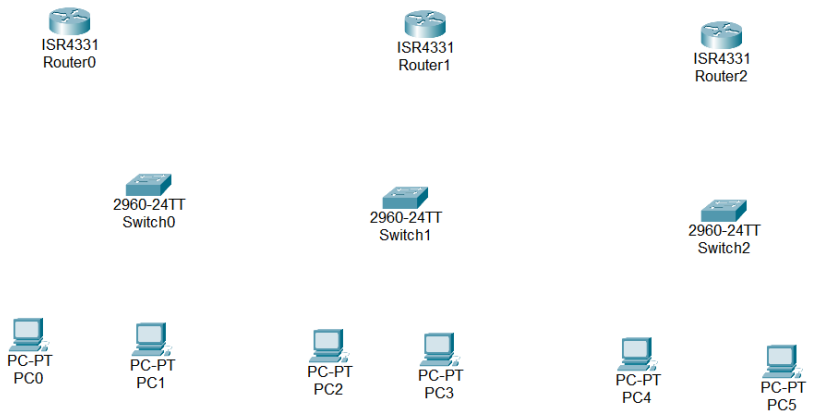
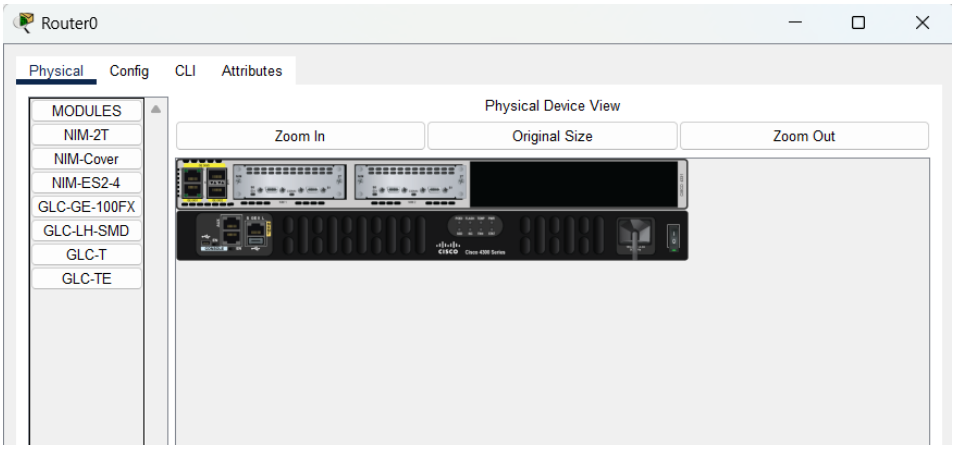
Marwadi University Marwadi Chandarana Group	**Marwadi University** **Faculty of Engineering and Technology** **Department of Information and Communication Technology**	
Subject: Computer Networks (01CT0503)	**Aim: Guided project.**	
Experiment No: 14	**Date: 24-11-2025**	**Enrolment No: 92301733024**

Multi-Lab College Network using RIP Protocol

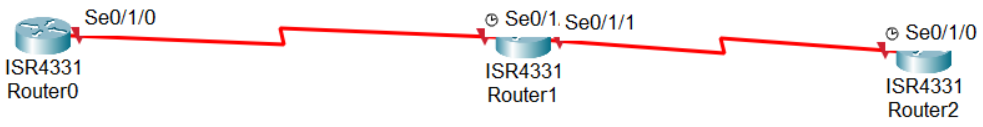
Step – 1:- Open the Cisco Packet tracer and take three routers, three switch and six PC's.



Step – 2 :- To long distance communication we need to connect router using Serial DTE cable. For the serial port we have to open router turn off it and drag and drop WIC-1T on router and turn on router.



Step – 3 :- Now Connect Two Routers Using Serial DTE Cable.



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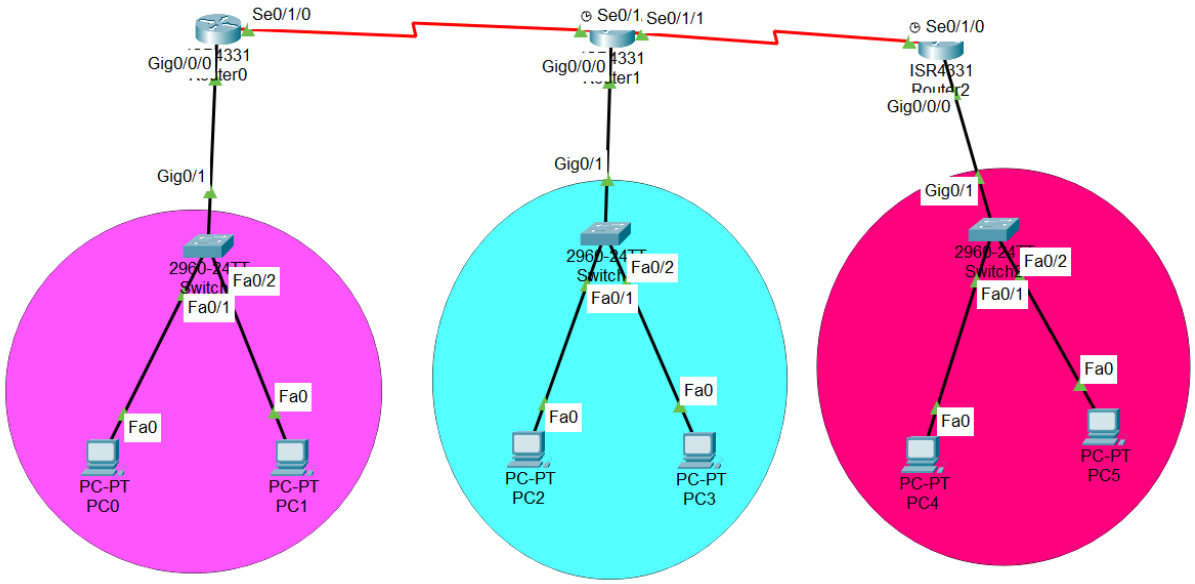
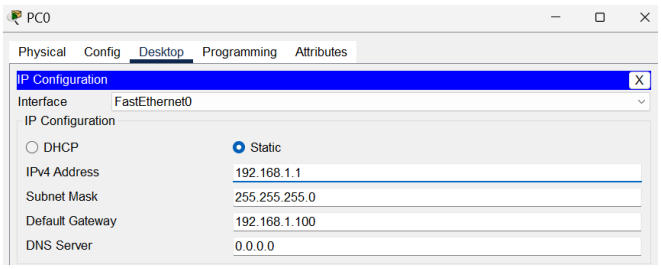
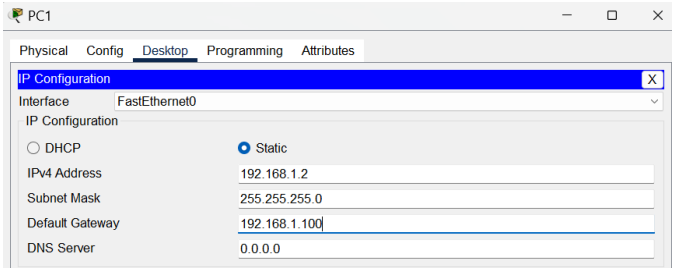
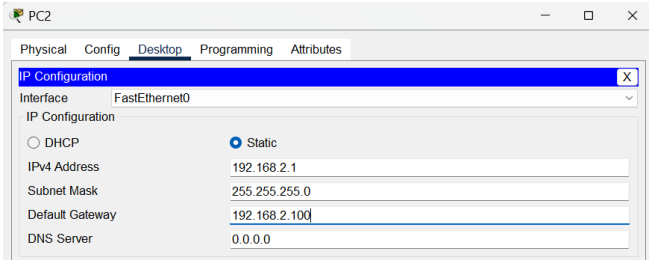
Step – 4 :- Now Connect the Switches with routers using Copper Straight through cable In GigaEthernet Port. And Connect PC's with Switches using copper Straight through cab

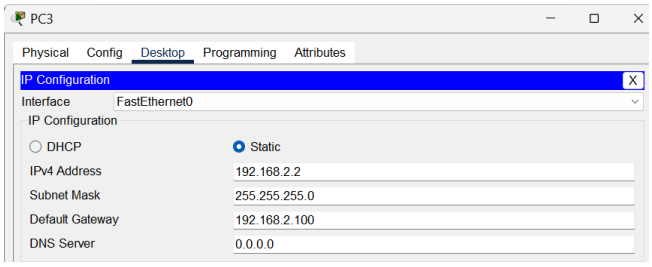


Step – 5:- Now assign the IP address And Subnet mask and Gateway to all PC's.









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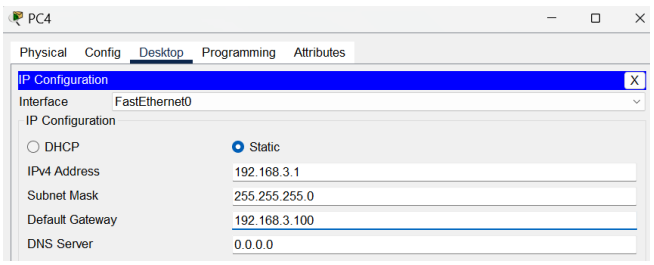
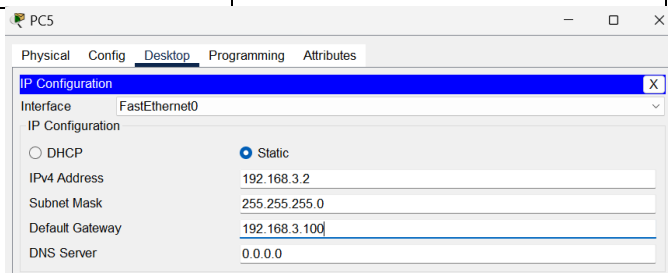
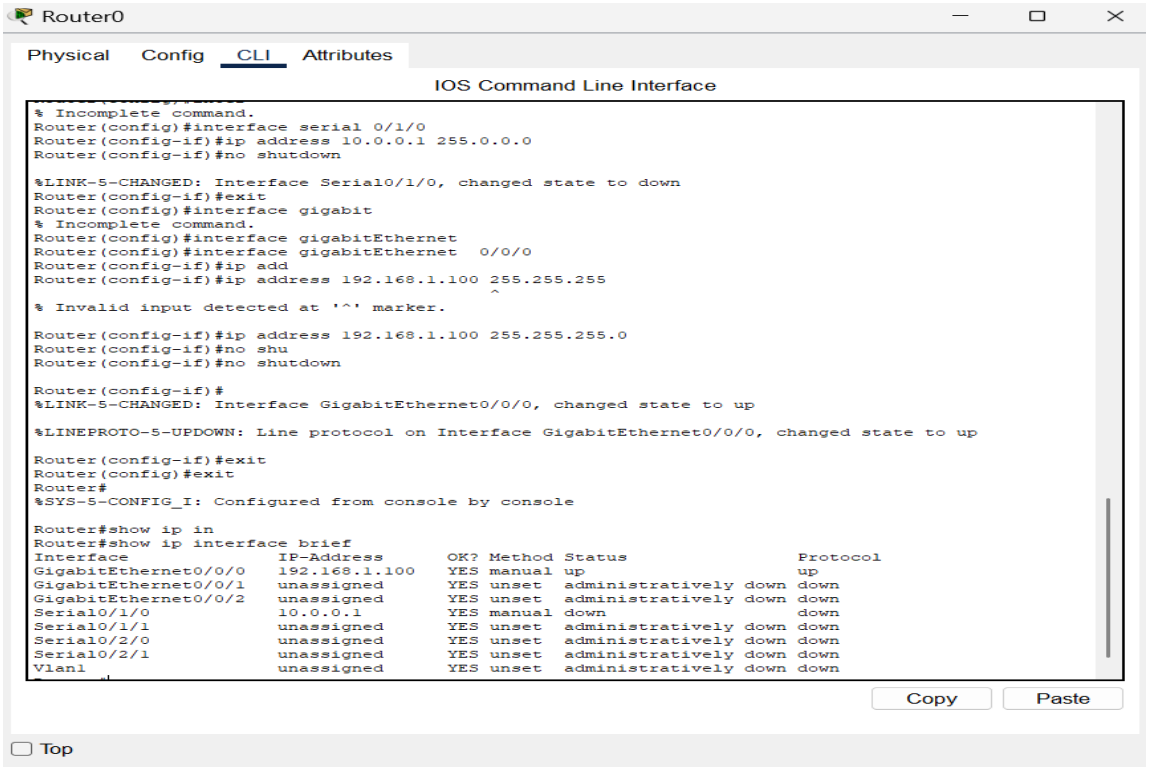




Step – 6:- Assign IP Address to Routers

Router – 0 :-



Router – 1 :-

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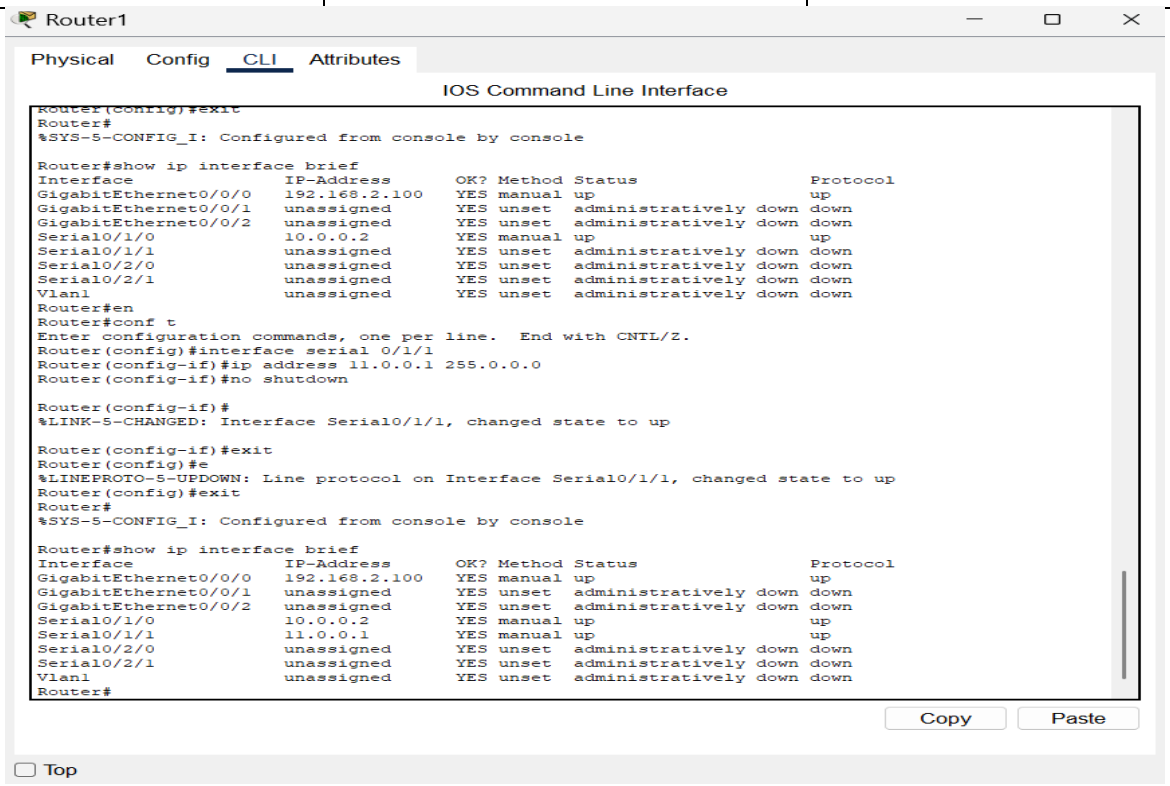

Router – 2 :-

```
Router#en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface serial 0/1/0
Router(config-if)#ip add
Router(config-if)#ip address 11.0.0.2 255.0.0.0
Router(config-if)#no shut down
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#interface giga
Router(config)#interface gigabitEthernet 0/0/0
Router(config-if)#ip add
Router(config-if)#ip address 192.168.3.100
% Incomplete command.
Router(config-if)#ip address 192.168.3.100 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show ip interface brief
Interface              IP-Address      OK? Method Status                Protocol
GigabitEthernet0/0/0   192.168.3.100   YES manual up                    up
GigabitEthernet0/0/1   unassigned      YES unset  administratively down down
GigabitEthernet0/0/2   unassigned      YES unset  administratively down down
Serial0/1/0            11.0.0.2        YES manual up                    up
Serial0/1/1            unassigned      YES unset  administratively down down
Serial0/2/0            unassigned      YES unset  administratively down down
Serial0/2/1            unassigned      YES unset  administratively down down
Vlan1                  unassigned      YES unset  administratively down down
Router#
```

Step – 7:- now we will configure router for RIP Protocol.

Router - 0

```
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#rou
Router(config)#router rip
Router(config-router)#ver
Router(config-router)#version 2
Router(config-router)#net
Router(config-router)#network 192.168.1.100
Router(config-router)#net
Router(config-router)#network 10.0.0.0
Router(config-router)#end
Router#
%SYS-5-CONFIG I: Configured from console by console
```

Router – 1 :-

```
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#rou
Router(config)#router rip
Router(config-router)#ver
Router(config-router)#version 2
Router(config-router)#network 192.168.2.100
Router(config-router)#network 10
                             ^
% Invalid input detected at '^' marker.

Router(config-router)#network 10.0.0.0
Router(config-router)#network 11.0.0.0
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Router-2 :-

```
Router#cong t
          ^
% Invalid input detected at '^' marker.

Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#rou
Router(config)#router rip
Router(config-router)#ver
Router(config-router)#version 2
Router(config-router)#net
Router(config-router)#network 192.168.3.100
Router(config-router)#network 11.0.0.0
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Step – 8 :- now we will check connection using ping command. And using tracert ip_add command we can check how packet will be reach at ip add.

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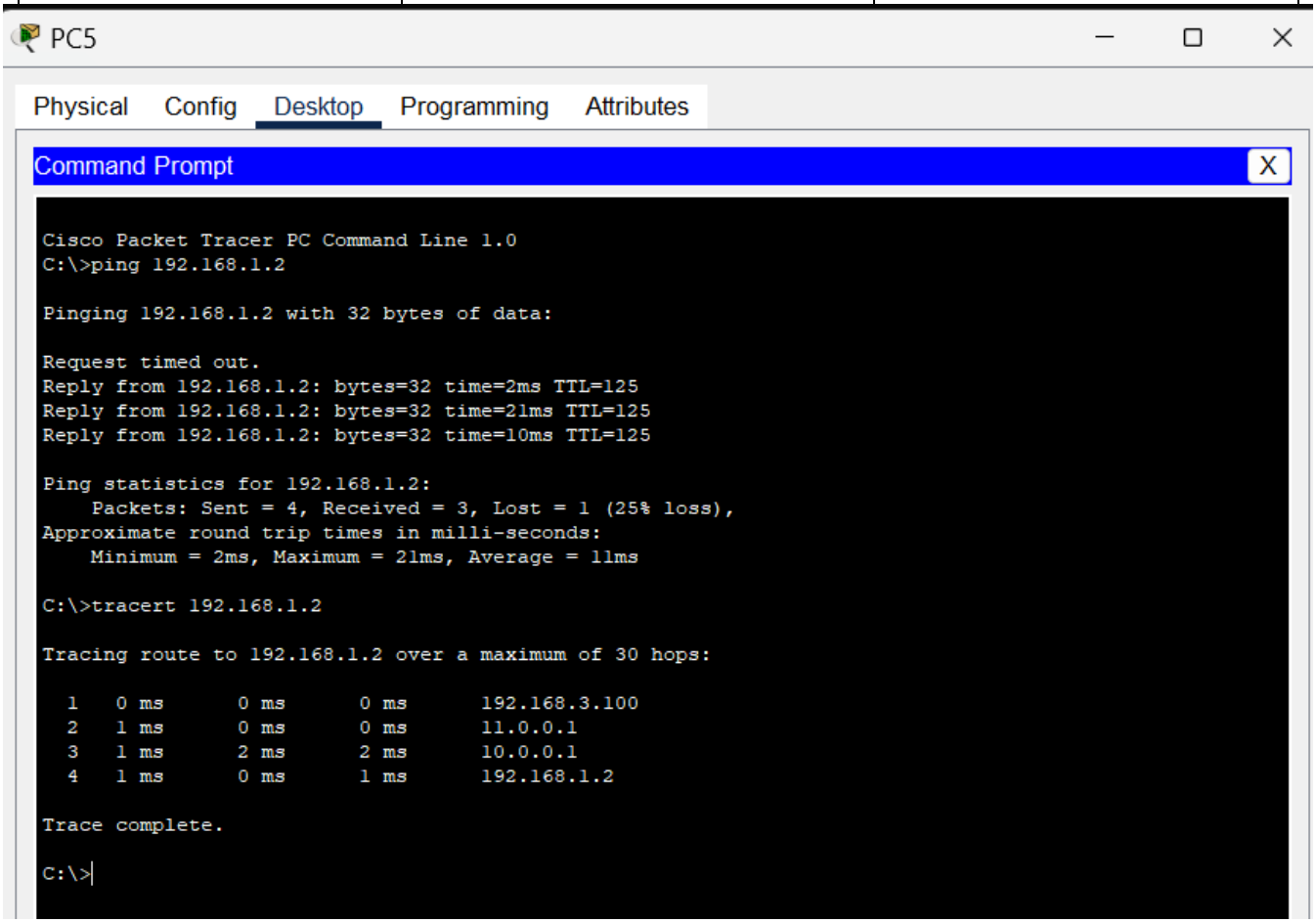

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