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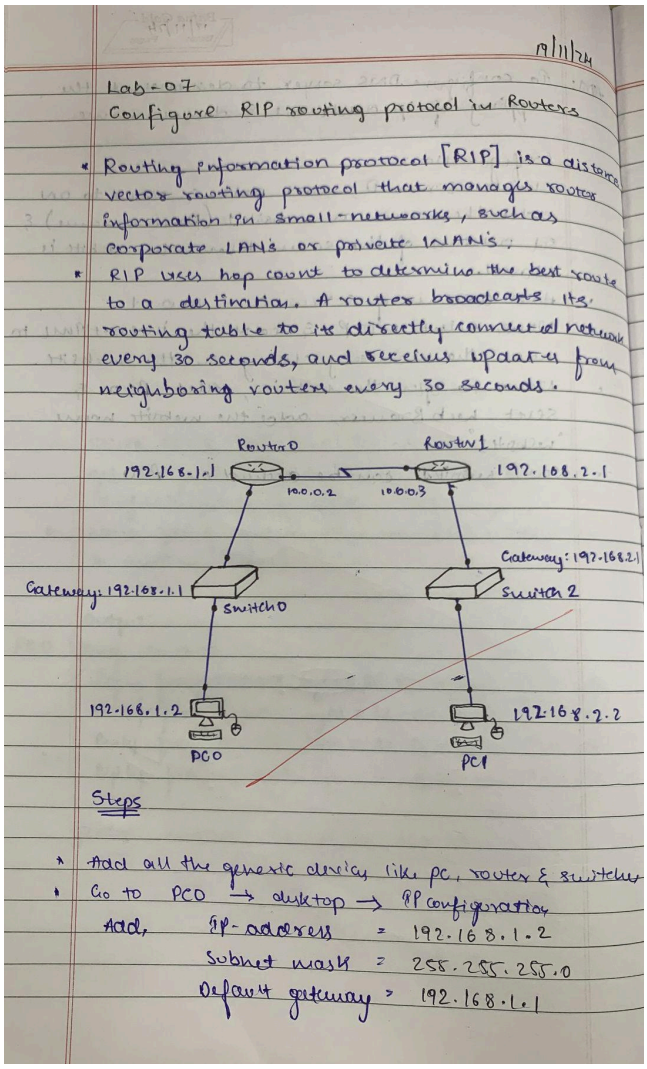
CN LAB 7

AIM: TO CONFIGURE RIP ROUTING PROTOCOL IN ROUTERS.

OBSERVATION:



Lab-07

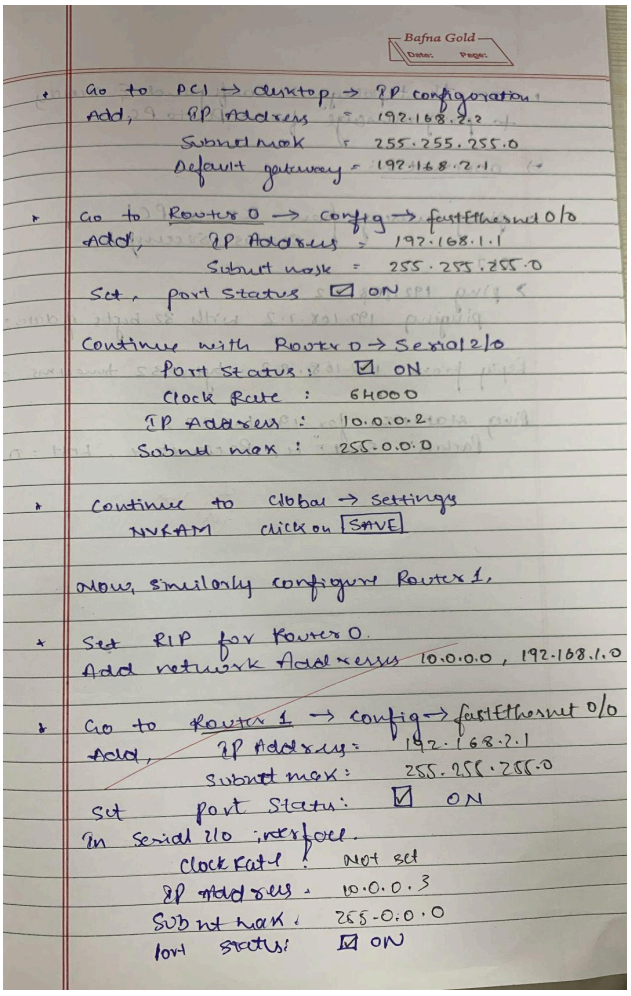
Configure RIP routing protocol in Routers

- Routing information protocol [RIP] is a distance vector routing protocol that manages router information in small-networks, such as corporate LAN's or private WANs.
- RIP uses hop count to determine the best route to a destination. A router broadcasts its routing table to its directly connected network every 30 seconds, and receives updates from neighboring routers every 30 seconds.

Steps

- Add all the generic devices like pc, router & switches
- Go to PC0 → desktop → IP configuration

Add, IP address = 192.168.1.2
Subnet mask = 255.255.255.0
Default gateway = 192.168.1.1



- Go to PC1 → desktop → IP configuration

Add, IP Address = 192.168.2.2
Subnet mask = 255.255.255.0
Default gateway = 192.168.2.1

- Go to Router 0 → config → fastEthernet 0/0

Add, IP Address = 192.168.1.1
Subnet mask = 255.255.255.0
Set, port Status ☑ ON

Continue with Router 0 → Serial 2/0
Port Status : ☑ ON
Clock Rate : 64000
IP Address : 10.0.0.2
Subnet mask : 255.0.0.0

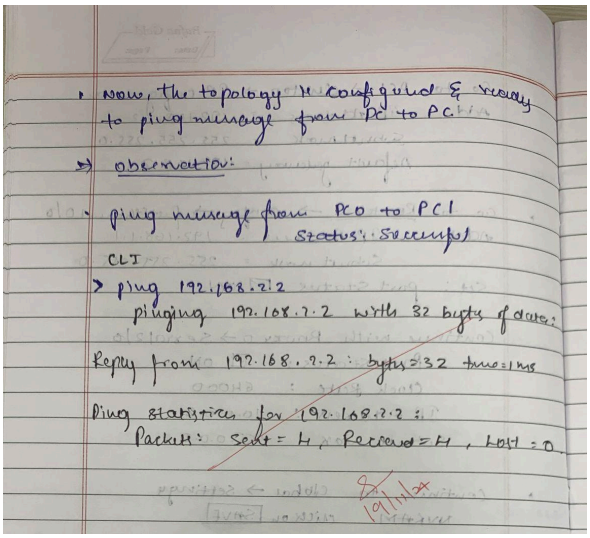
- Continue to Global → Settings
NVRAM click on [SAVE]

Now, similarly configure Router 1,

- Set RIP for Router 0.
Add network Address 10.0.0.0, 192.168.1.0

- Go to Router 1 → config → fastEthernet 0/0

Add, IP Address: 192.168.2.1
Subnet mask: 255.255.255.0
Set port Status: ☑ ON
In Serial 2/0 interface.
Clock Rate: Not set
IP address: 10.0.0.3
Subnet mask: 255.0.0.0
Port status: ☑ ON



- Now, the topology is configured & ready to ping message from PC to PC.

→ observation:

- ping message from PC0 to PC1
Status: Successful

CLI

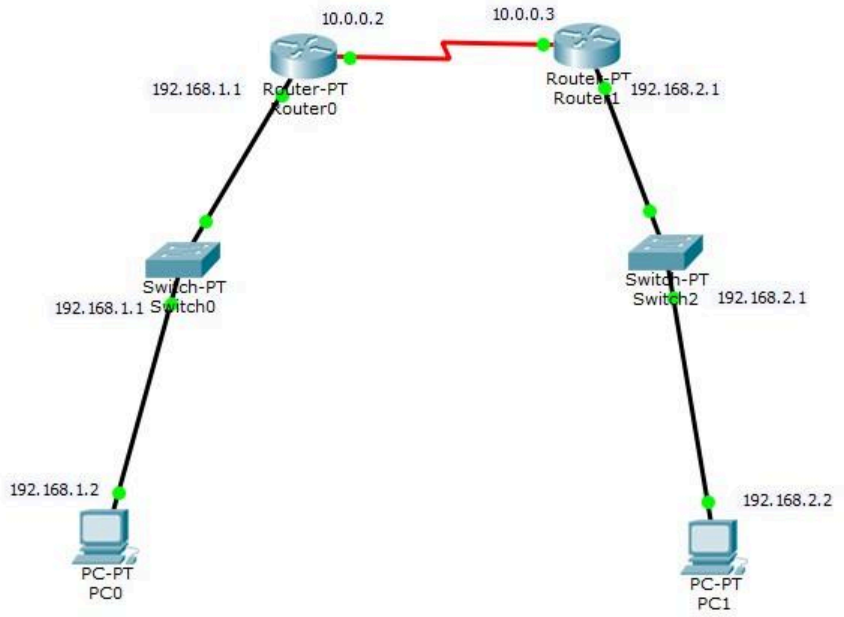
> ping 192.168.2.2

pinging 192.168.2.2 with 32 bytes of data:

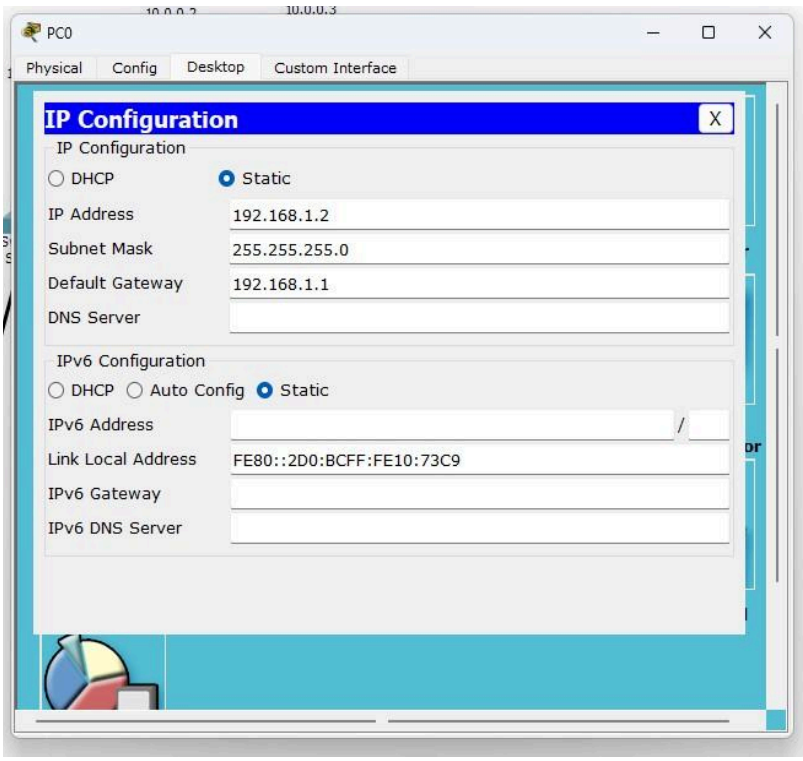
Reply from 192.168.2.2 : bytes=32 time=1ms

Ping statistics for 192.168.2.2 :
Packets: Sent = 4, Received = 4, Lost = 0

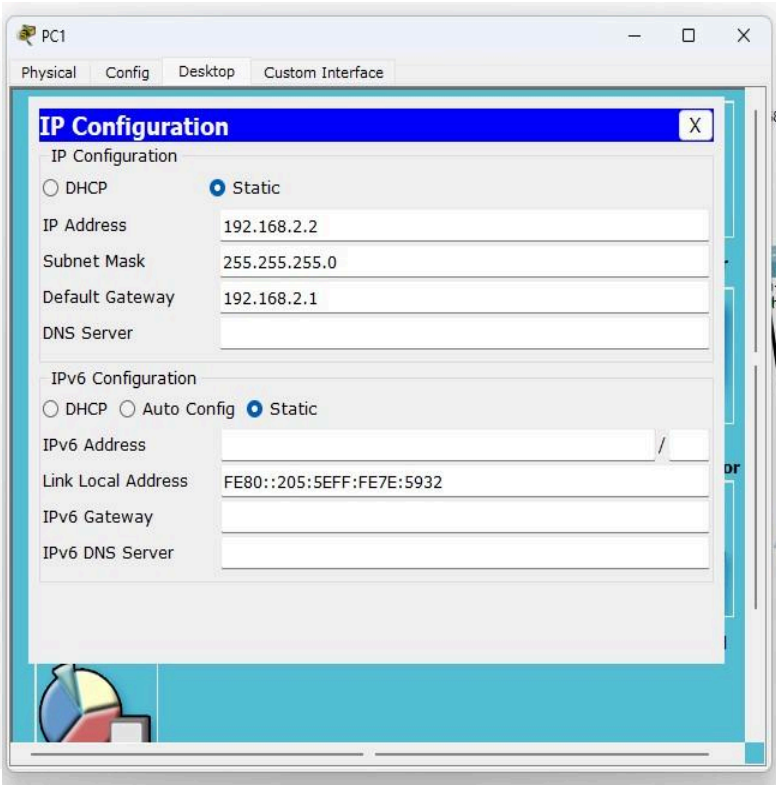
TOPOLOGY:



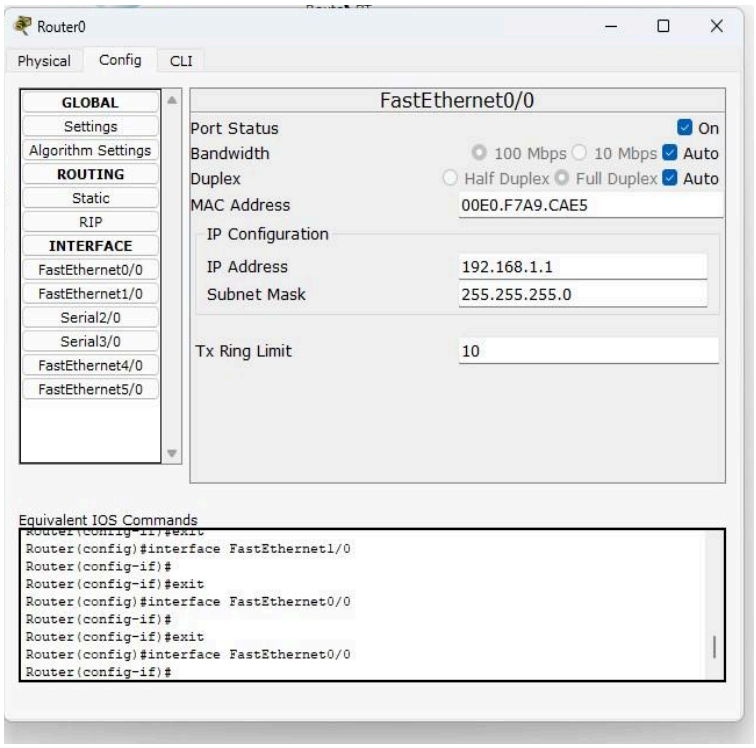
PC_0 CONFIGURATION:

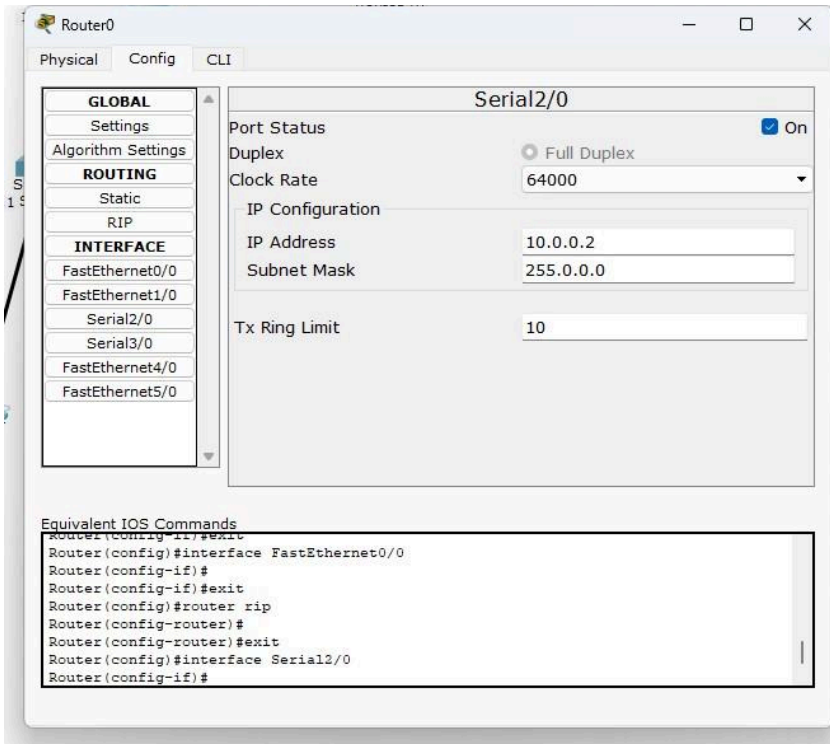


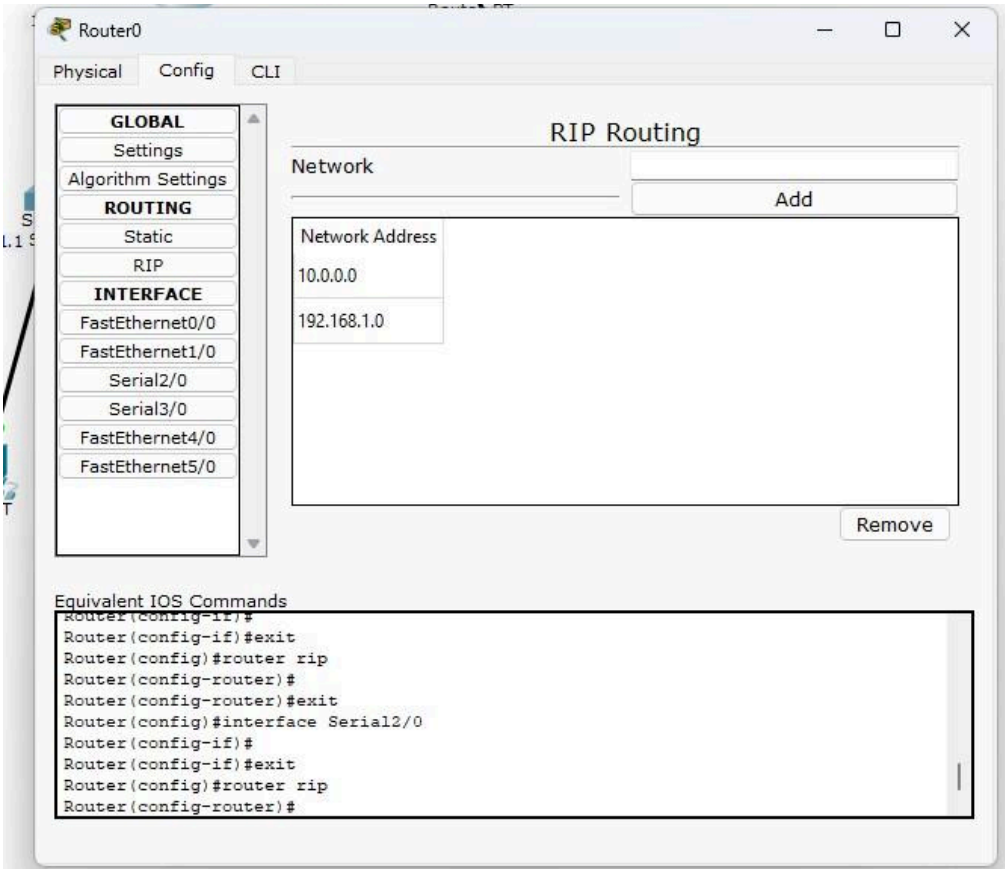
PC_1 CONFIGURATION:



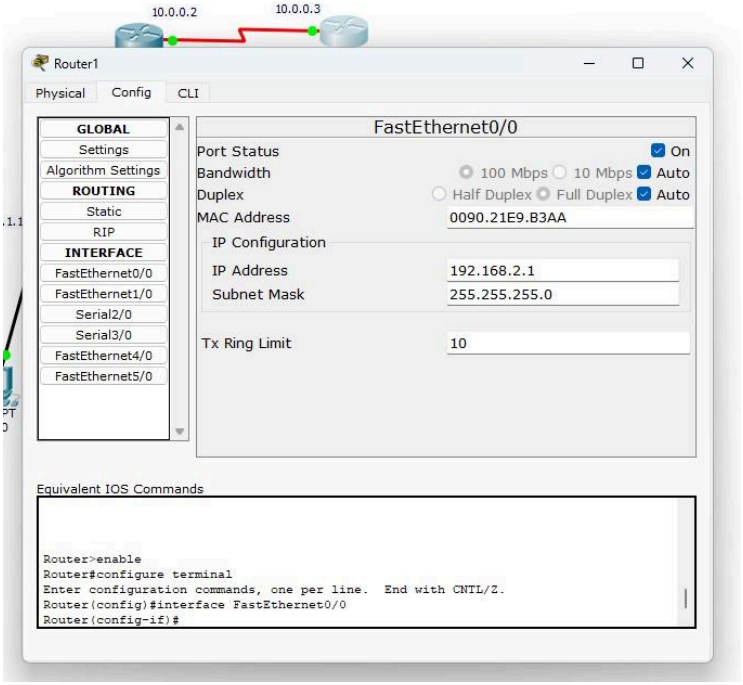
ROUTER_0 CONFIGURATION:

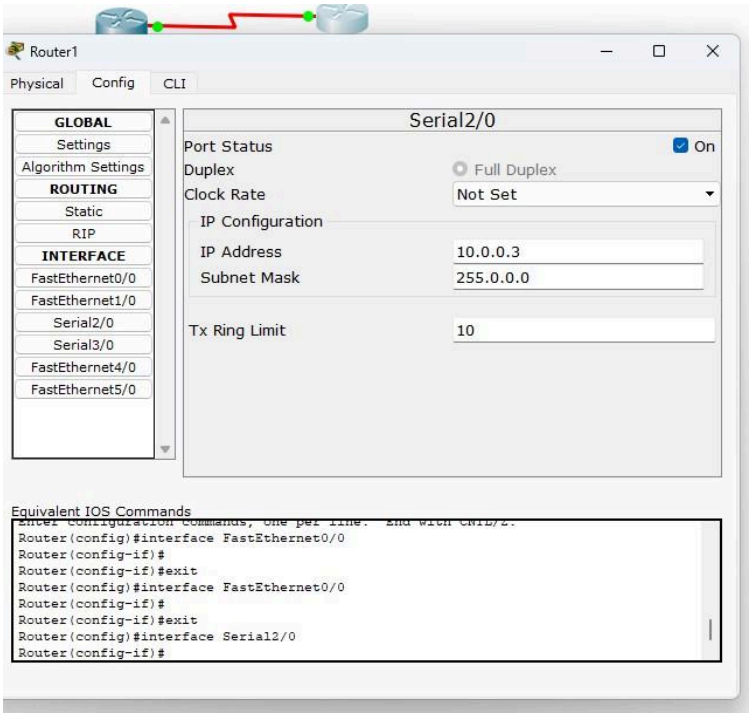


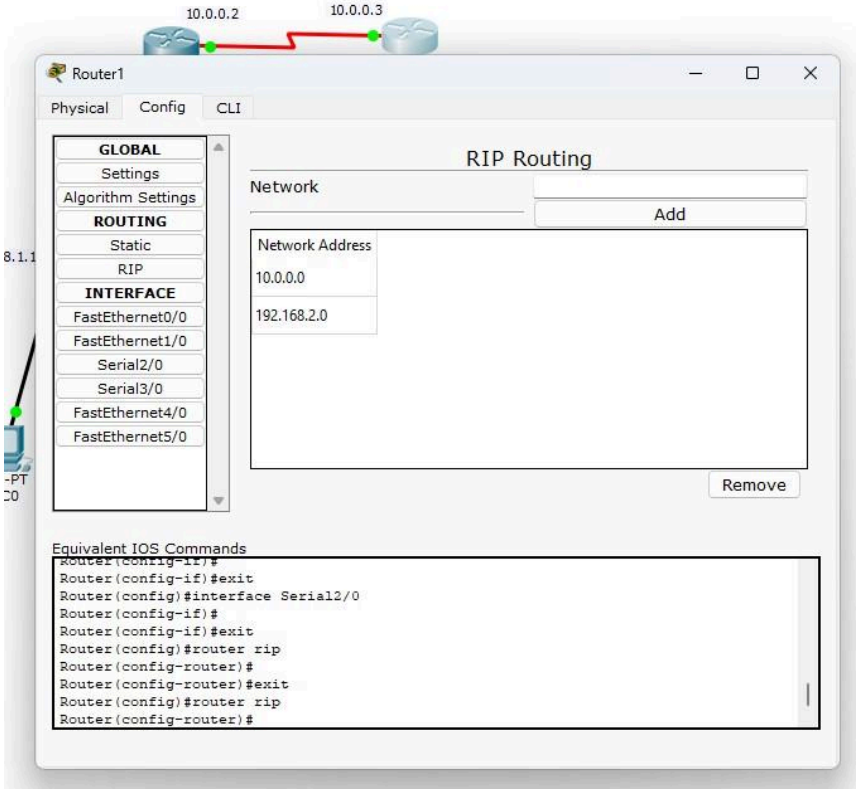




ROUTER_1 CONFIGURATION:







Packet transfer / ping