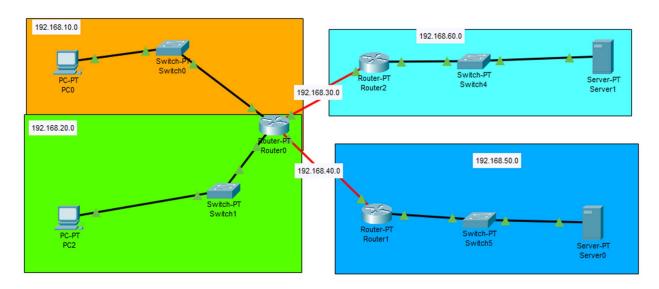
AIM: Understanding ,Reading and Analyzing Routing Table of a network

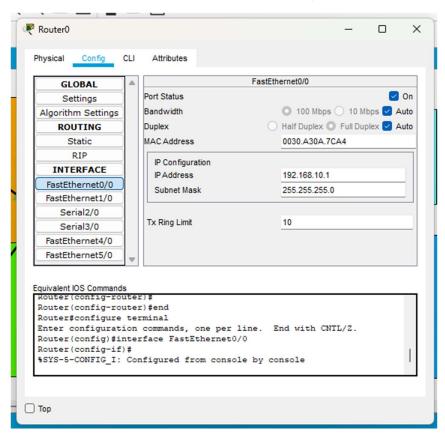


We have 6 networks in this topology.

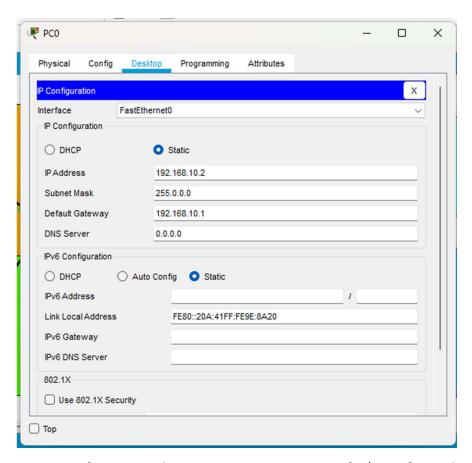
192.168.10.0, 192.168.20.0, 192.168.30.0, 192.168.40.0, 192.168.50.0, 192.168.60.0

Let's configure network 192.168.10.0

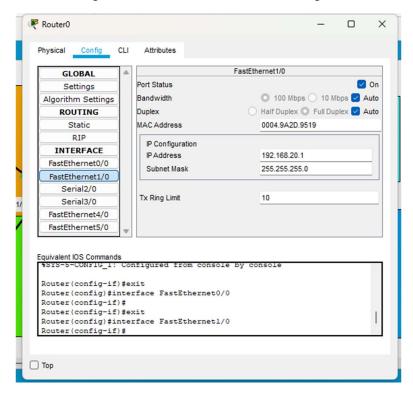
Double Click on router0, click on fa0/0 and enter the ip address



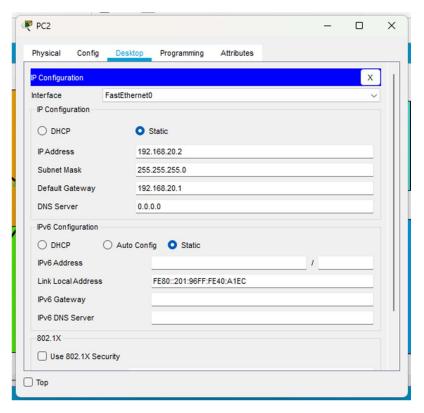
Now Click on the PCO and enter the ip and default geteway.



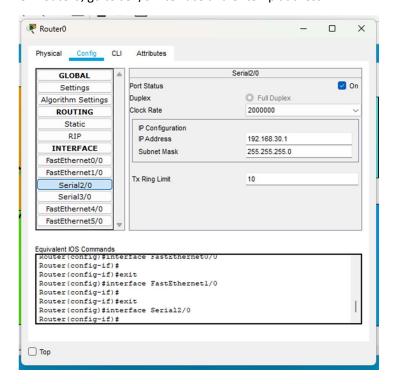
Now we configure network 192.168.20.0, on router0 go to fa1/0 interface and enter the ip address



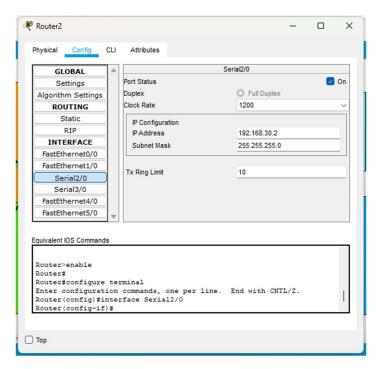
Now click on PC2 and enter the ip and default gateway for the particular network.



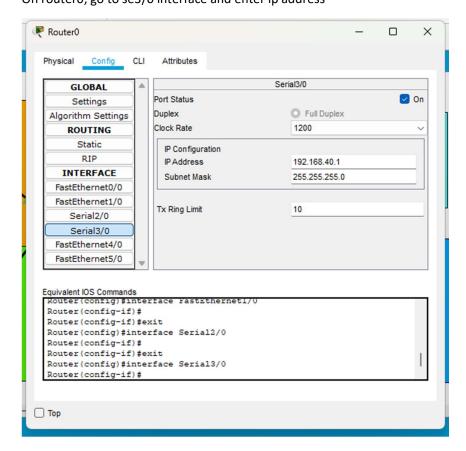
Now we configure network 192.168.30.0. i.e the connection between router0 and router2 On router0, go to se2/0 interface and enter ip address



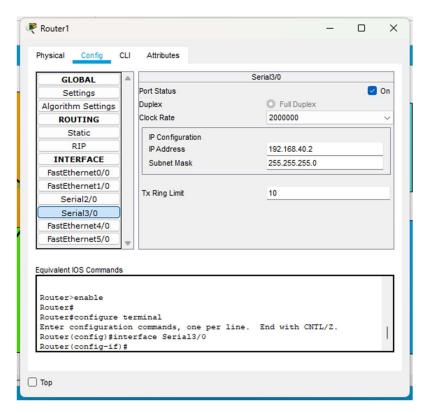
We go to the same interface on router2 and enter the ip address



Now we configure network 192.168.40.0. i.e the connection between router0 and router1 On router0, go to se3/0 interface and enter ip address

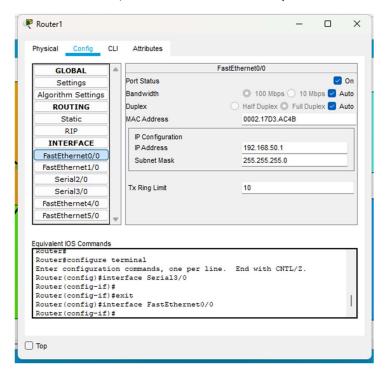


We go to the same interface on router1 and enter the ip address

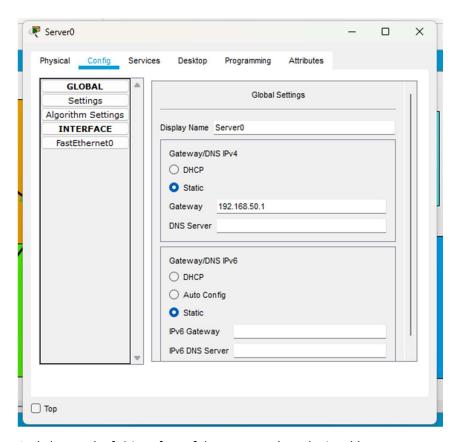


Now we configure network 192.168.50.0.

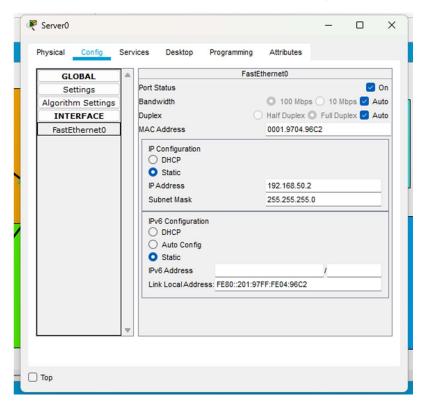
Go to interface fa0/0 on router1 and enter the ip address



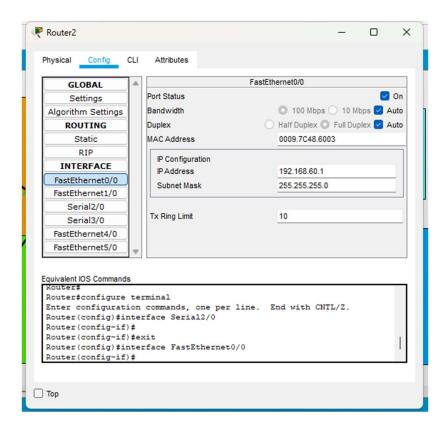
Now click on Server0 and enter the default gateway.



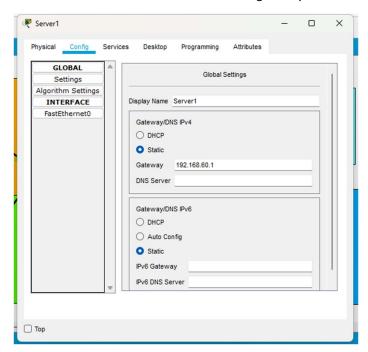
And also set the fa0 interface of the server and set the ip address



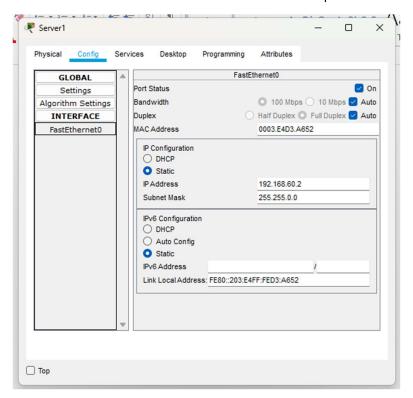
Now we configure the network 192.168.60.0



Now click on Server1 and enter the default gateway.

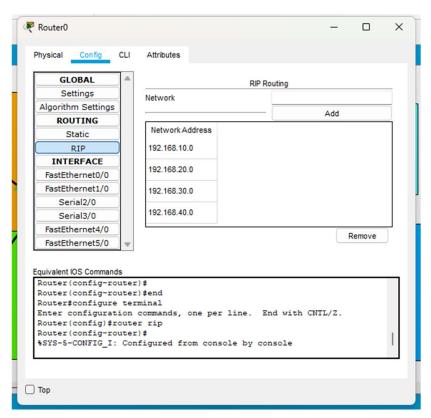


And also set the fa0 interface of the server and set the ip address

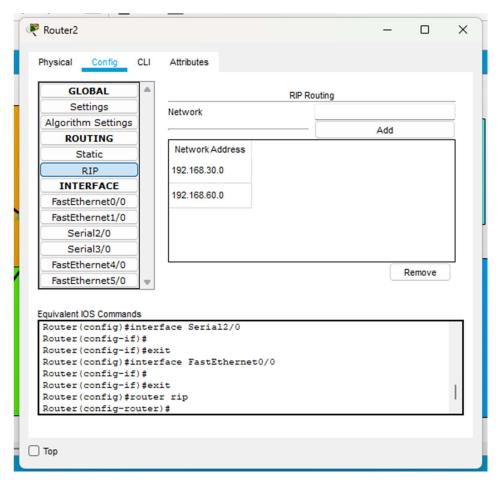


Now we do the RIP configuration for all 3 routers.

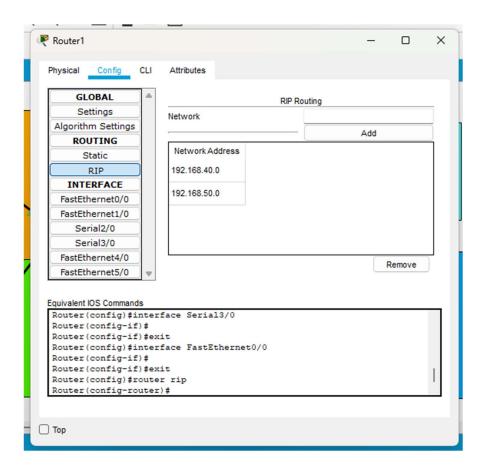
For router0



Router2

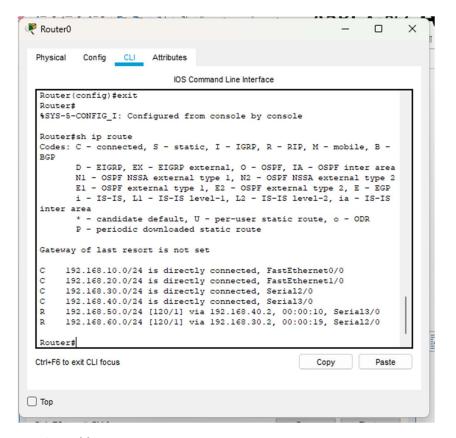


Router1



Now we ping, Server0 from PC0

```
PC0
                                                                    X
 Physical
           Config
                   Desktop
                            Programming
                                        Attributes
  Command Prompt
                                                                         X
  C:\>ping 192.168.50.2
  Pinging 192.168.50.2 with 32 bytes of data:
  Reply from 192.168.50.2: bytes=32 time=7ms TTL=126
  Reply from 192.168.50.2: bytes=32 time=3ms TTL=126
  Reply from 192.168.50.2: bytes=32 time=1ms TTL=126
  Reply from 192.168.50.2: bytes=32 time=2ms TTL=126
  Ping statistics for 192.168.50.2:
      Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
  Approximate round trip times in milli-seconds:
      Minimum = 1ms, Maximum = 7ms, Average = 3ms
```



Routing Table

```
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B -
        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
      192.168.10.0/24 is directly connected, FastEthernet0/0
C
     192.168.20.0/24 is directly connected, FastEthernet1/0
     192.168.30.0/24 is directly connected, Serial2/0
C
     192.168.40.0/24 is directly connected, Serial3/0
R
      192.168.50.0/24 [120/1] via 192.168.40.2, 00:00:16, Serial3/0
R
      192.168.60.0/24 [120/1] via 192.168.30.2, 00:00:21, Serial2/0
Router#
Ctrl+F6 to exit CLI focus
                                                            Copy
                                                                        Paste
```