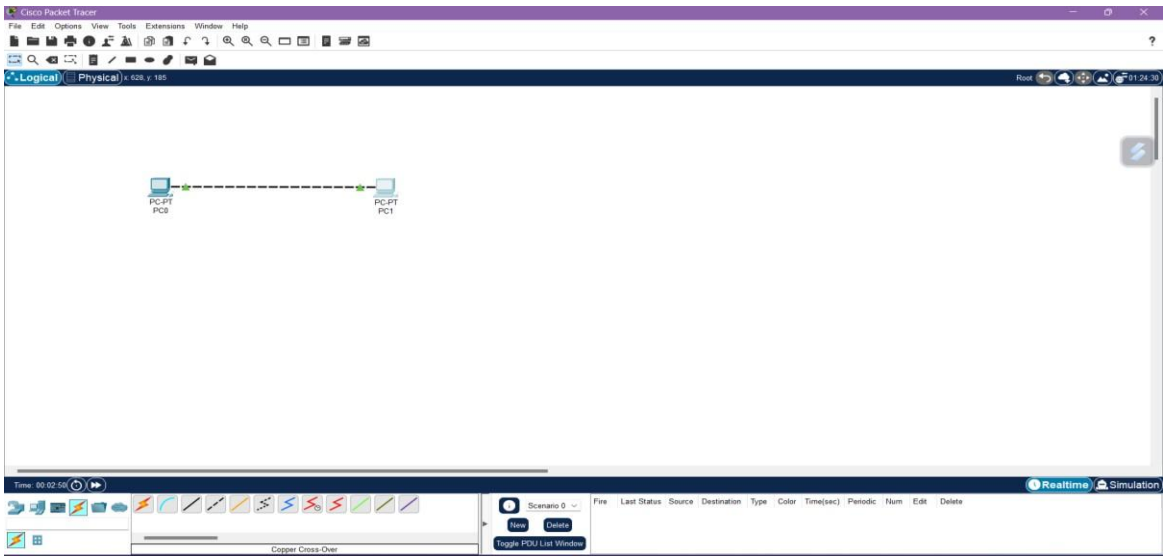
Register No:	**99220040570**
Name	**K. Hanumaan**
Class/Section	**8501 A/S06**
Ex. No:	**2**
Name of the Experiment	**a) Building a Peer-to-Peer Network** **b) Design a Simple LAN Network**
Google Drive link of the packet tracer file (give view permission):	https://drive.google.com/drive/folders/129M2kRvvdYrELTckAxKCSvIceirUMEL8?usp=sharing

a) Building a Peer-to-Peer Network

1. **Device Requirements:**
    1. PC0
    2. PC1
    3. Wires
2. **Network Diagram for your experiment (draw the diagram either hand drawing/ms paint or any other drawing tools)**

3. **Network Diagram (packet tracer diagram before configuration):**



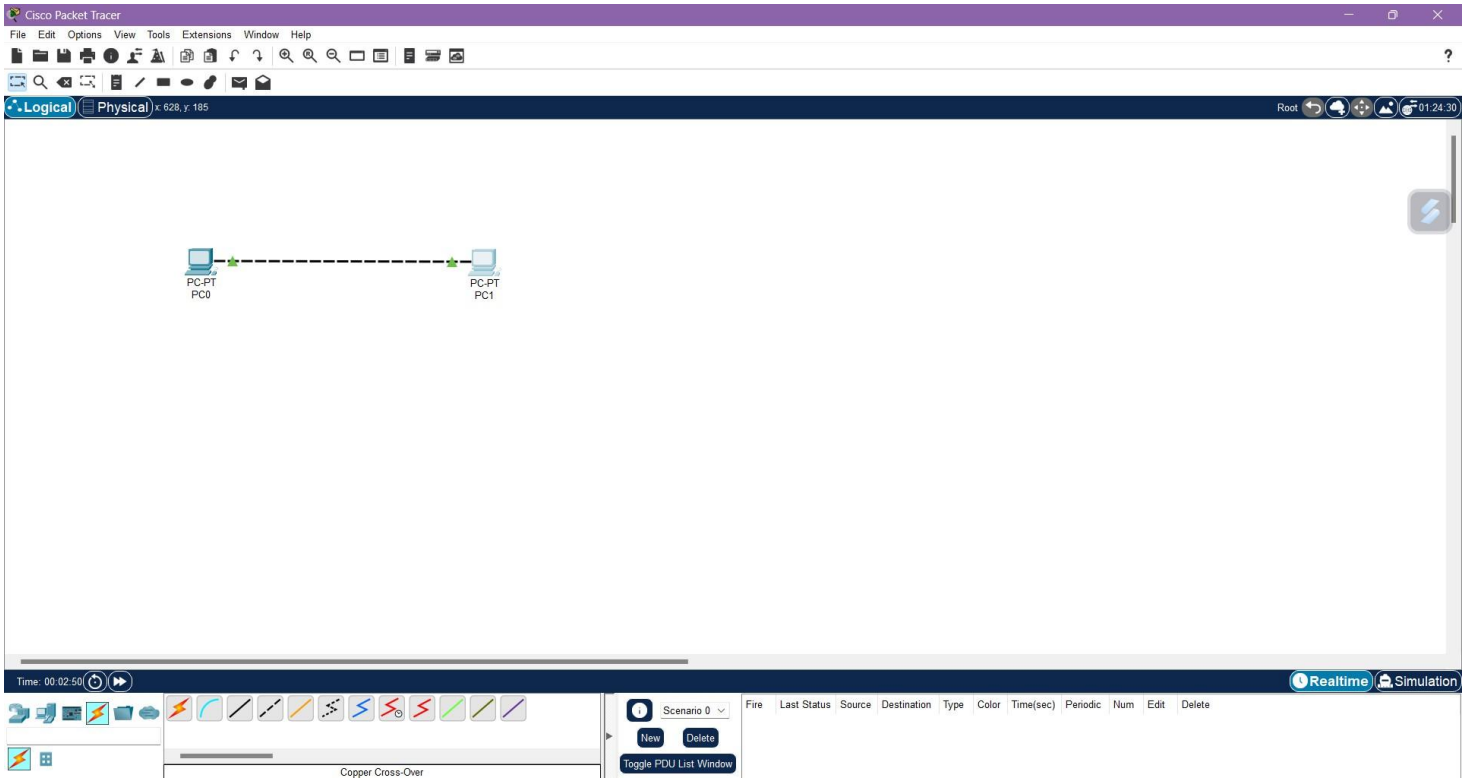
4. Configuration details:

Device Name	Interface Name	IP Address	Subnet mask
PC0	Fa0	172.16.108.25	255.255.0.0
PC1	Fa0	172.16.108.26	255.255.0.0

5. Commands used in each of the diagram (if any):

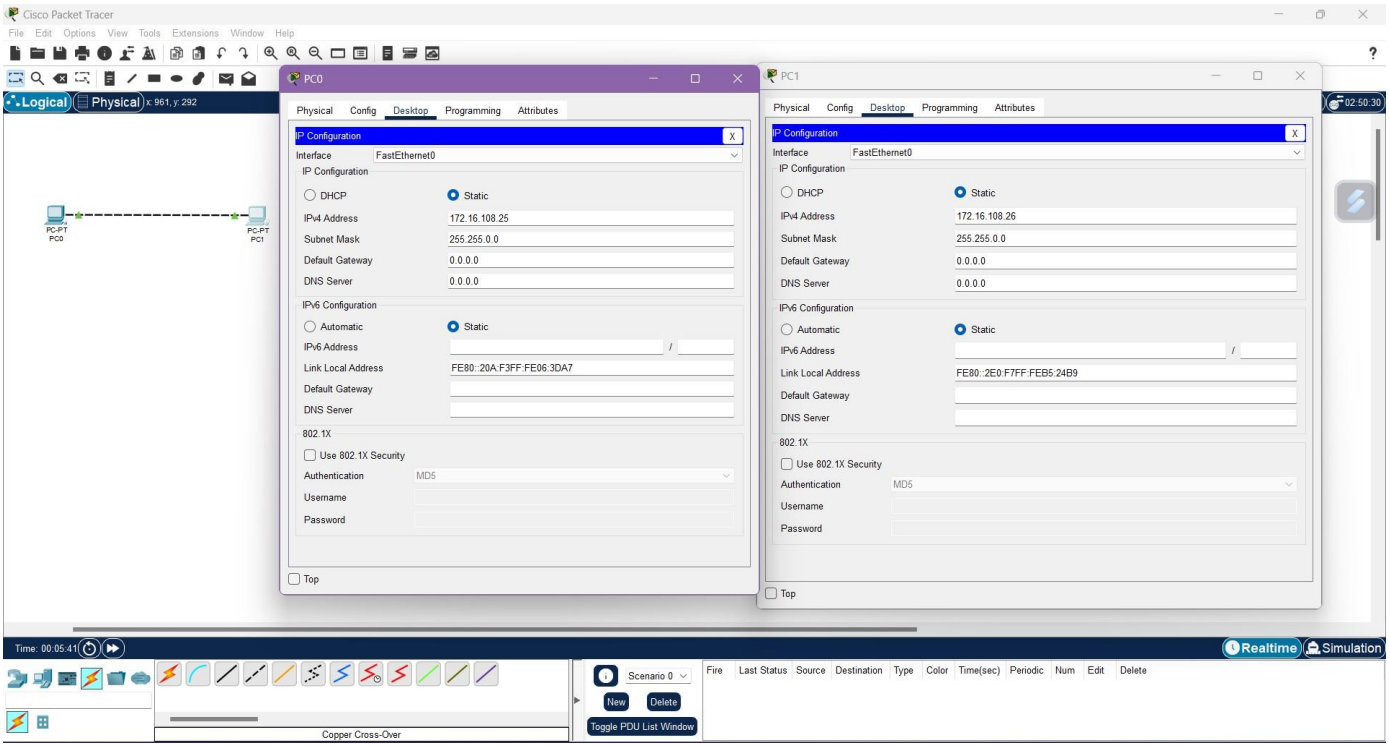
1. Ipconfig
2. Ping

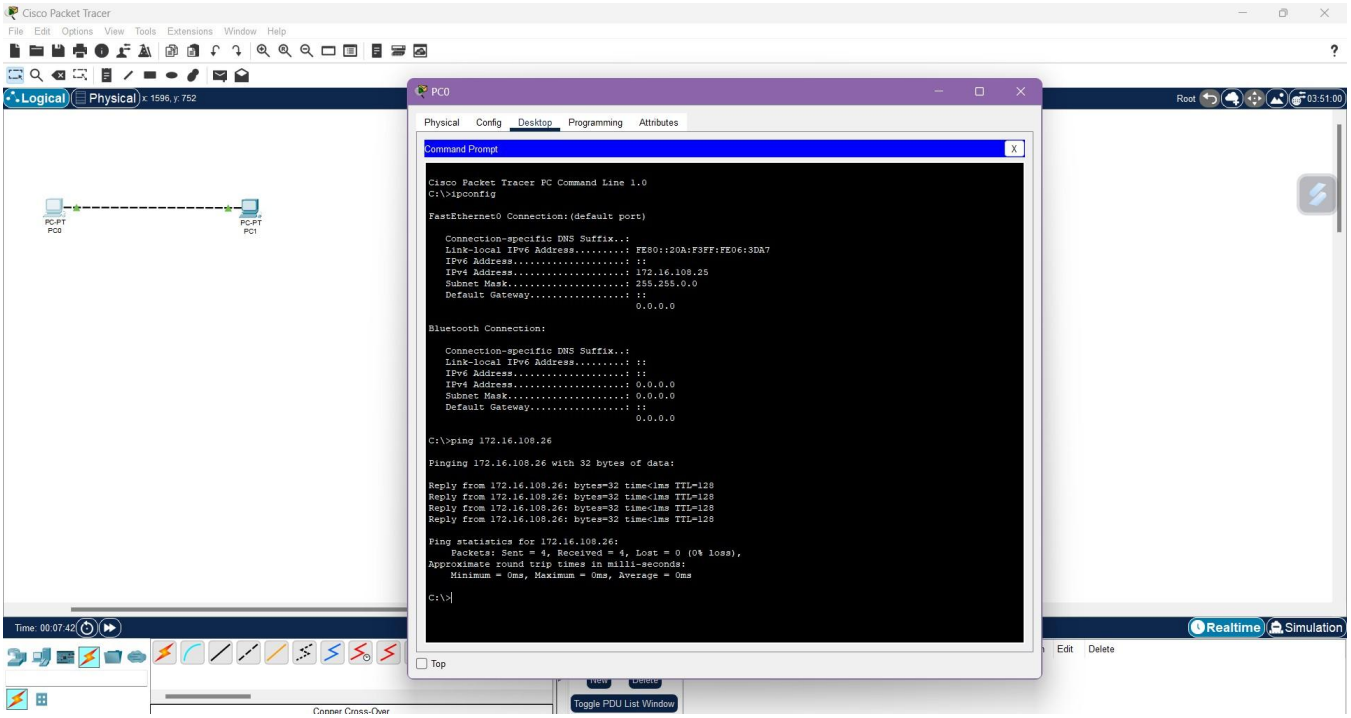
6. Output Diagram (Minimum 3 screenshot):

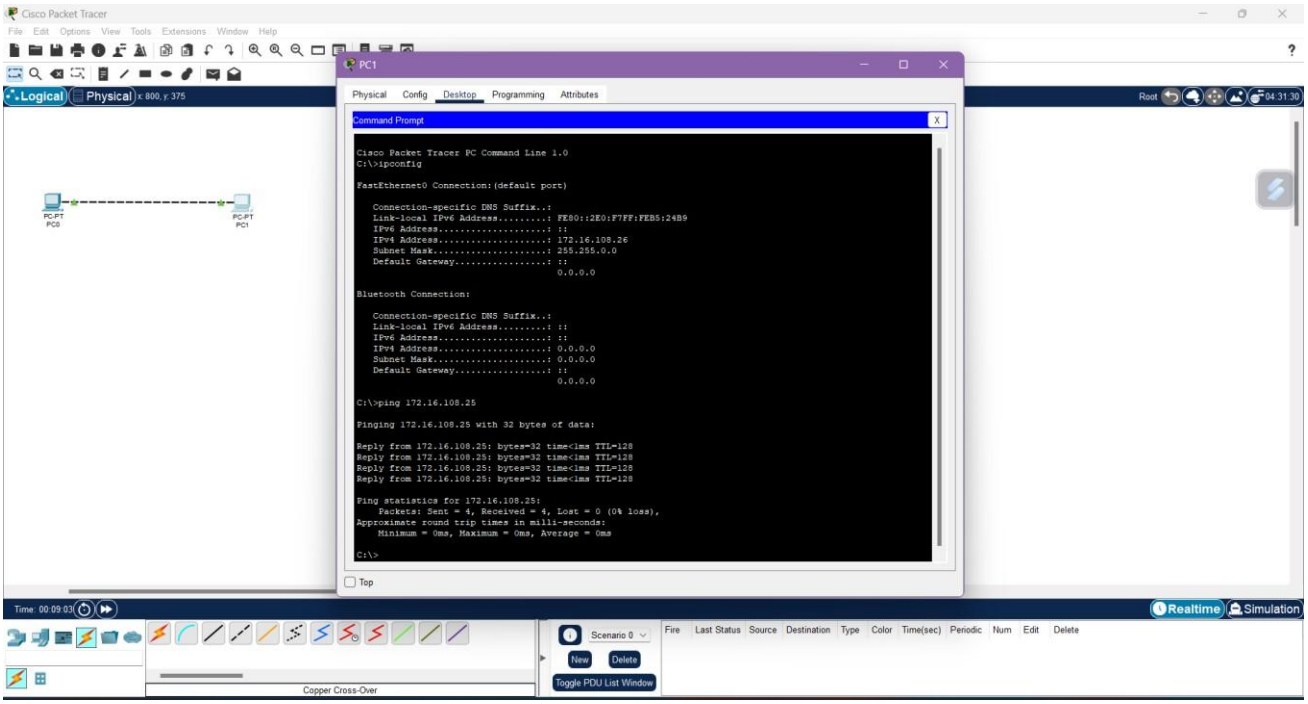


Network Diagram

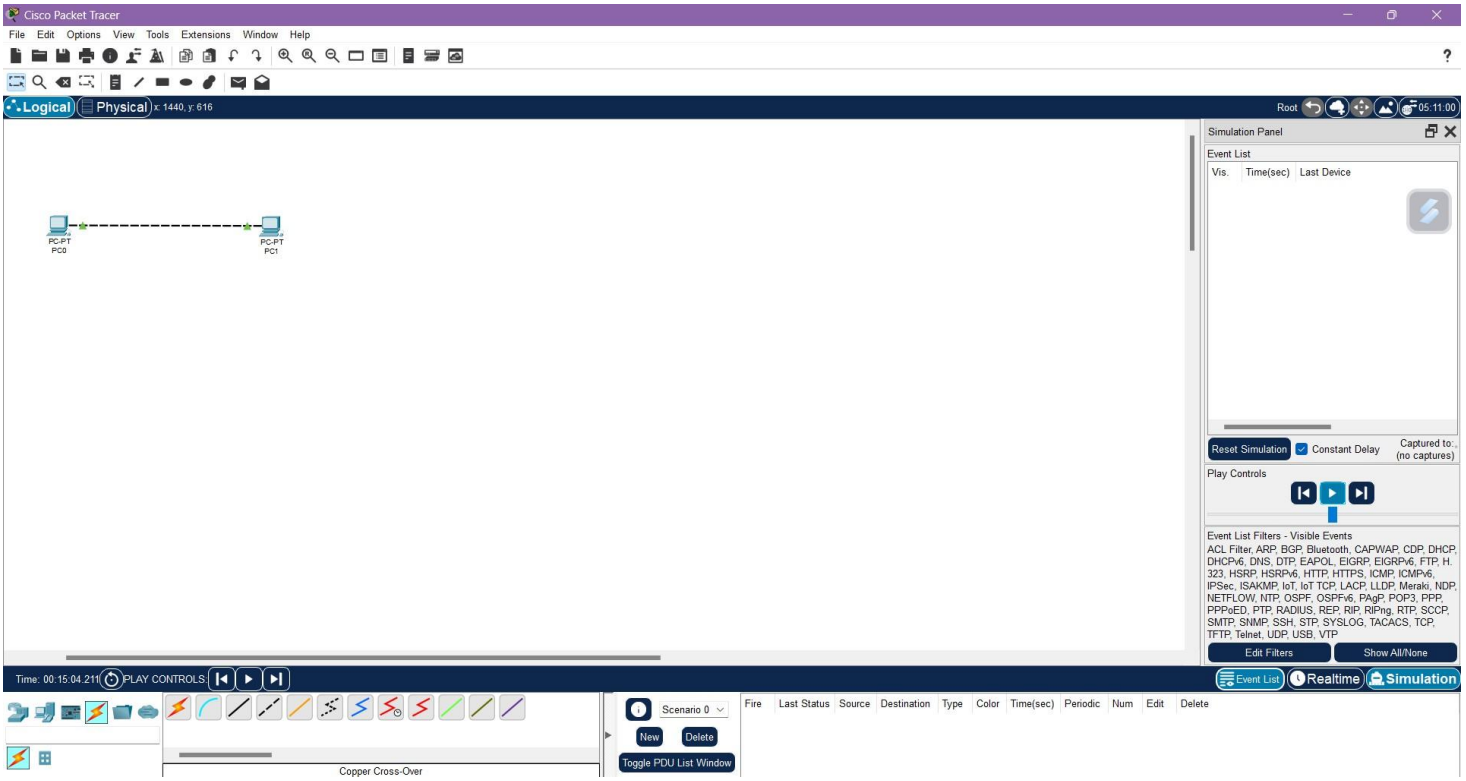
99220040570







Assigning IP Address



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CONCLUSION:

The Peer to Peer network model is ideal for applications such as file sharing, distributed computing, and collaborative platforms. Despite challenges like maintaining security and managing network resources, the flexibility and decentralization offered by P2P networks make them a powerful solution for modern distributed systems.

Rubrics for Experiment Assessment:

Rubrics	Good	Normal	Poor	Marks
Creation of Topology (4)	Created the topology, Identify the proper devices and making the connections **(4)**	Created the topology, Identify the proper devices, making the connections But missing some features **(3)**	Created wrong topology, Failed to Identify the proper devices and making connections **(1)**	
Verify the connectivity (4)	Verified the connectivity in all the levels **(4)**	Verified the connectivity at some levels (only some nodes) **(2)**	Verified the connectivity is not done. **(1)**	
Timely Completion (2)	Completed the lab before the allotted time **(2)**	Completed the lab after the deadline **(1)**	Did not submitted before grading **(0)**	
Total				

Result: Thus the Building a Peer to Peer Network has been done successfully.

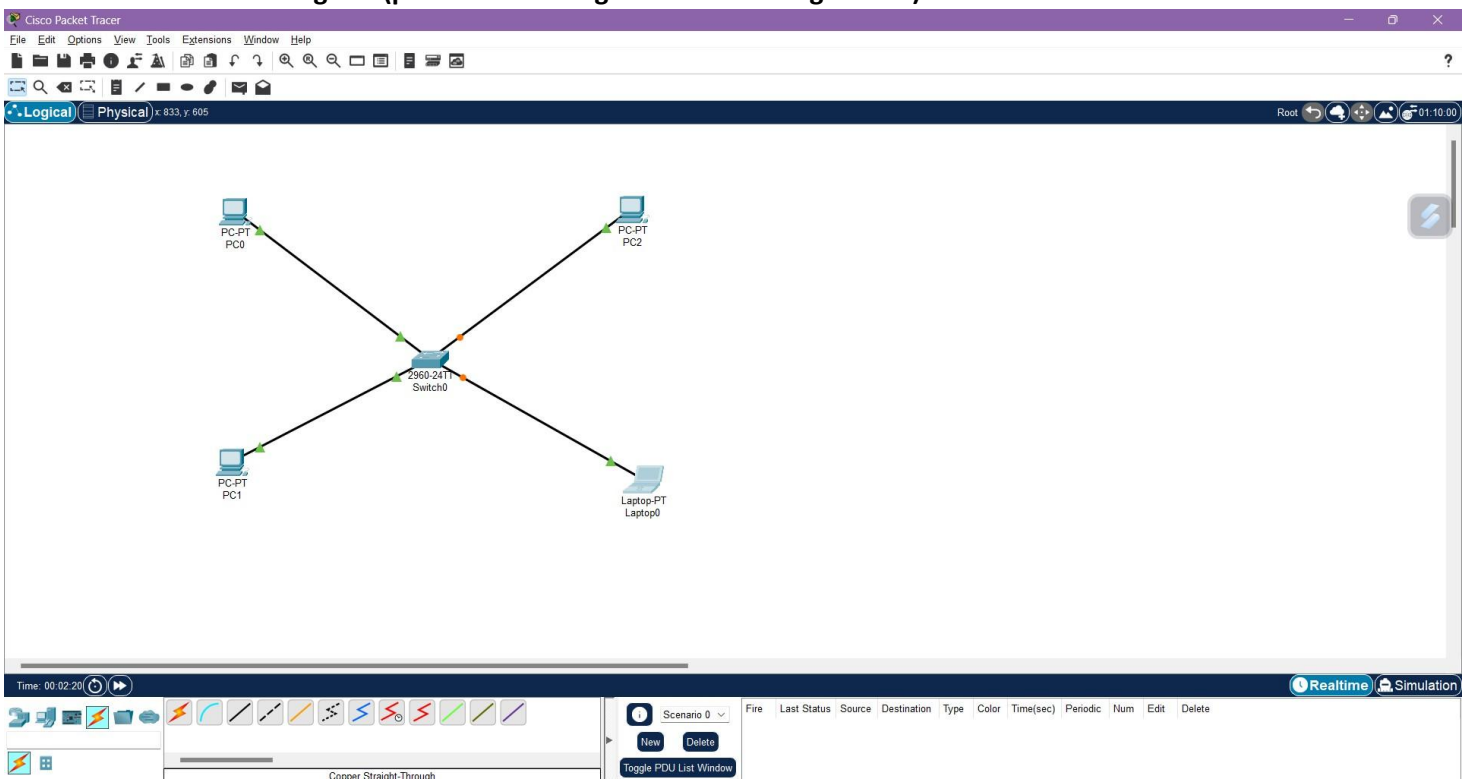
b). Design a Simple LAN Network

1. **Device Requirements:**

    1. Switch
    2. PC0
    3. PC1
    4. PC2
    5. Laptop0
    6. wire

2. **Network Diagram for your experiment (draw the diagram either hand drawing/ms paint or any other drawing tools)**

3. **Network Diagram (packet tracer diagram before configuration):**



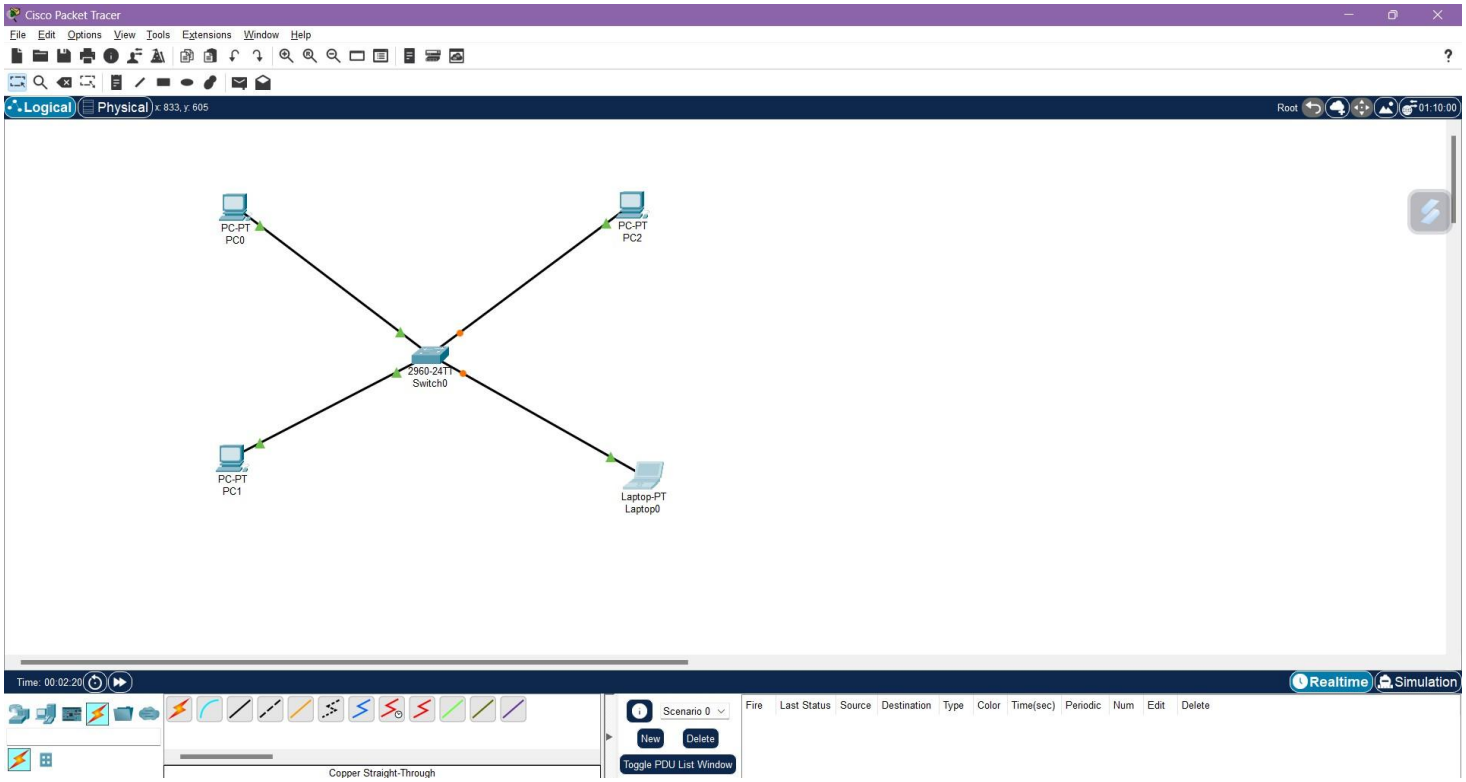
4. **Configuration details:**

Device Name	Interface Name	IP Address	Subnet mask
PC0	Fa0	172.16.108.1	255.255.0.0
PC1	Fa0	172.16.108.2	255.255.0.0
PC2	Fa0	172.16.108.3	255.255.0.0
Laptop0	Fa0	172.16.108.4	255.255.0.0
Switch			

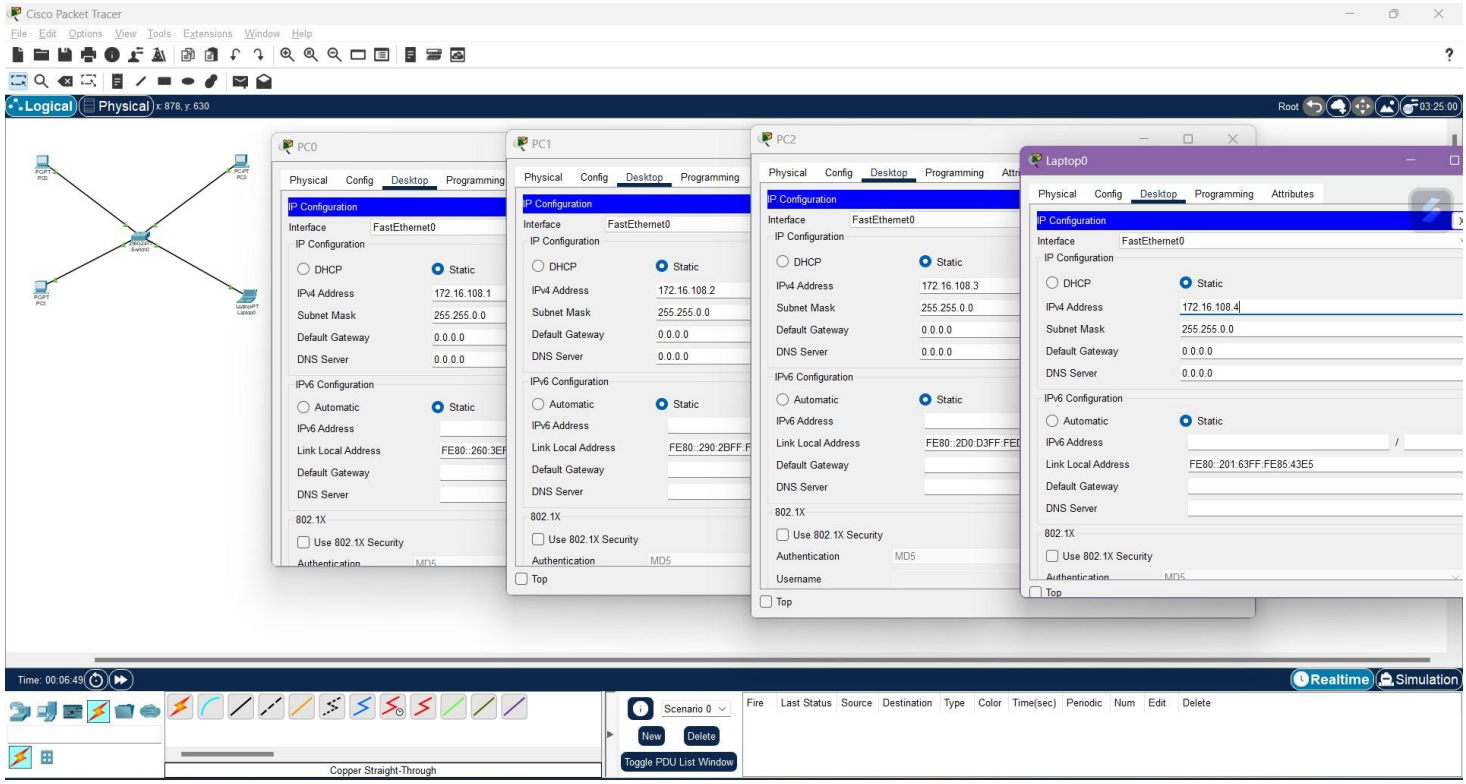
5. **Commands used in each of the diagram (if any):**

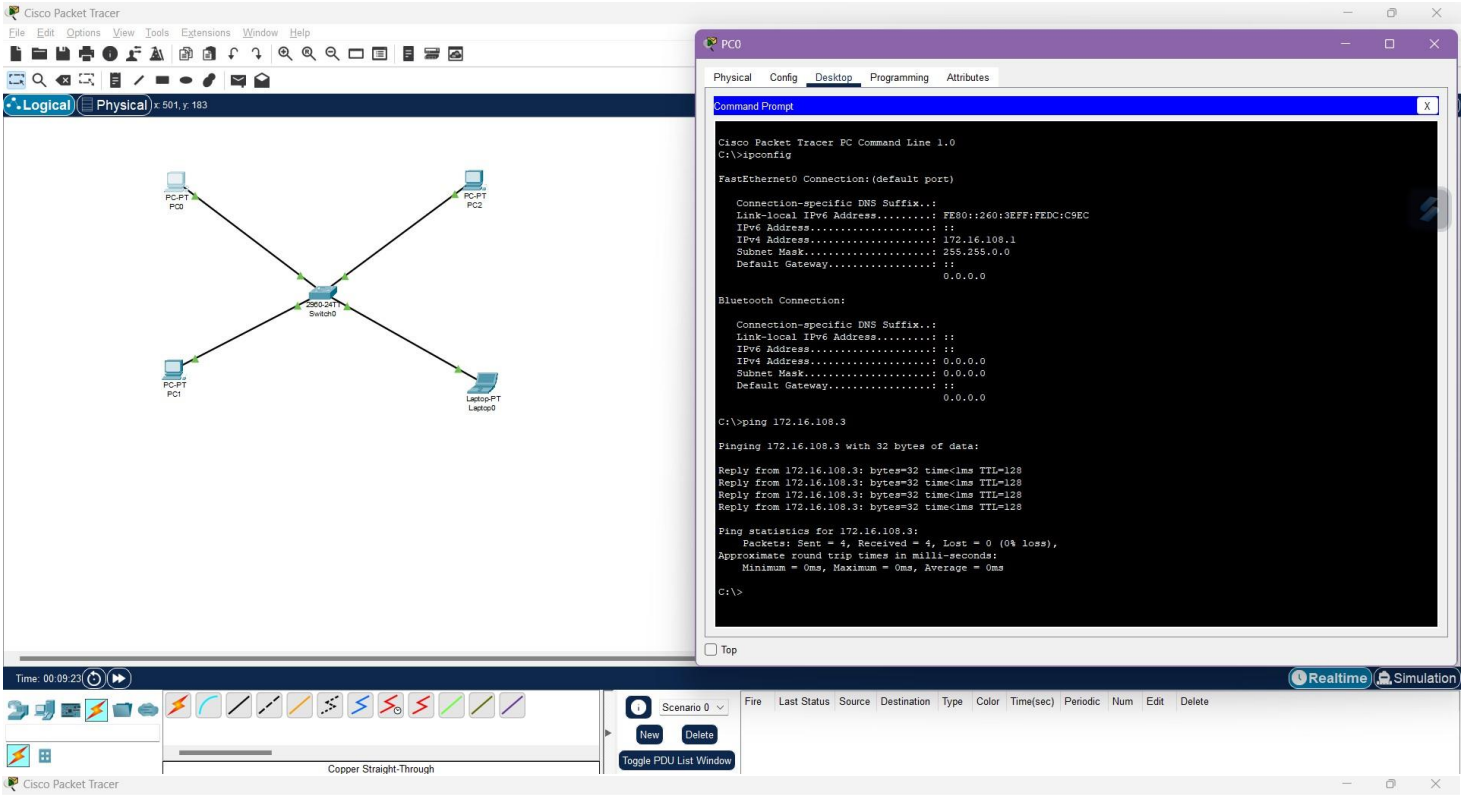
3. Ipconfig
4. Ping

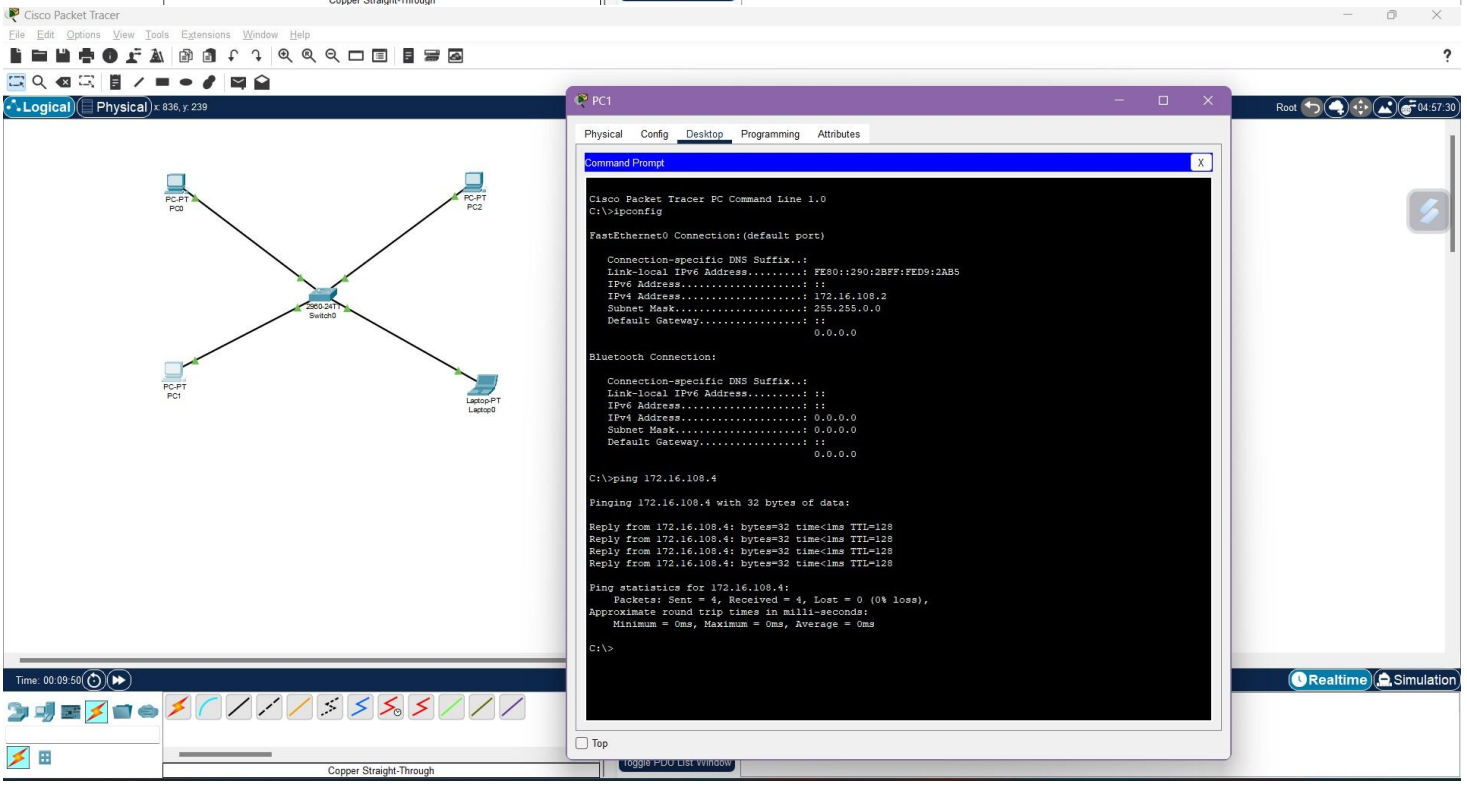
6. Output Diagram (Minimum 3 screenshot):



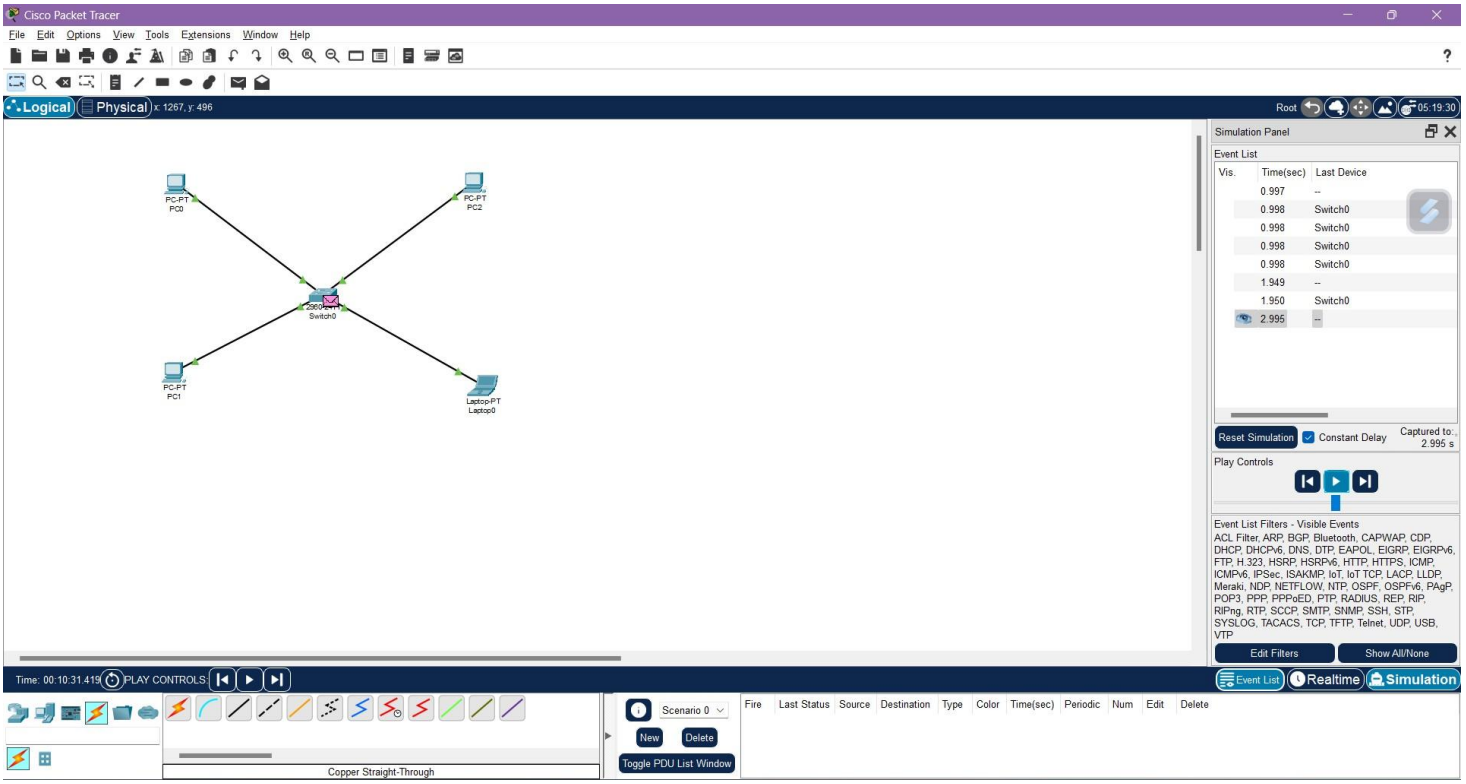
Network Diagram







Assigning IP Address



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CONCLUSION:

Designing a simple LAN network provides a foundational understanding of networking principles and technologies. It lays the groundwork for more complex network architectures and is essential for creating efficient, secure, and scalable computing environments tailored to specific needs.

Rubrics for Experiment Assessment:

Rubrics	Good	Normal	Poor	Marks
Creation of Topology (4)	Created the topology, Identify the proper devices and making the connections **(4)**	Created the topology, Identify the proper devices, making the connections But missing some features **(3)**	Created wrong topology, Failed to Identify the proper devices and making connections **(1)**	
Verify the connectivity (4)	Verified the connectivity in all the levels **(4)**	Verified the connectivity at some levels (only some nodes) **(2)**	Verified the connectivity is not done. **(1)**	
Timely Completion (2)	Completed the lab before the allotted time **(2)**	Completed the lab after the deadline **(1)**	Did not submitted before grading **(0)**	
Total				

Result: Thus the Design a Simple LAN Network has been done successfully.