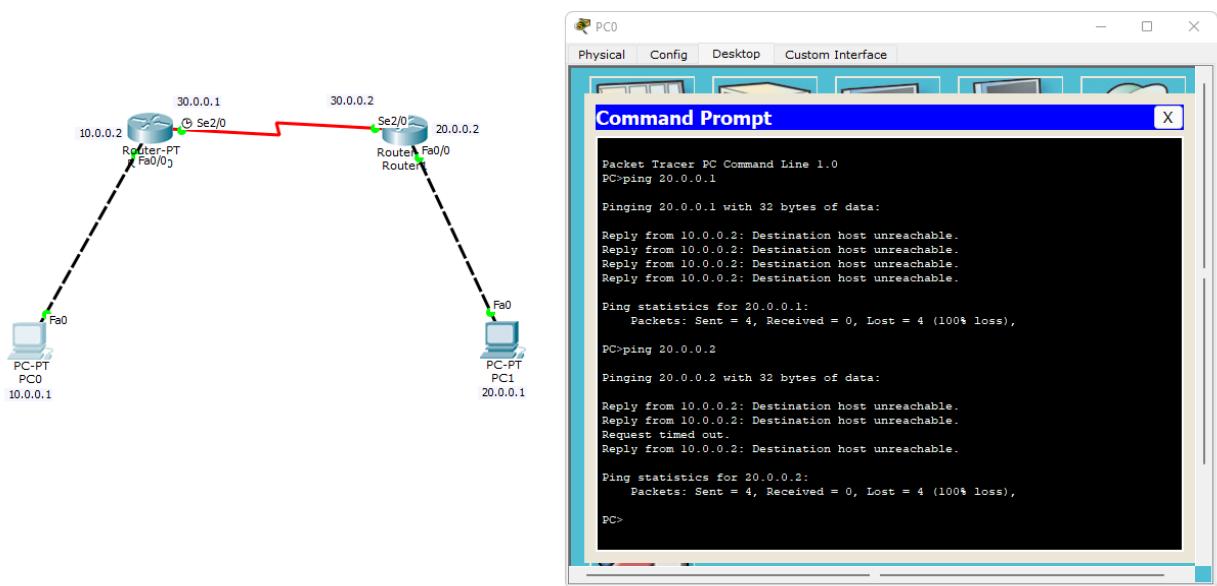
OBSERVATION

TOPOLOGY

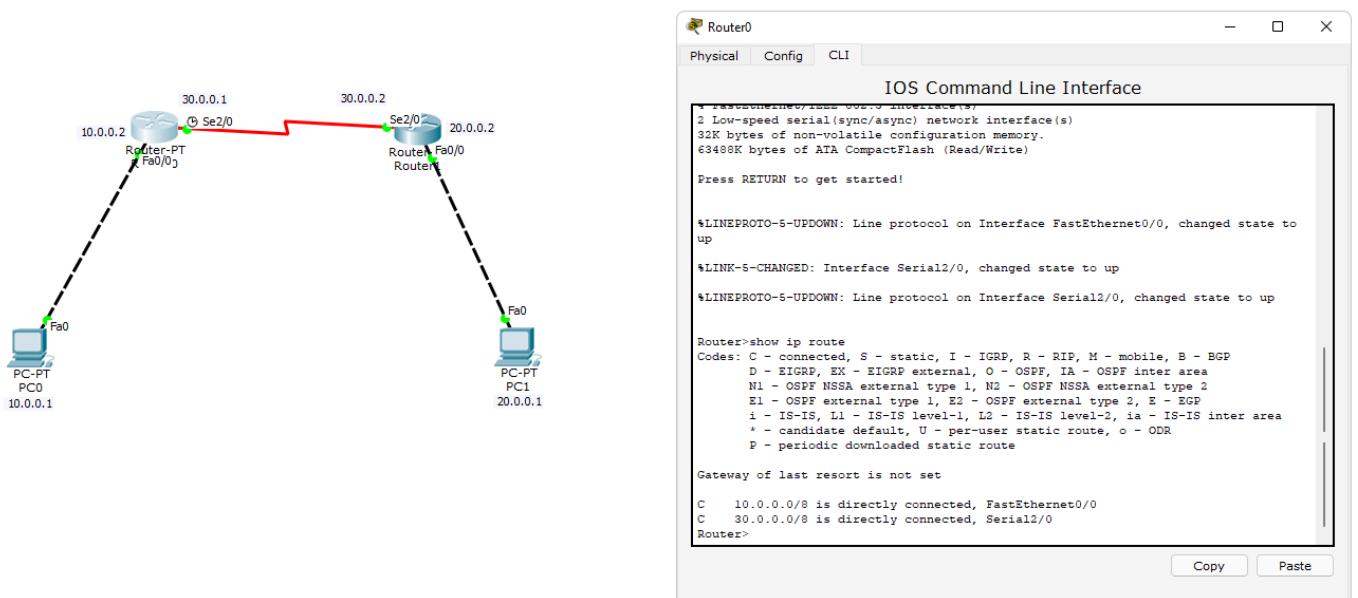


OUTPUT





(After static routing)



PC0

Physical Config Desktop Custom Interface

Command Prompt X

```
PC>ping 10.0.0.2
Pinging 10.0.0.2 with 32 bytes of data:
Reply from 10.0.0.2: bytes=32 time=5ms TTL=255
Reply from 10.0.0.2: bytes=32 time=0ms TTL=255
Reply from 10.0.0.2: bytes=32 time=0ms TTL=255
Reply from 10.0.0.2: bytes=32 time=0ms TTL=255

Ping statistics for 10.0.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 5ms, Average = 1ms

PC>ping 20.0.0.1
Pinging 20.0.0.1 with 32 bytes of data:
Request timed out.
Reply from 20.0.0.1: bytes=32 time=4ms TTL=126
Reply from 20.0.0.1: bytes=32 time=1ms TTL=126
Reply from 20.0.0.1: bytes=32 time=6ms TTL=126

Ping statistics for 20.0.0.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 4ms, Maximum = 11ms, Average = 7ms

PC>
```

PC0

Physical Config Desktop Custom Interface

Command Prompt X

```
PC>ping 10.0.0.2
Pinging 10.0.0.2 with 32 bytes of data:
Reply from 10.0.0.2: bytes=32 time=5ms TTL=255
Reply from 10.0.0.2: bytes=32 time=0ms TTL=255
Reply from 10.0.0.2: bytes=32 time=0ms TTL=255
Reply from 10.0.0.2: bytes=32 time=0ms TTL=255

Ping statistics for 10.0.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 5ms, Average = 1ms

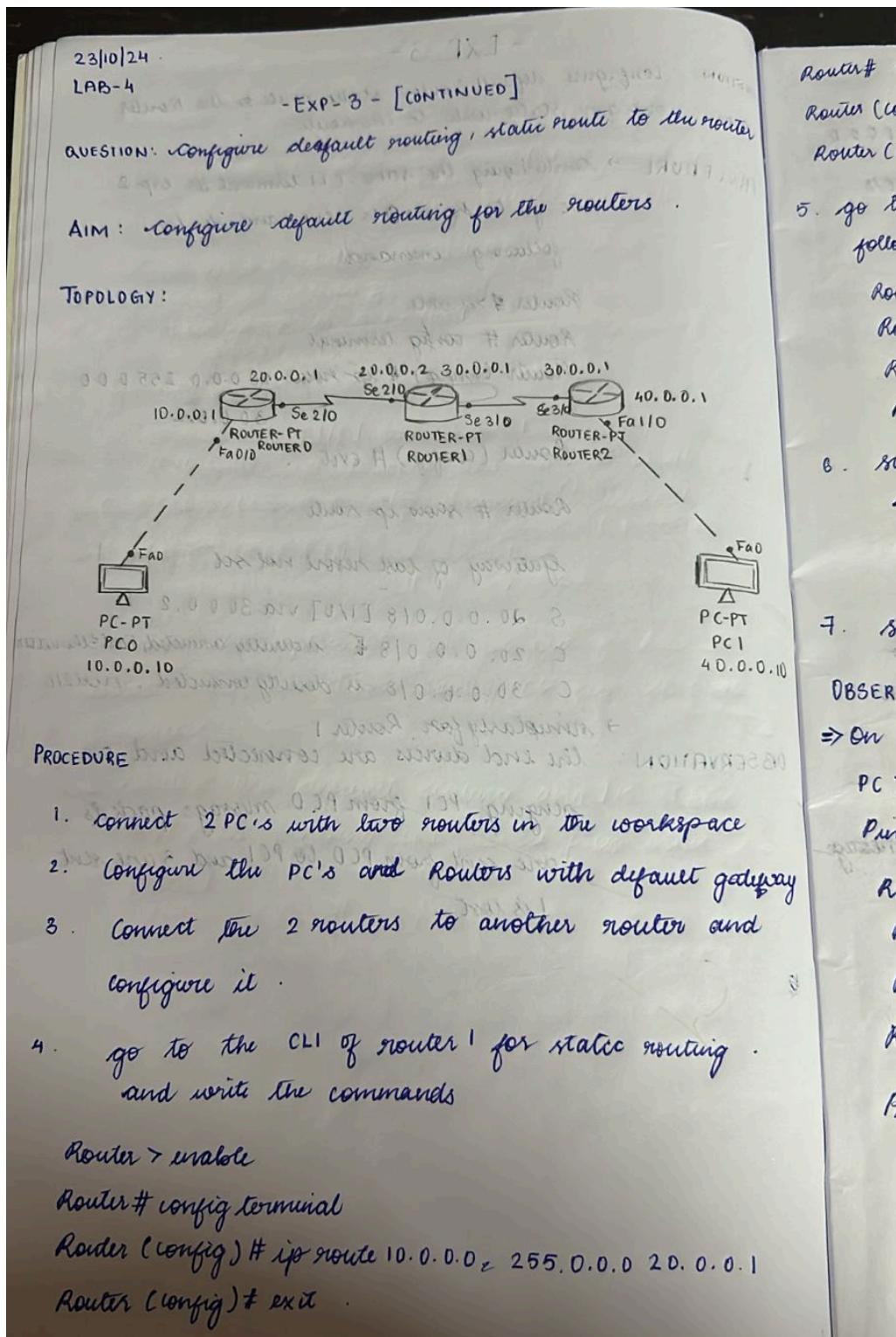
PC>ping 20.0.0.1
Pinging 20.0.0.1 with 32 bytes of data:
Request timed out.
Reply from 20.0.0.1: bytes=32 time=4ms TTL=126
Reply from 20.0.0.1: bytes=32 time=11ms TTL=126
Reply from 20.0.0.1: bytes=32 time=6ms TTL=126

Ping statistics for 20.0.0.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 4ms, Maximum = 11ms, Average = 7ms

PC>
```

EXP-3b

OBSERVATION



Router# config terminal

Router (config)# ip route 40.0.0.0 255.0.0.0 30.0.0.2

Router (config)# exit.

5. go to the CLI of Router 0 for default routing and the following commands

Router > enable

Router # config terminal

Router (config)# ip route 0.0.0.0 0.0.0.0 20.0.0.2

Router (config)# exit

6. similarly do for router 1 while keeping the ip route command as

Router (config)# ip route 0.0.0.0 0.0.0.0 30.0.0.1

7. send a message i.e ping PC1 from PC0

OBSERVATION:

⇒ On the command prompt:

PC > ping 40.0.0.10

Pinging 40.0.0.10 with 32 bytes of data

Request timed out.

Reply from 40.0.0.10: Bytes=32 time=12ms TTL=125

Reply from 40.0.0.10: Bytes=32 time=12ms TTL=125

Reply from 40.0.0.10: Bytes=32 time=9ms TTL=125

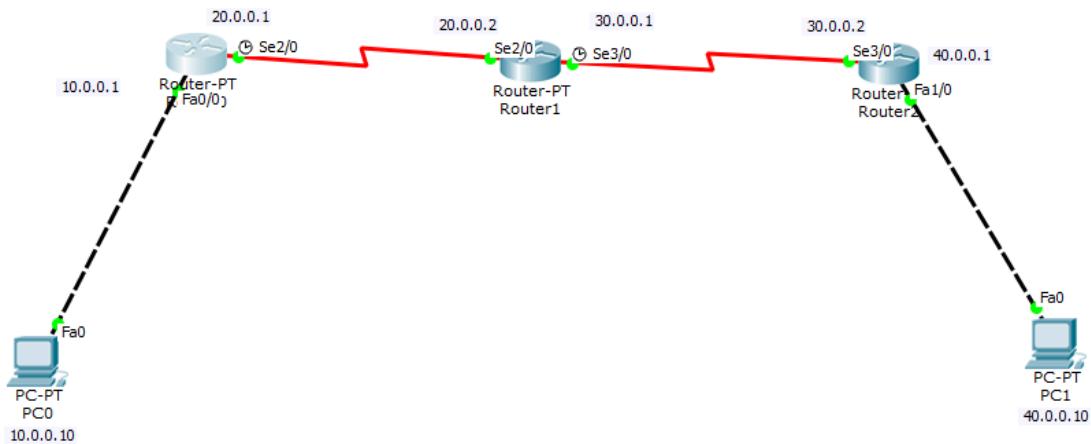
Ping statistics for 40.0.0.10:

Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),

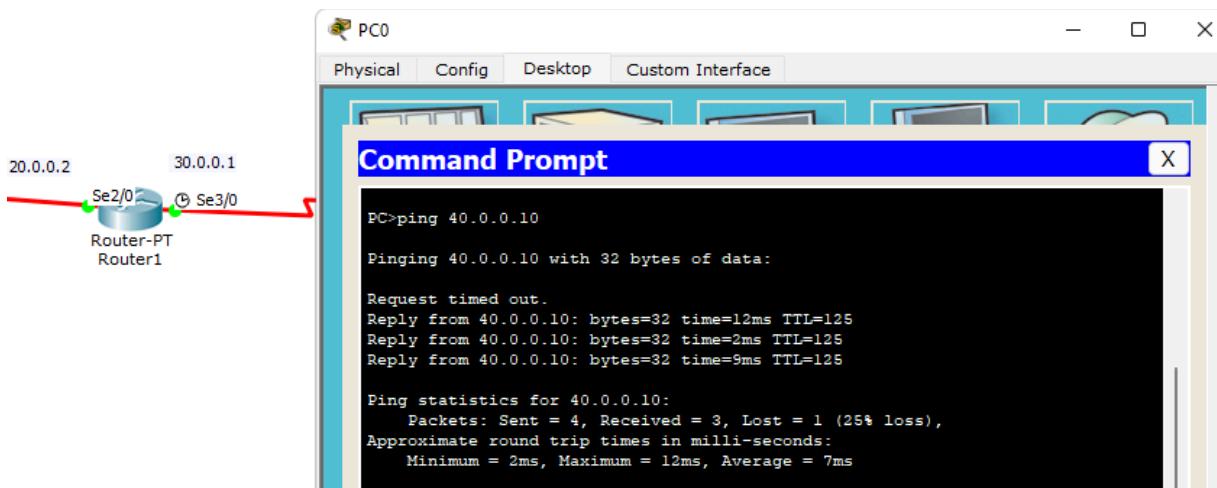
Approximate round trip times in milliseconds:

Minimum = 2ms, Maximum = 12ms, Average = 7ms.

TOPOLOGY



OUTPUT



```

Router>enable
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
      D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
      N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
      i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
      * - candidate default, U - per-user static route, o - ODR
      P - periodic downloaded static route

Gateway of last resort is 20.0.0.2 to network 0.0.0.0

C   10.0.0.0/8 is directly connected, FastEthernet0/0
C   20.0.0.0/8 is directly connected, Serial2/0
S*  0.0.0.0/0 [1/0] via 20.0.0.2
Router#
  
```