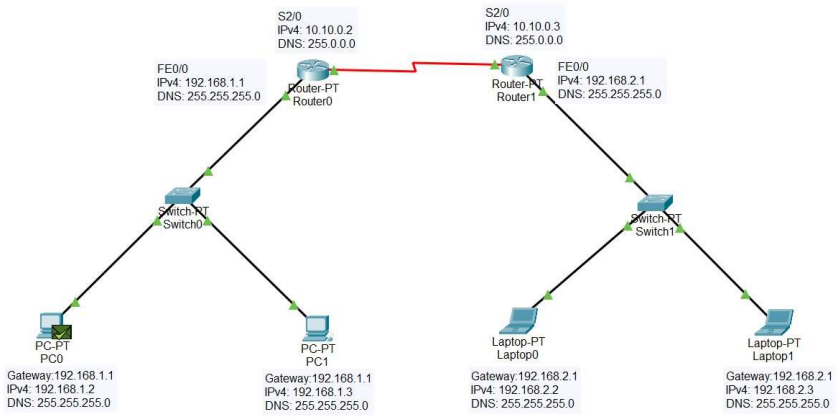
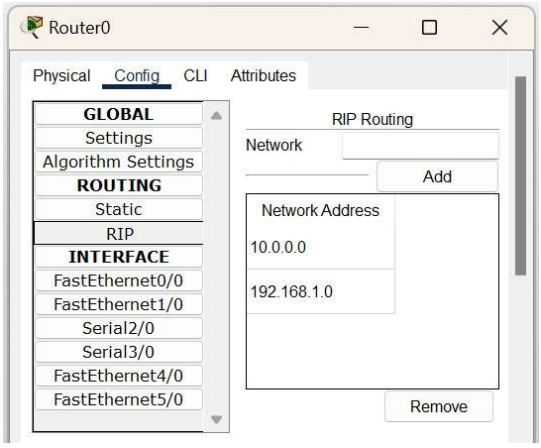
LABORATORY PROGRAM – 9

To Configure RIP routing protocol in Routers.





Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	Laptop1	ICMP		0.000	N	0	(edit)	

```
C:\>ping 192.168.2.3

Pinging 192.168.2.3 with 32 bytes of data:

Reply from 192.168.2.3: bytes=32 time=18ms TTL=126
Reply from 192.168.2.3: bytes=32 time=14ms TTL=126
Reply from 192.168.2.3: bytes=32 time=1ms TTL=126
Reply from 192.168.2.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.2.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 18ms, Average = 8ms
```

Observation: When we have to Dynamically assign IP address to another Network we will do it using a router. When we configure and connect Routers to Switch0 to Switch using (10) we will be using "ip helper-address 10.0.0.2" so that 2nd Network can access pool in server of Network I. Now when we go to PC's and select DHCP for Network I it will be starting from 10.0.0.3 and Second Network 20.0.0.3. the systems will be dynamically assigned the IP address

Good

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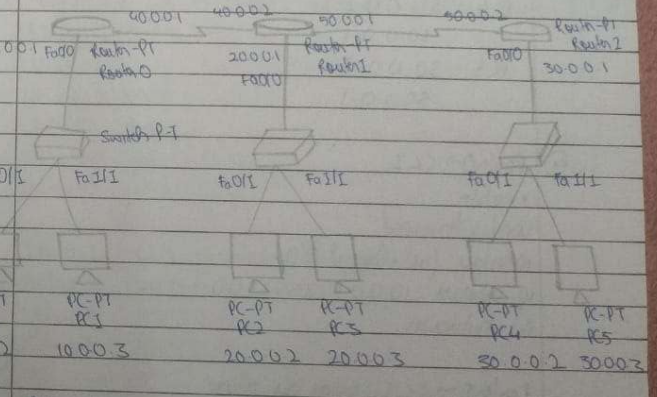
Configure Routing information protocol in Router

Aim: We are trying to connect different networks using Routing information protocol (R.I.P) so that we can send a message or connect PC from one network to another PC of another network

Topology:



Procedure

(1) Launch Cisco Packet Tracker
(2) Take 6 End devices, add 2 each to 3 switches and connect these 3 switches to 3 router using Copper straight through
Connect Routers with each other with Serial DCE

④ PCs → Fast ethernet and settings

PC0 : 10.0.0.2
10.0.0.1

PC1 : 10.0.0.3
10.0.0.1

PC2 : 20.0.0.2
20.0.0.1

PC3 : 20.0.0.3
20.0.0.1

PC4 : 30.0.0.2
30.0.0.1

PC5 : 30.0.0.3
30.0.0.1

Router0 → CLI
enable
config terminal
interface fastethernet 0/0
ip address 10.0.0.1 255.0.0.0
no shutdown

Router1 → CLI same as above
ip address 20.0.0.1 255.0.0.0

Router2 → CLI same as above
ip address 30.0.0.1 255.0.0.0

⑤ Router0 → CLI
enable
config terminal
interface Serial 2/0
ip address 40.0.0.1 255.0.0.0
no shutdown

Router1 → CLI same as above
ip address 40.0.0.2 255.0.0.0

interface Serial 3/0
ip address 50.0.0.1 255.0.0.0

Router2 → CLI same as above
ip address 50.0.0.2 255.0.0.0

⑥ Now we try to connect different Routers using RIP
Router0 → CLI →
enable
config terminal
router rip
network 10.0.0.0
network 40.0.0.0

Router1 → CLI → same as above
network 20.0.0.0
network 40.0.0.0
network 50.0.0.0

Router2 → CLI → same as above
network 50.0.0.0
network 30.0.0.0