
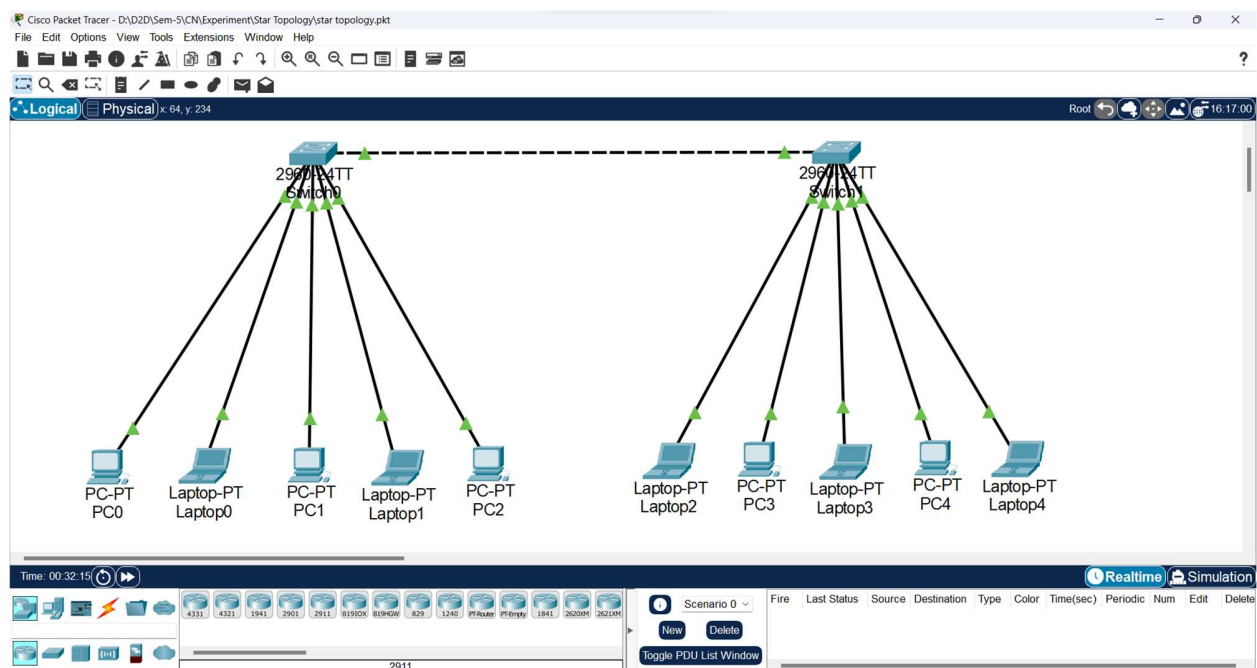


|   |  |                                  |
|---|--|----------------------------------|
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| <b>Subject: Computer Networks (01CT0503)</b>  | <b>Aim:</b> Simulate star topology and check the connectivity between devices.   |                                  |
| <b>Experiment No: 03</b>  | <b>Date:</b> 21-08-2023  | <b>Enrolment No:</b> 92210133006 |


**Aim:** Simulate star topology and check the connectivity between devices.

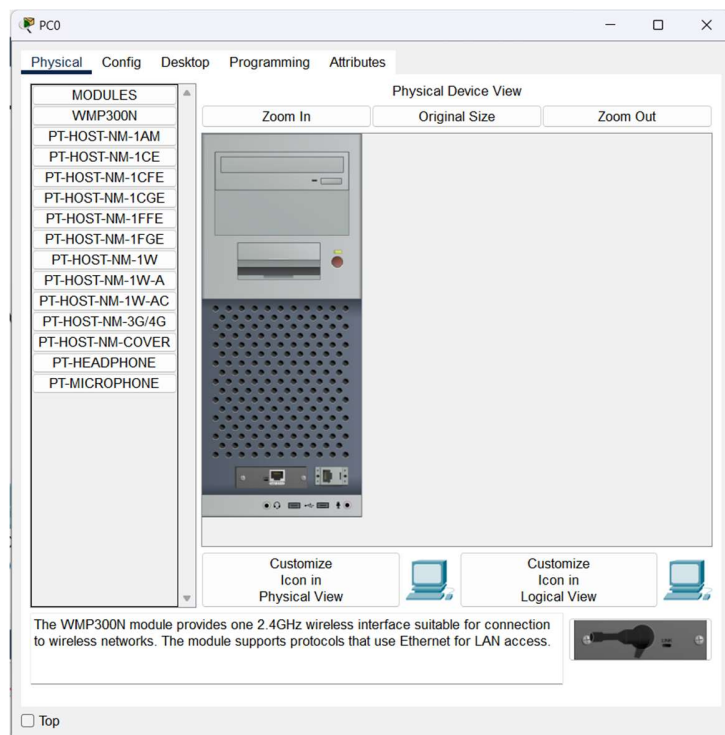
**Step 1:** Open Cisco Packet Tracer and create a Star Topology with 2 switch and 5 devices on each switch.

Connect same devices using copper cross-over cable and different devices using copper straight-through cable.

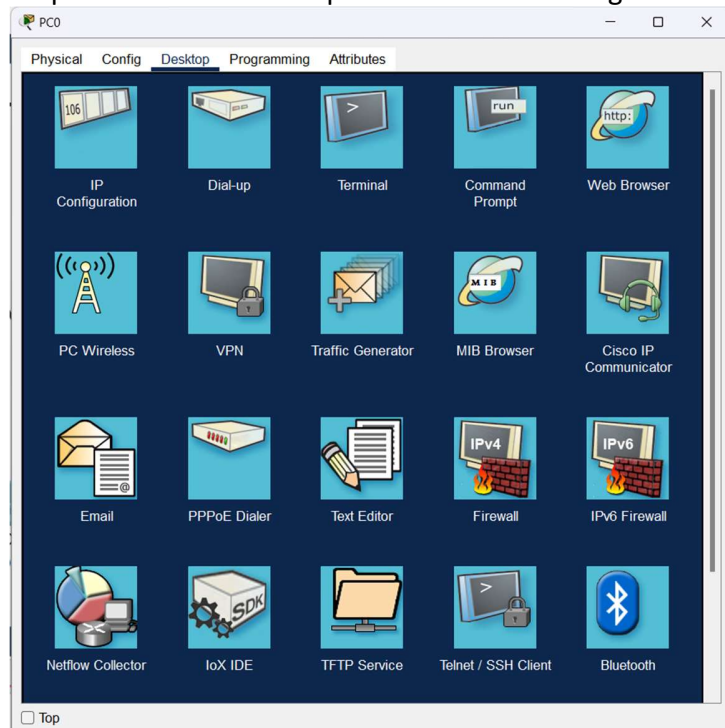



**Step 2:** Assign same network IP to all devices connected with switch with different host addresses. To do that Click on device in which want to assign IP.  
By clicking on device, we can see physical view of device.

|   |  |                                  |
|---|--|----------------------------------|
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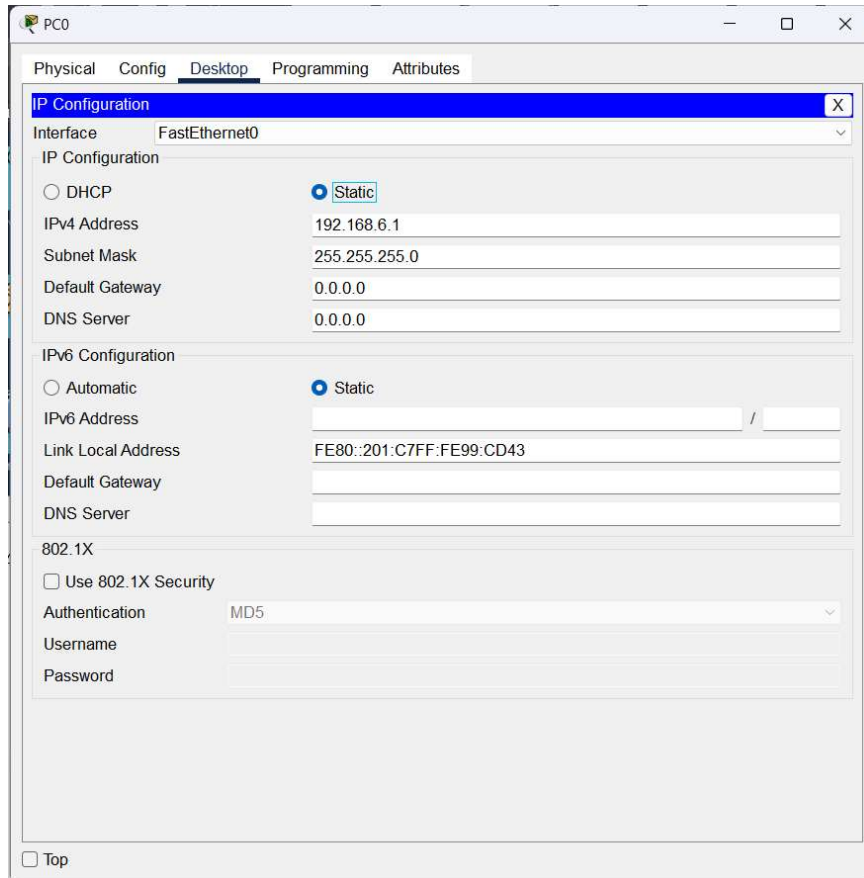


Step 3: Click on "Desktop" and select "IP Configuration".



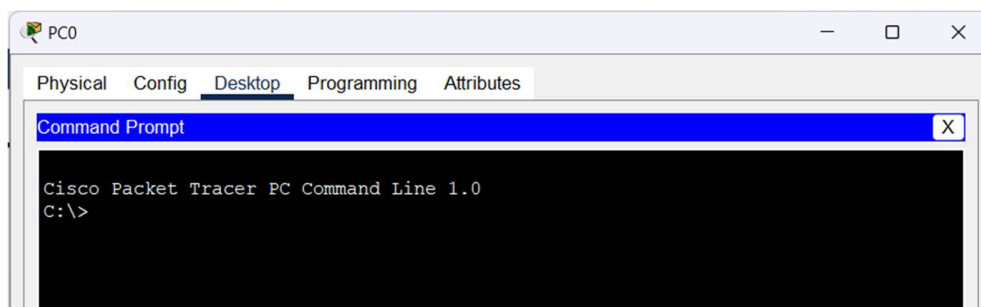
|   |  |                                  |
|---|--|----------------------------------|
|  <b>Marwadi University</b><br>Marwadi Chandarana Group | <b>Marwadi University</b><br><b>Faculty of Engineering and Technology</b><br><b>Department of Information and Communication Technology</b> |                                  |
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Step 4: In the IP Configuration window, enter the IPV4 address, subnet mask and then close the window.



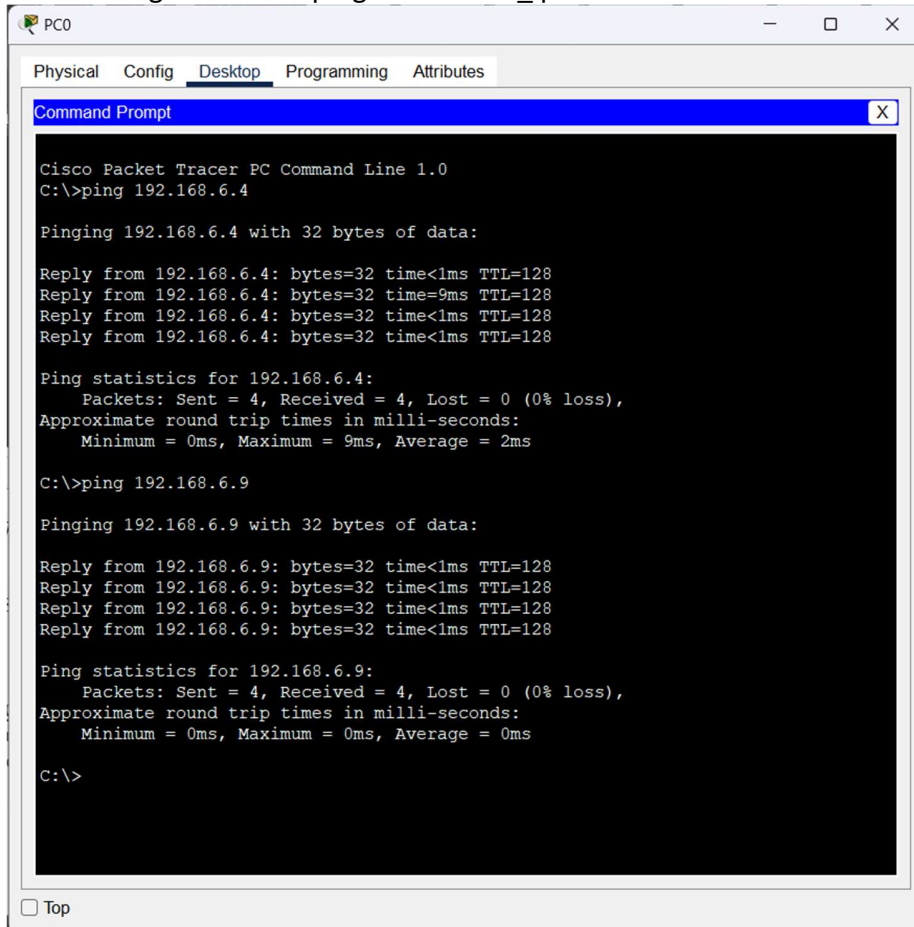
Step 5: Do step 2 to step 4 for all remaining devices.

Step 6: Now open any device and click on "Desktop" and select "Command Prompt".



|   |  |                                  |
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Step 7: Now try to connect with other devices if it is connected with same switch or different switch using command 'ping destination\_ip'.



```

PC0
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.6.4

Pinging 192.168.6.4 with 32 bytes of data:

Reply from 192.168.6.4: bytes=32 time<1ms TTL=128
Reply from 192.168.6.4: bytes=32 time=9ms TTL=128
Reply from 192.168.6.4: bytes=32 time<1ms TTL=128
Reply from 192.168.6.4: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.6.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 9ms, Average = 2ms

C:\>ping 192.168.6.9

Pinging 192.168.6.9 with 32 bytes of data:

Reply from 192.168.6.9: bytes=32 time<1ms TTL=128
Reply from 192.168.6.9: bytes=32 time<1ms TTL=128
Reply from 192.168.6.9: bytes=32 time<1ms TTL=128
Reply from 192.168.6.9: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.6.9:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>

```

## Conclusion:

Through this experiment, I learned how to create star topology, how to configure IP address of devices and check connection between source and destination using ping command and I observe that different network addresses cannot able to connect.