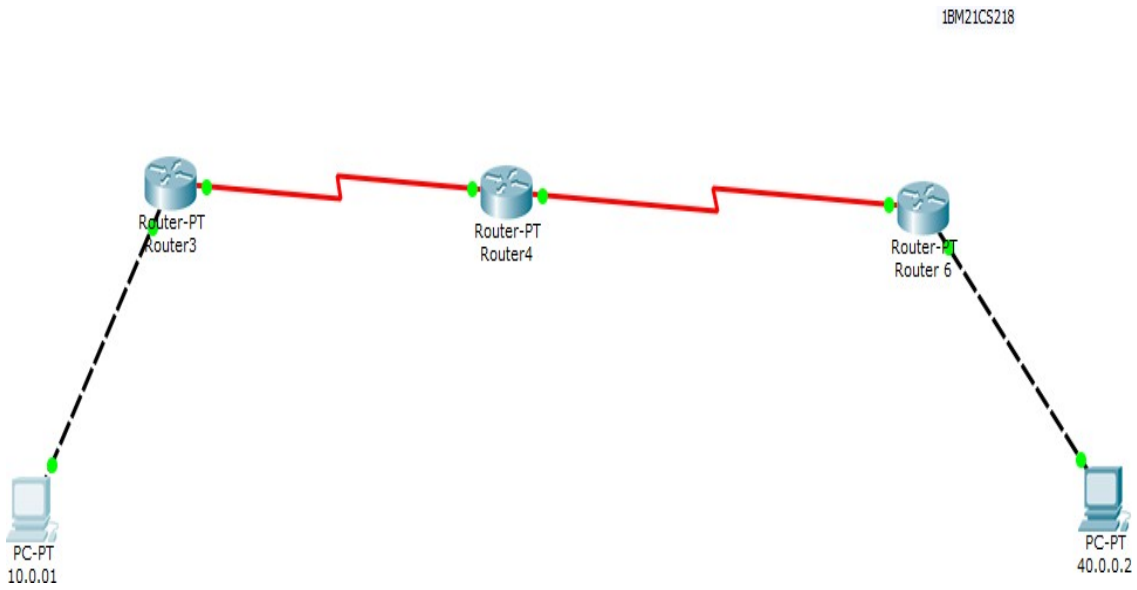
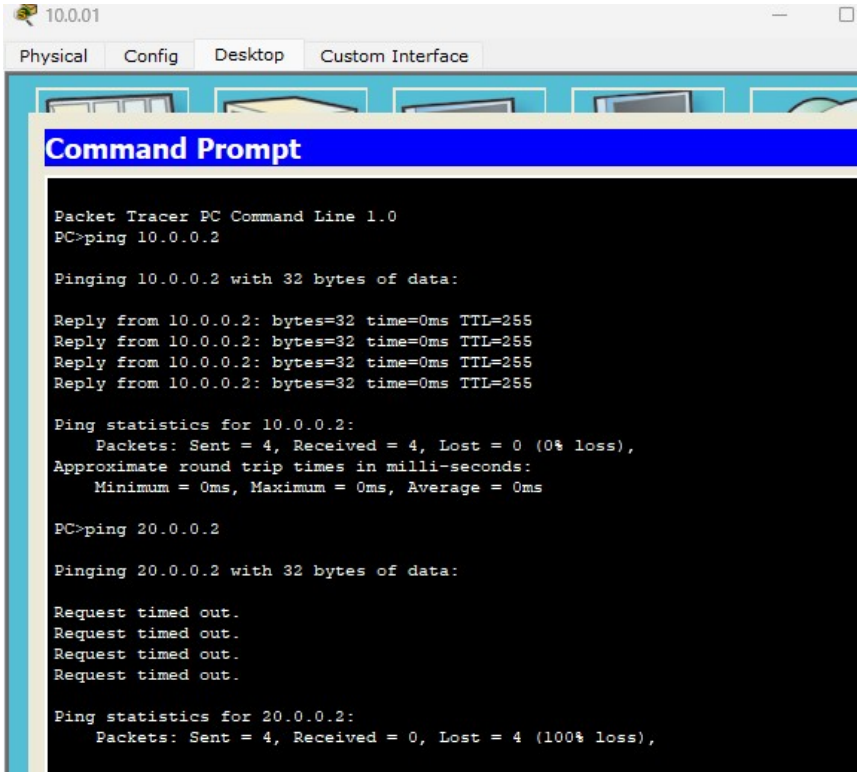
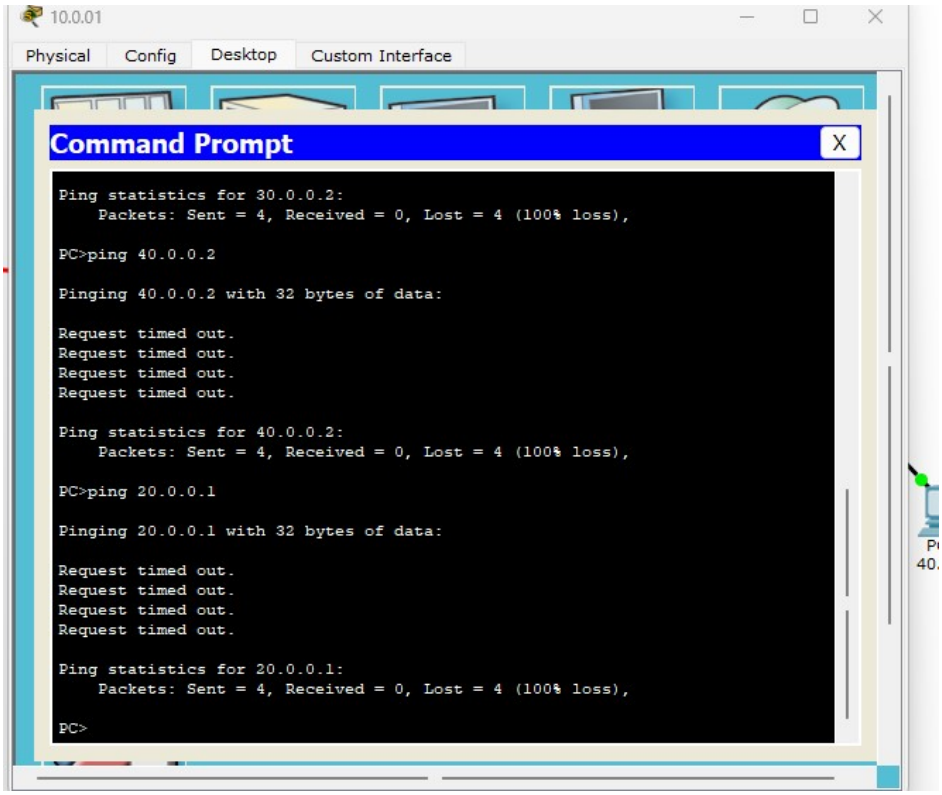
CN-LAB 03

TOPOLOGY:

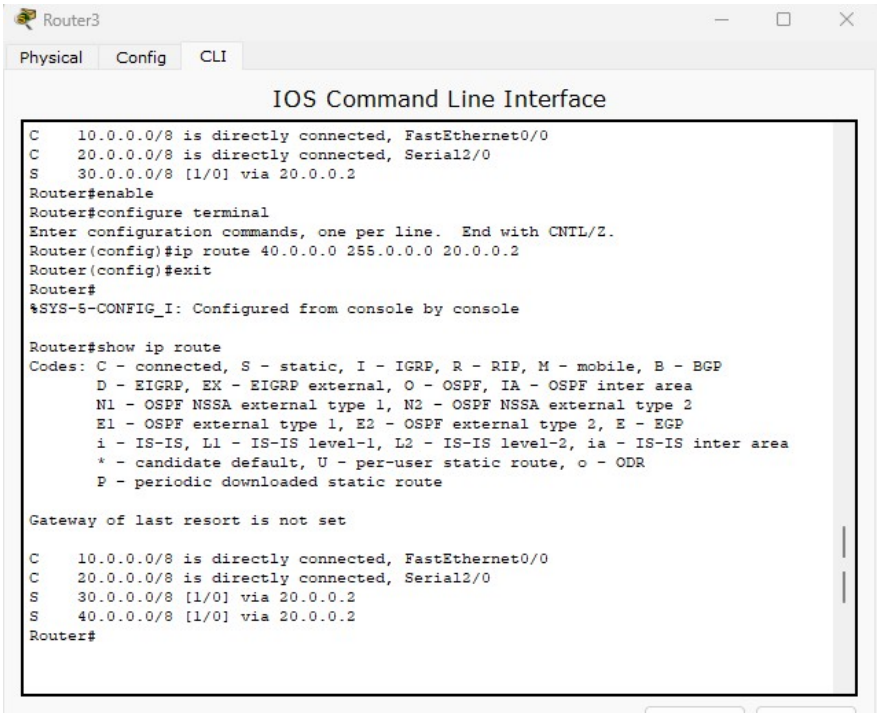


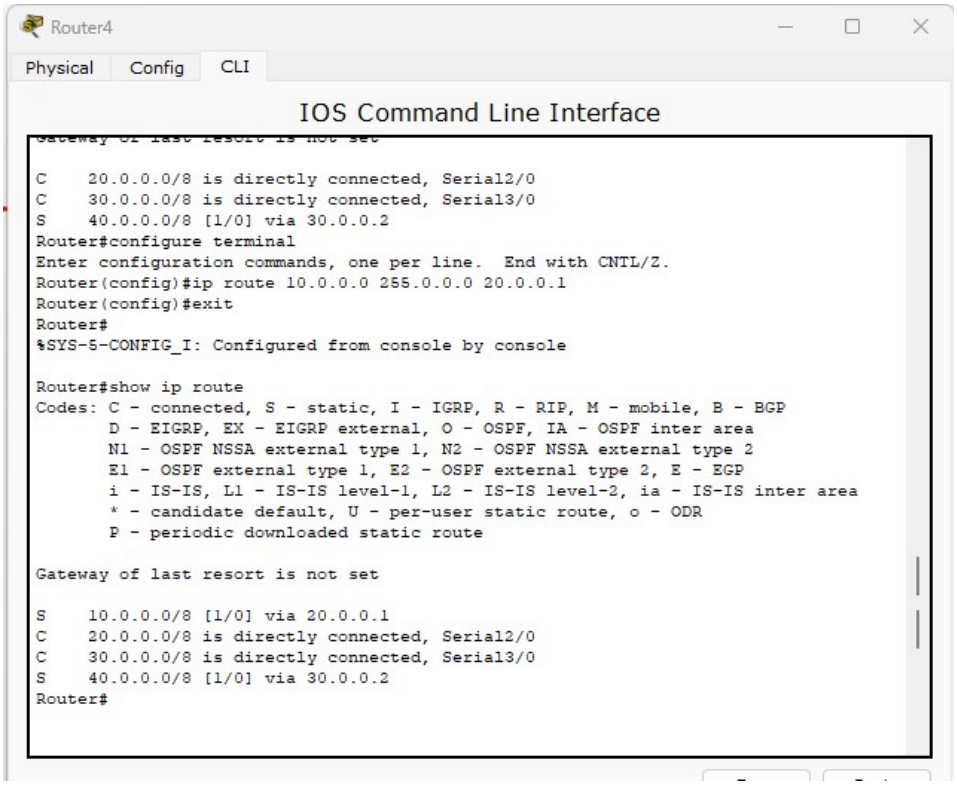
Ping Response before configuring router route:

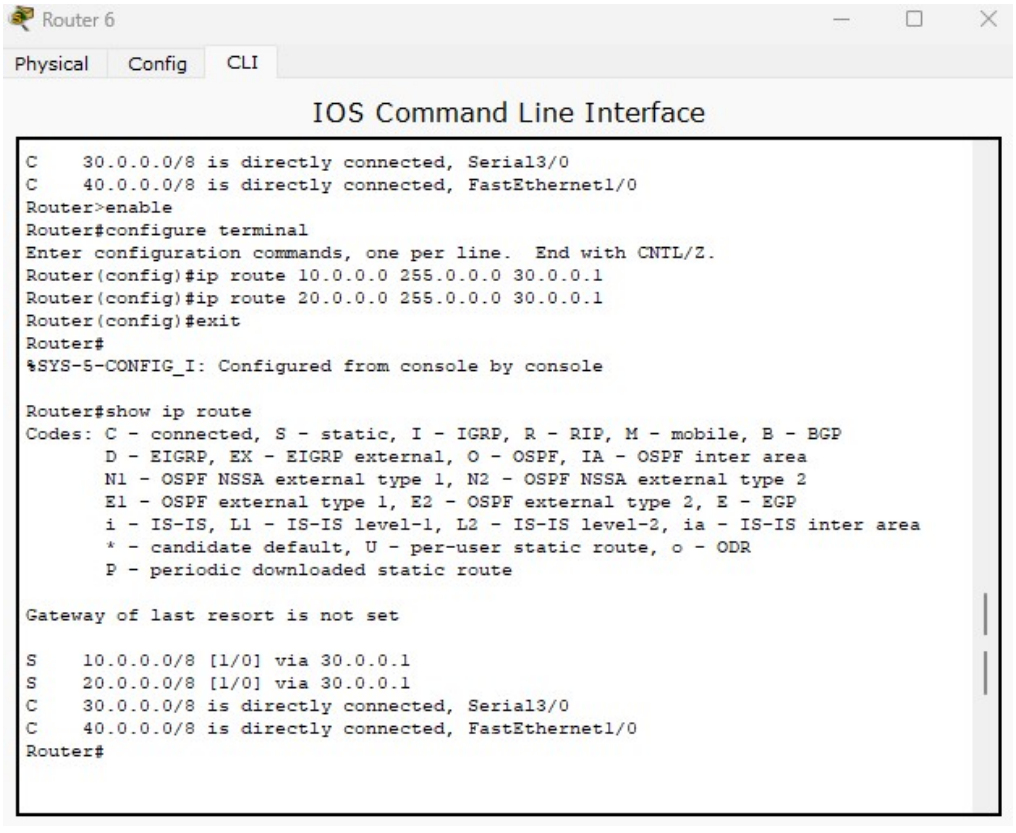




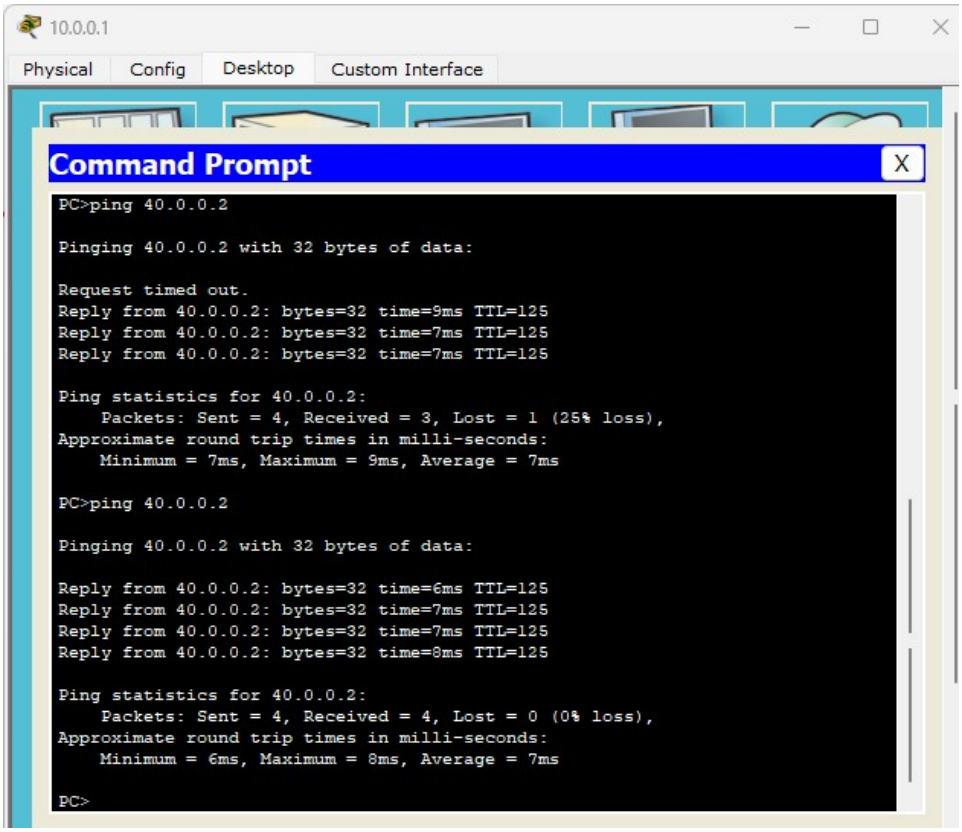
Router Route:

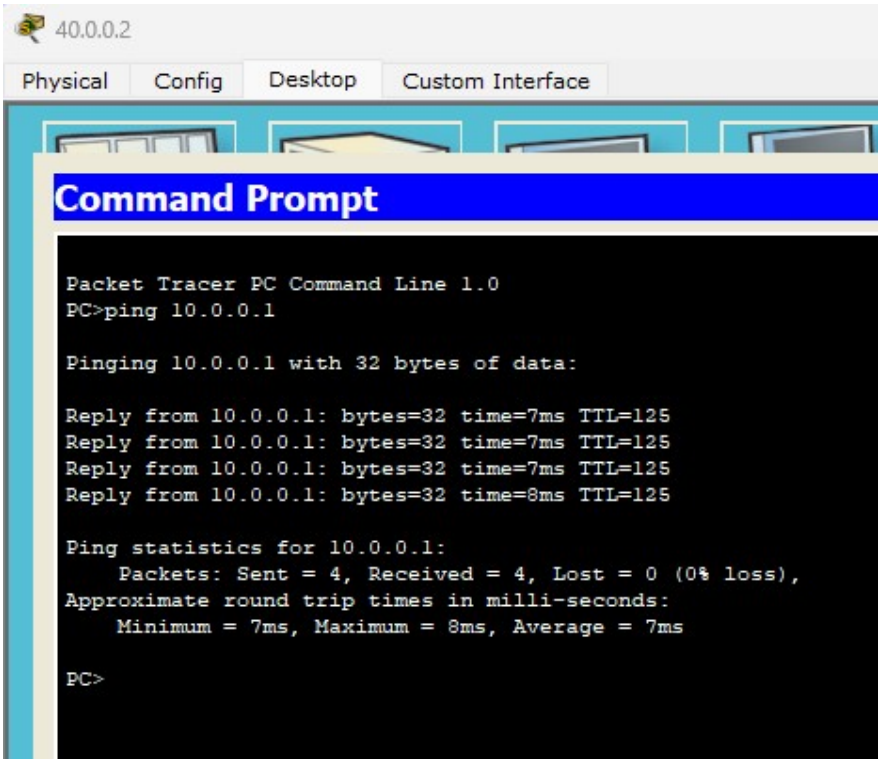



Router4
Physical
Config
CLI
IOS Command Line Interface
C 20.0.0.0/8 is directly connected, Serial2/0
C 30.0.0.0/8 is directly connected, Serial3/0
S 40.0.0.0/8 [1/0] via 30.0.0.2
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 10.0.0.0 255.0.0.0 20.0.0.1
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
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 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
Router#


Router 6
Physical
Config
CLI
IOS Command Line Interface
C 30.0.0.0/8 is directly connected, Serial3/0
C 40.0.0.0/8 is directly connected, FastEthernet1/0
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 10.0.0.0 255.0.0.0 30.0.0.1
Router(config)#ip route 20.0.0.0 255.0.0.0 30.0.0.1
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
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 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, FastEthernet1/0
Router#

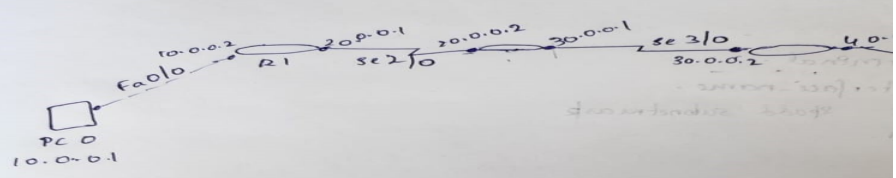
Ping Responses final:





CN - Lab 03

Network of Routers



① Ping from PC0 to R1

Ping statistics for 10.0.0.2

Packet: sent = 4, Received = 4, Los

Approximate round trip times in milli-secon

Minimum = 0 ms, Maximum = 0 ms, Av

② Ping from PC0 to R2 Ping 20.0.0.2

Request timed out.

③ Ping from PC0 to R3 Ping 30.0.0.2

Request timed out.

④ Ping from PC0 to PC1

Ping 40.0.0.2

Steps to configure Router :-

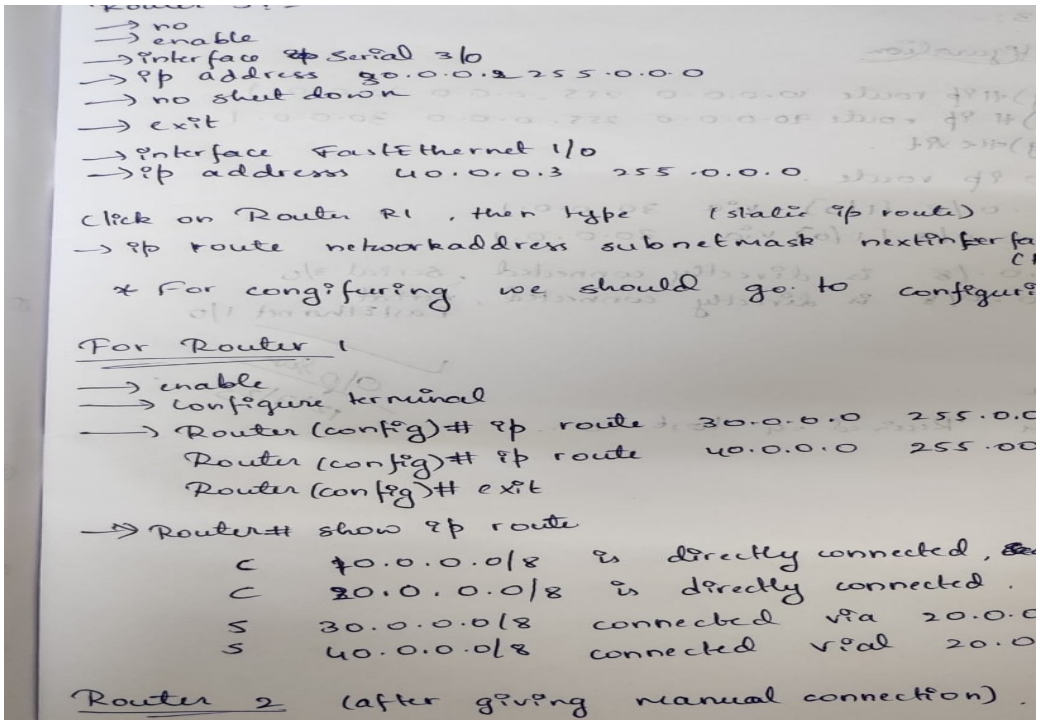
① Press no
② Press enable
③ enter
④ Configure terminal.
⑤ interface interface_name.
⑥ ip address ipadd subnetmask
⑦ no shutdown.
⑧ exit.

Router 1:

→ no
→ enable
→ configure terminal
→ interface FastEthernet 0/0
→ ip address 10.0.0.2 255.0.0.0
→ no shutdown
→ exit
→ interface serial 2/0
→ ip address 20.0.0.1 255.0.0.0
→ no shut down.
→ exit.

Router 2 :-

→ no
→ enable
→ configure terminal
→ interface serial 2/0
→ ip address 20.0.0.2 255.0.0.0
→ no shut down



→ no
→ enable
→ interface Serial 3/0
→ ip address 30.0.0.2 255.0.0.0
→ no shut down
→ exit
→ interface FastEthernet 1/0
→ ip address 40.0.0.3 255.0.0.0

Click on Router R1, then type (static ip route)
→ ip route networkaddress subnetmask nextinterfa

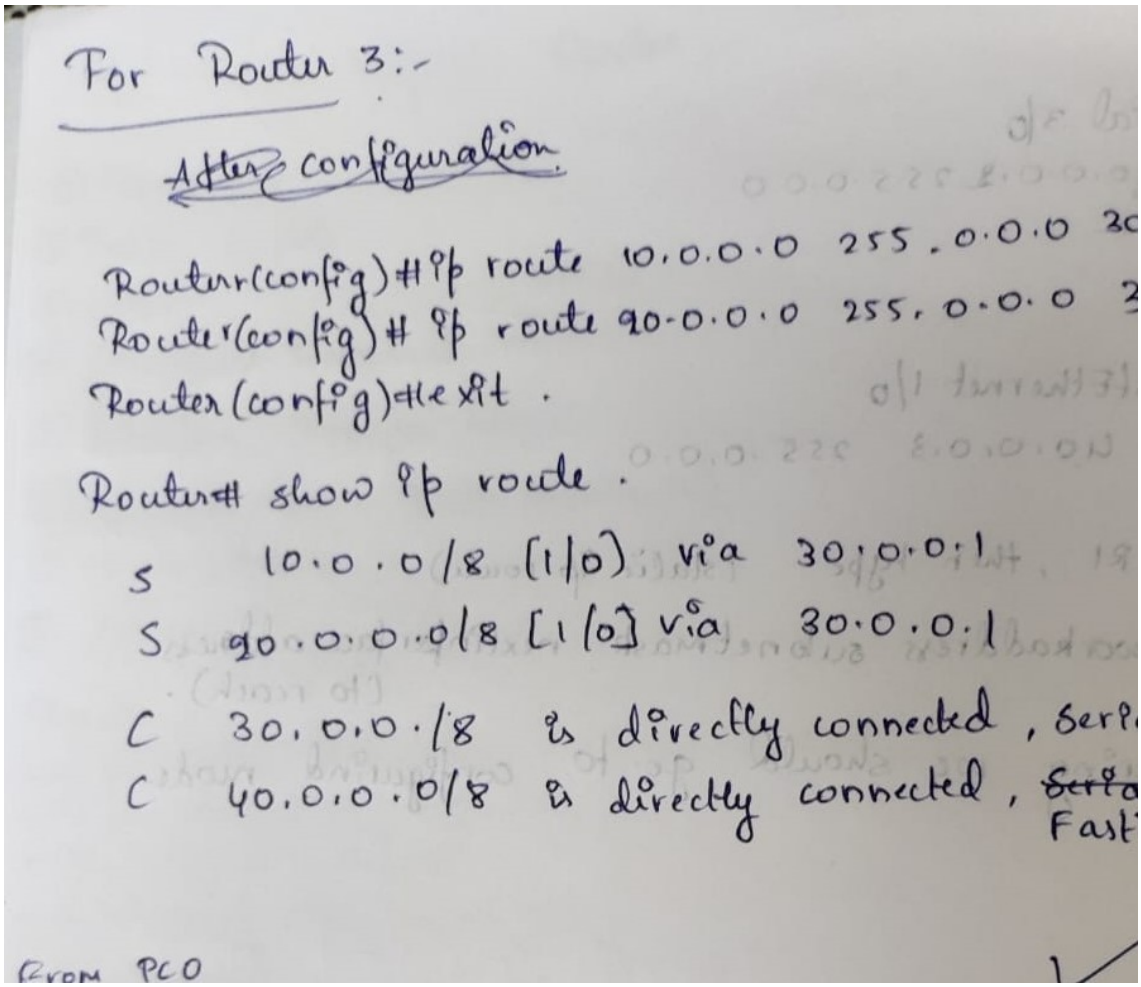
* For configuring we should go to configur

For Router 1

→ enable
→ configure terminal
→ Router(config)# ip route 30.0.0.0 255.0.0
Router(config)# ip route 40.0.0.0 255.00
Router(config)# exit

→ Router# show ip route
C 10.0.0.0/8 is directly connected,
C 30.0.0.0/8 is directly connected.
S 30.0.0.0/8 connected via 20.0.0
S 40.0.0.0/8 connected vial 20.0

Router 2 (after giving manual connection).



For Router 3:-

After configuration

Router(config)# ip route 10.0.0.0 255.0.0.0 30
Router(config)# ip route 90.0.0.0 255.0.0.0 3
Router(config)#exit.

Router# show ip route.

S 10.0.0/8 [1/0] via 30.0.0.1
S 90.0.0.0/8 [1/0] via 30.0.0.1
C 30.0.0./8 is directly connected, Seri
C 40.0.0.0/8 is directly connected, ~~Serio~~ Fast

FROM PC0