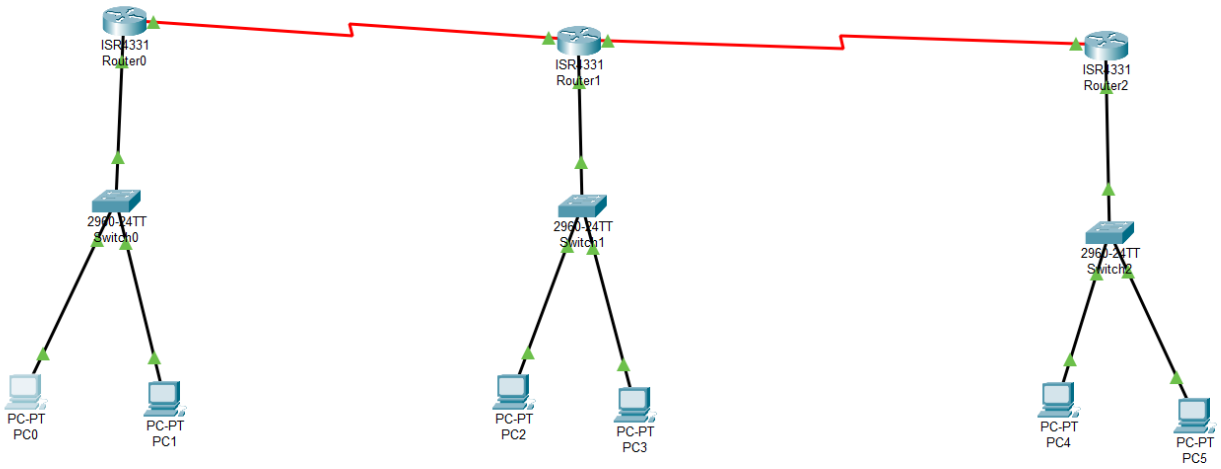
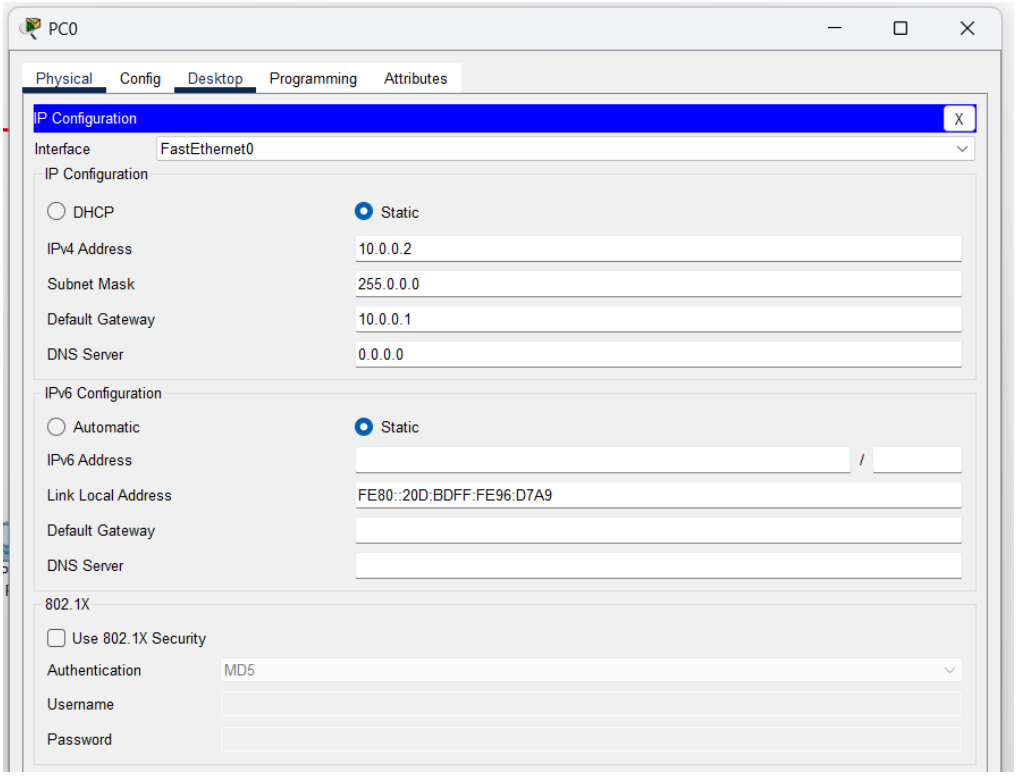
Marwadi University Marwadi Chandarana Group	**Marwadi University** **Faculty of Engineering and Technology** **Department of Information and Communication Technology**	
Subject: Computer Networks (01CT0503)	**Aim:** Perform static routing protocol and analyze the results.	
Experiment No: 5	**Date:**	**Enrolment No: 92301733041**

Aim:

Step 1: make physical connection of switch, and pc using straight copper cable , router to router(serial cable DTE)



step 2 : configure IP for router's port and end device (IP add, subnet mask,gateway)



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```
!
!
!
interface GigabitEthernet0/0/0
 ip address 10.0.0.1 255.0.0.0
 duplex auto
 speed auto
!
```

There are 5 networks give all them different networks address .
Now in same network it will show the configuration but in one network to diff network it will not ping or the connection is not available.
so here we have to route the router means tell the router that if request come for these N.H.H.H then route the flow to this path (ip add of next near by router where the network is.) or in other terms tell the router about those networks which are not connected directly to it.

```
!
ip classless
ip route 10.0.0.0 255.0.0.0 Serial0/1/0
ip route 10.0.0.0 255.0.0.0 11.0.0.1
ip route 10.0.0.0 255.0.0.0 12.0.0.1
ip route 10.0.0.0 255.0.0.0 30.0.0.1
ip route 11.0.0.0 255.0.0.0 Serial0/1/0
ip route 11.0.0.0 255.0.0.0 Serial0/2/0
ip route 11.0.0.0 255.0.0.0 30.0.0.2
ip route 11.0.0.0 255.0.0.0 20.0.0.2
ip route 12.0.0.0 255.0.0.0 30.0.0.2
ip route 30.0.0.0 255.0.0.0 20.0.0.2
!
ip flow-export version 9
```

Step 4:check connectivity between PCs from diff network

```
C:\>ping 12.0.0.3

Pinging 12.0.0.3 with 32 bytes of data:

Reply from 12.0.0.3: bytes=32 time=20ms TTL=125
Reply from 12.0.0.3: bytes=32 time=11ms TTL=125
Reply from 12.0.0.3: bytes=32 time=11ms TTL=125
Reply from 12.0.0.3: bytes=32 time=2ms TTL=125

Ping statistics for 12.0.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 20ms, Average = 11ms

C:\>
```

Conclusion: In this exp I learnt about the static routing protocol where it routes the router if request is come for specific router , need of this protocol is that when the request come with any IP router don't where to route so wee need to configure using routing protocols.