

# IMPLEMENTATION OF TREE TOPOLOGY USING PACKET TRACER

EXPERIMENT-6

## AIM:-

To implement a tree topology using packet tracer and hence to transmit data between the devices connected using tree topology.

## PROCEDURE:-

Step 1: Start Packet Tracer

Step 2: Choosing Devices and Connections

Step 3: Building the Topology - Adding Hosts

Step 4: Building the <sup>star</sup> Topology - Connecting Hosts to Switches

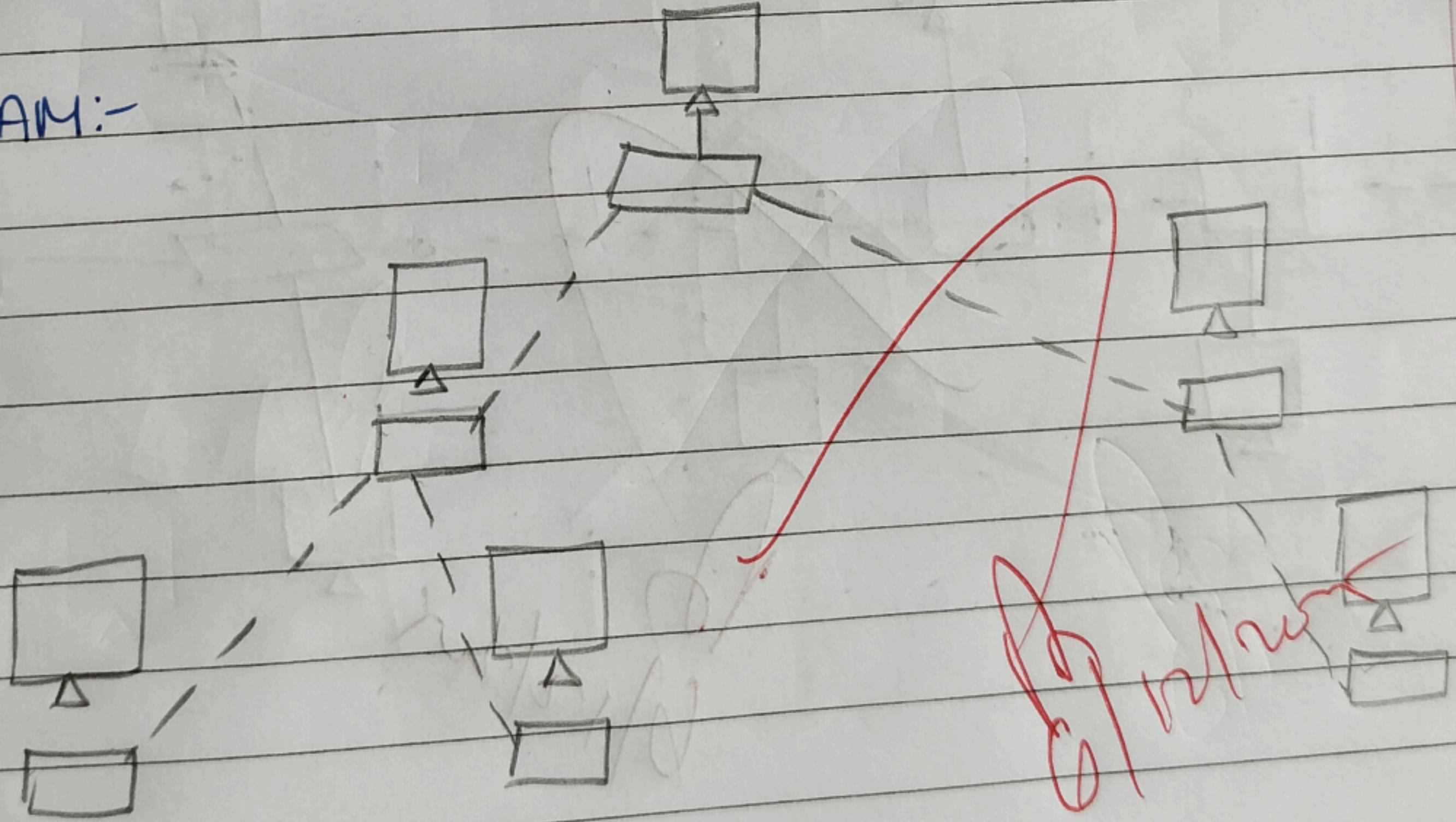
Step 5: Connect PCs to Hub by choosing connection

Step 6: Building the Tree topology - Connecting Hubs to Active hubs

Step 7: Configure IP Address and Subnet Masks

Step 8: Verify connectivity in real-time & Simulation mode

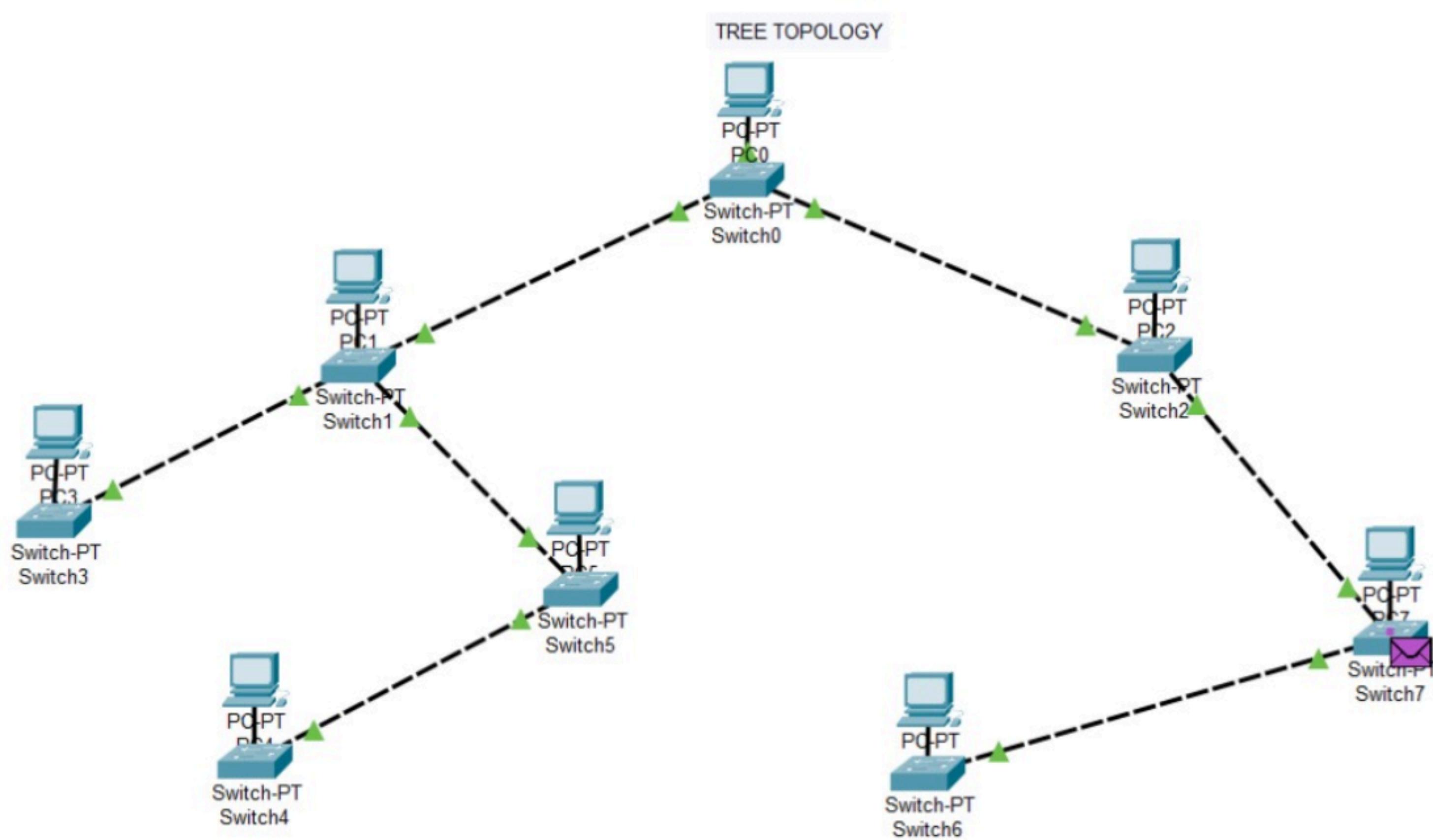
## DIAGRAM:-



## RESULT:-

Thus the tree topology is implemented with Packet Tracer

Simulation Tool



# IMPLEMENTATION OF HYBRID TOPOLOGY USING PACKET TRACER

## EXPERIMENT-7

### AIM:-

To implement Hybrid Topology using packet tracer and hence to transmit data

### PROCEDURE:-

Step 1: Start Packet Tracer

Step 2: Choose Devices and Connection

Step 3: Build the topology - Both Bus Topology and Ring Topology

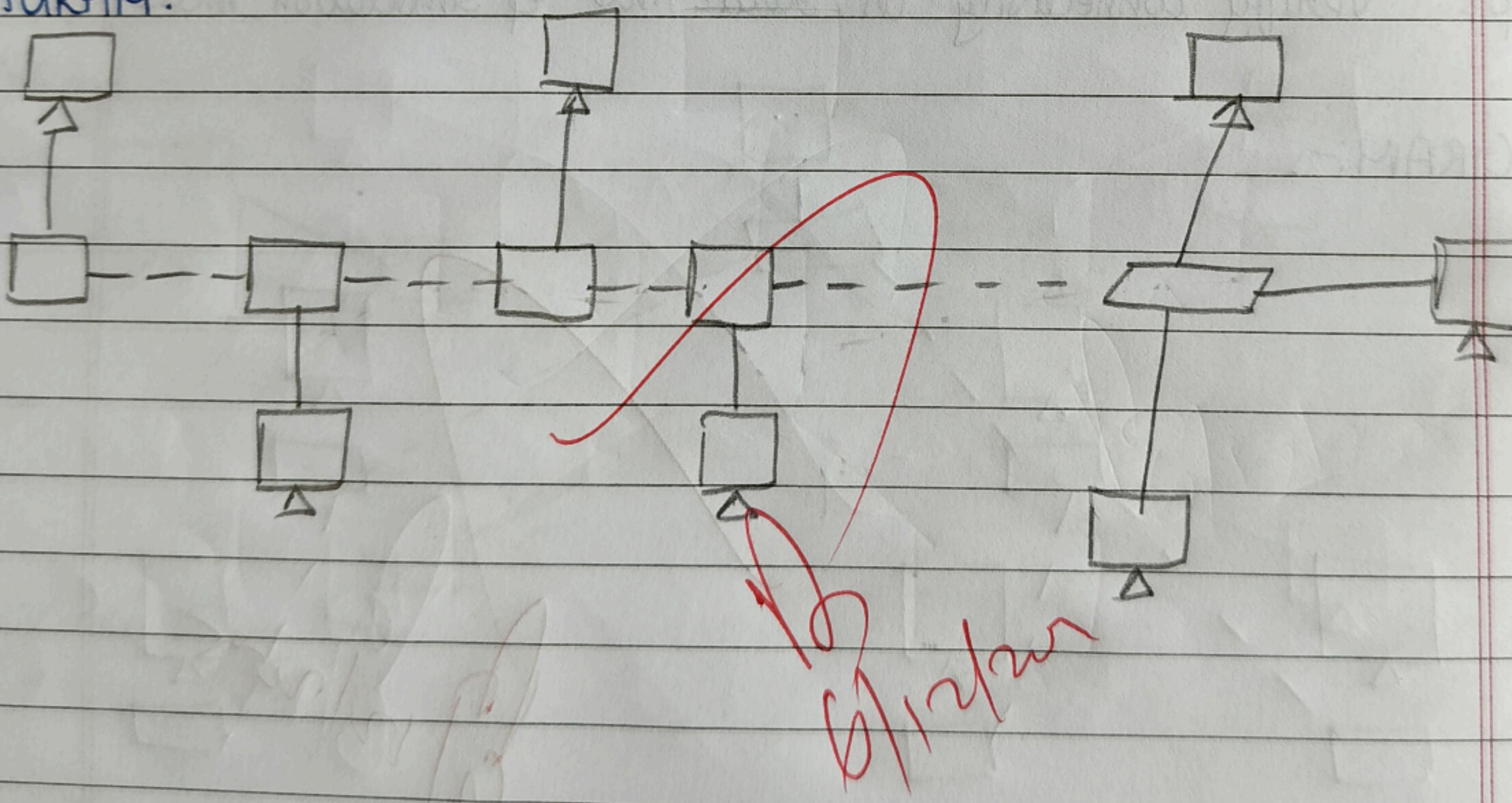
Step 4: Connect PCs to Hub by choosing connection

Step 5: Build Tree Topology - Connect Hubs to Active Hub

Step 6: Configuring IP Addresses and Subnet Masks on Host

Step 7: Verify connectivity in real-time & Simulation time mode.

### DIAGRAM:-



### RESULT:-

Thus the hybrid topology is implemented with Packet Tracer Simulation Tool

## DATA LINK

### AIM:-

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Using

### PROCEDURE

Step

Step

Step

Step

Step

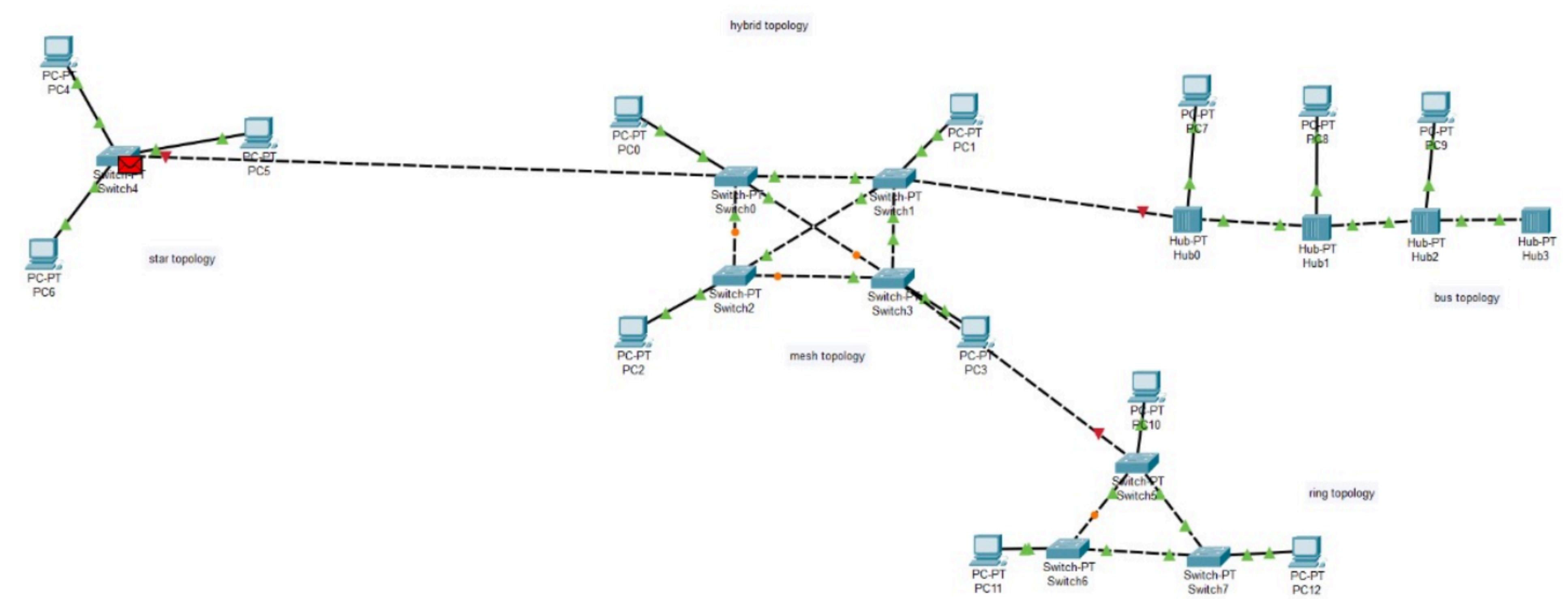
Step

Step

### DIAGRAM

## RESULT

Thus  
Analy



EXPERIMENT-8

DATA LINK LAYER TRAFFIC SIMULATION USING  
PACKET TRACER ANALYSIS OF ARP

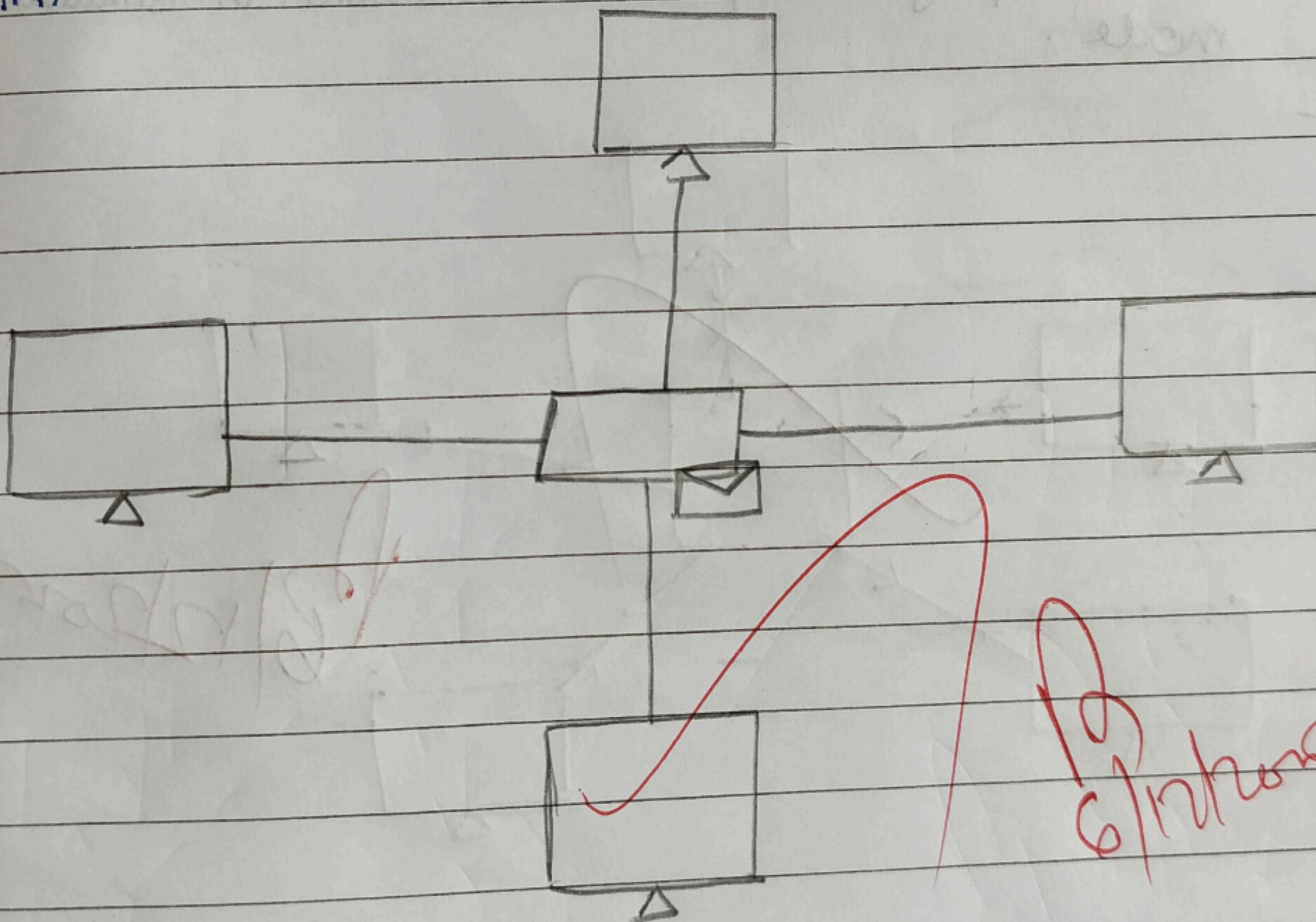
AIM:-

To implement Data Link layer Traffic Simulation  
Using Packet Tracer Analysis of ARP

PROCEDURE:-

- Step 1 : Open Packet Tracer
- Step 2 : Click on the list available capture interface
- Step 3: Choos the PCs, server and Hub
- Step 4: Later give connection from hub to remaining PCs
- Step 5: Give IP address to the PCs
- Step 6: Simulate the Source and Destination

DIAGRAM:-



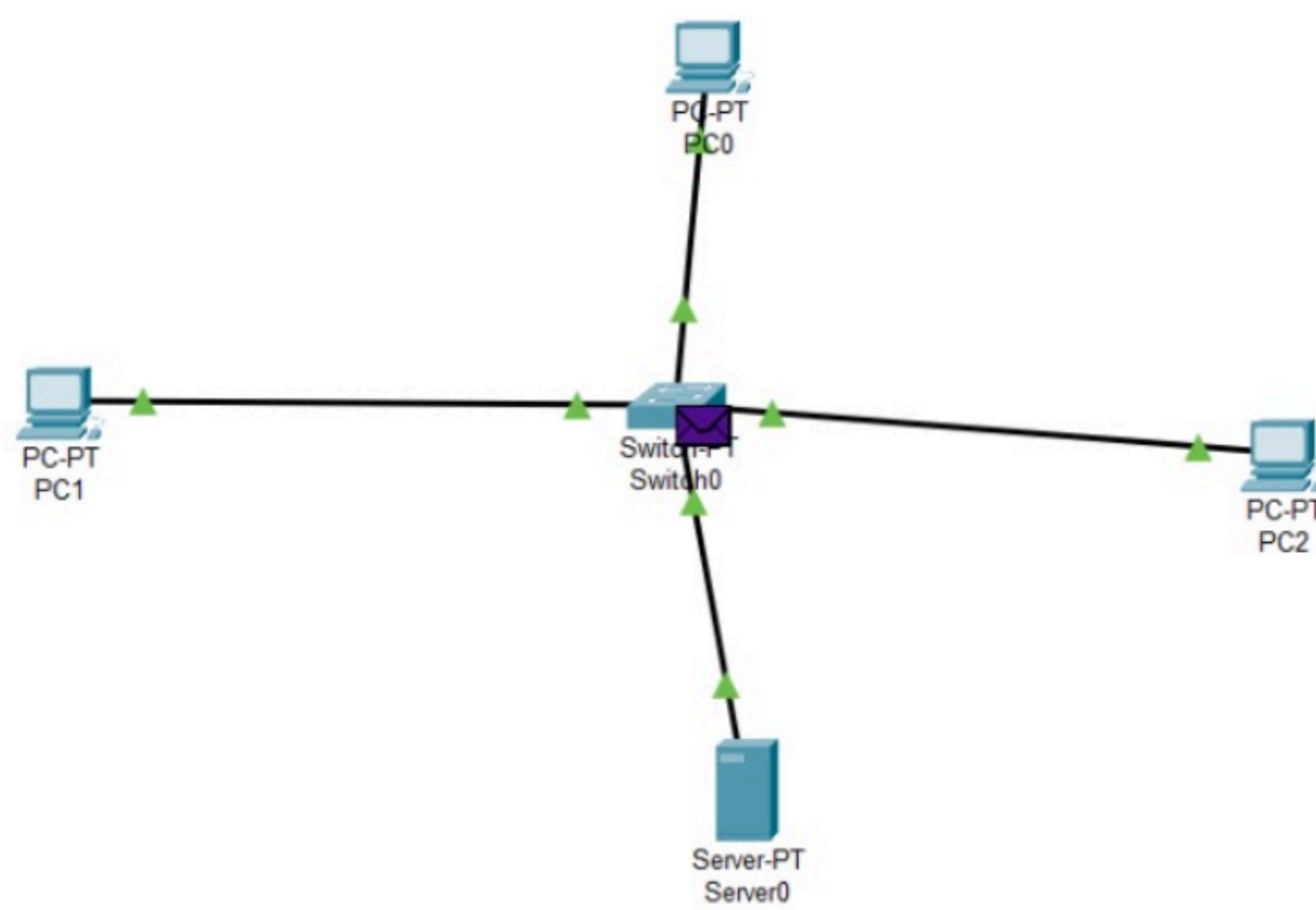
RESULT:-

Thus the Data Link layer Traffic Simulation using Packet Tracer  
Analysis of ARP is implemented

ARP Table for Server0

IP Address	Hardware Address	Interface
192.16...	0060.2F...	FastEth...
192.16...	00E0.8F...	FastEth...
	4264	

ARP USING CISCO  
PACKET TRACER



ARP Table for PC2

IP Address	Hardware Address	Interface
192.16...	000C.85E2.3961	FastEth...

# EXPERIMENT - 9

## DATA LINK LAYER TRAFFIC SIMULATION USING PACKET TRACER ANALYSIS OF CSMA/CD & CSMA/CA

MAKING

AIM:-

To implement Data Link Layer Traffic Simulation using packet tracer Analysis of CSMA/CD & CSMA/CA

AIM:-  
Making

PROCEDURE:-

Step 1: Click on Generic PCs, drag and drop on window

Step 2: Drag and Drop Switch and connect all through Cable

Step 3: Assign IP address for all end devices

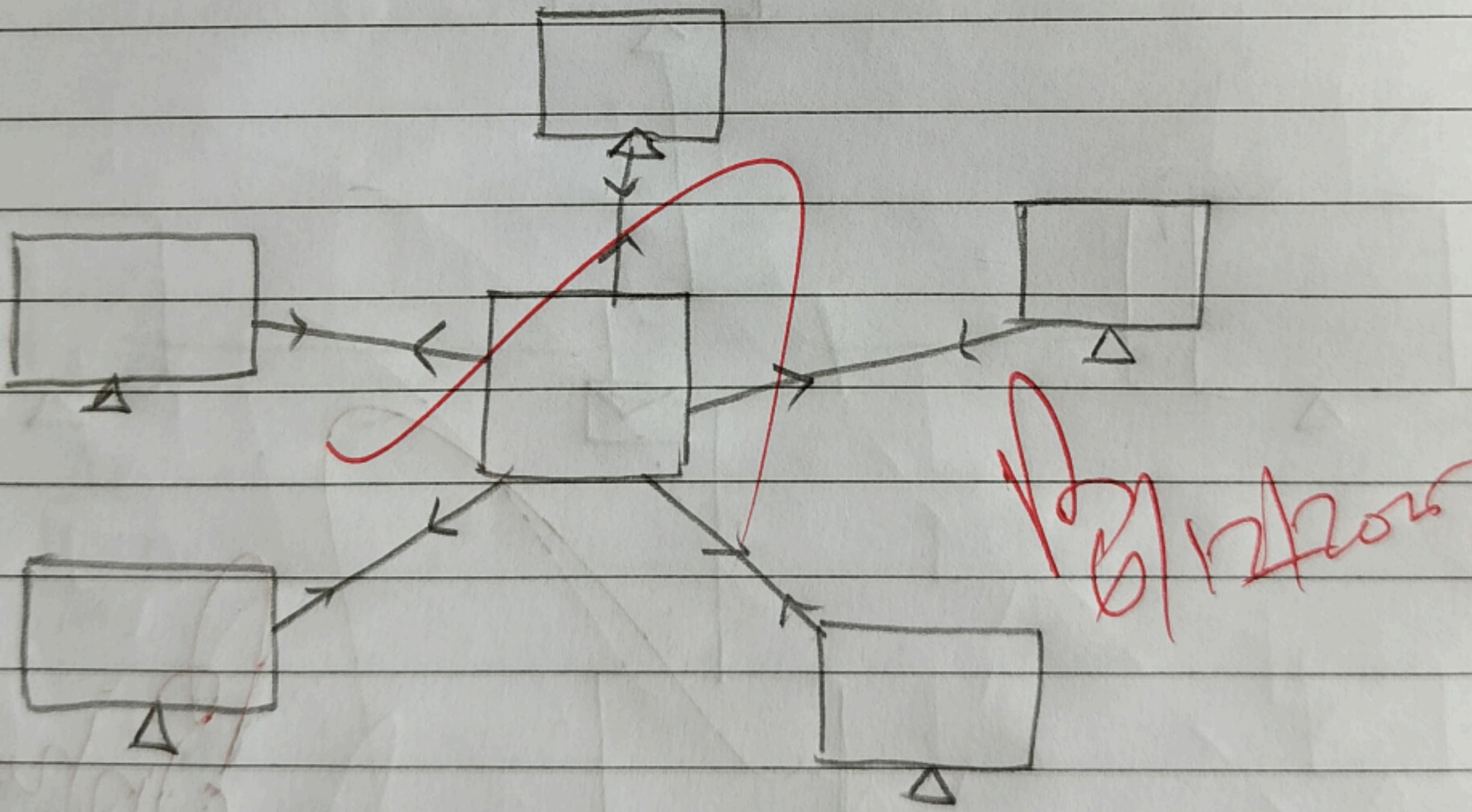
Step 4: To view the IP Address, give IP configuration

Command in Cmd , using ping command , we can establish communication between two hosts

Step 5: Now display the packet transmission in simulation mode .

DIAGR

DIAGRAM:-



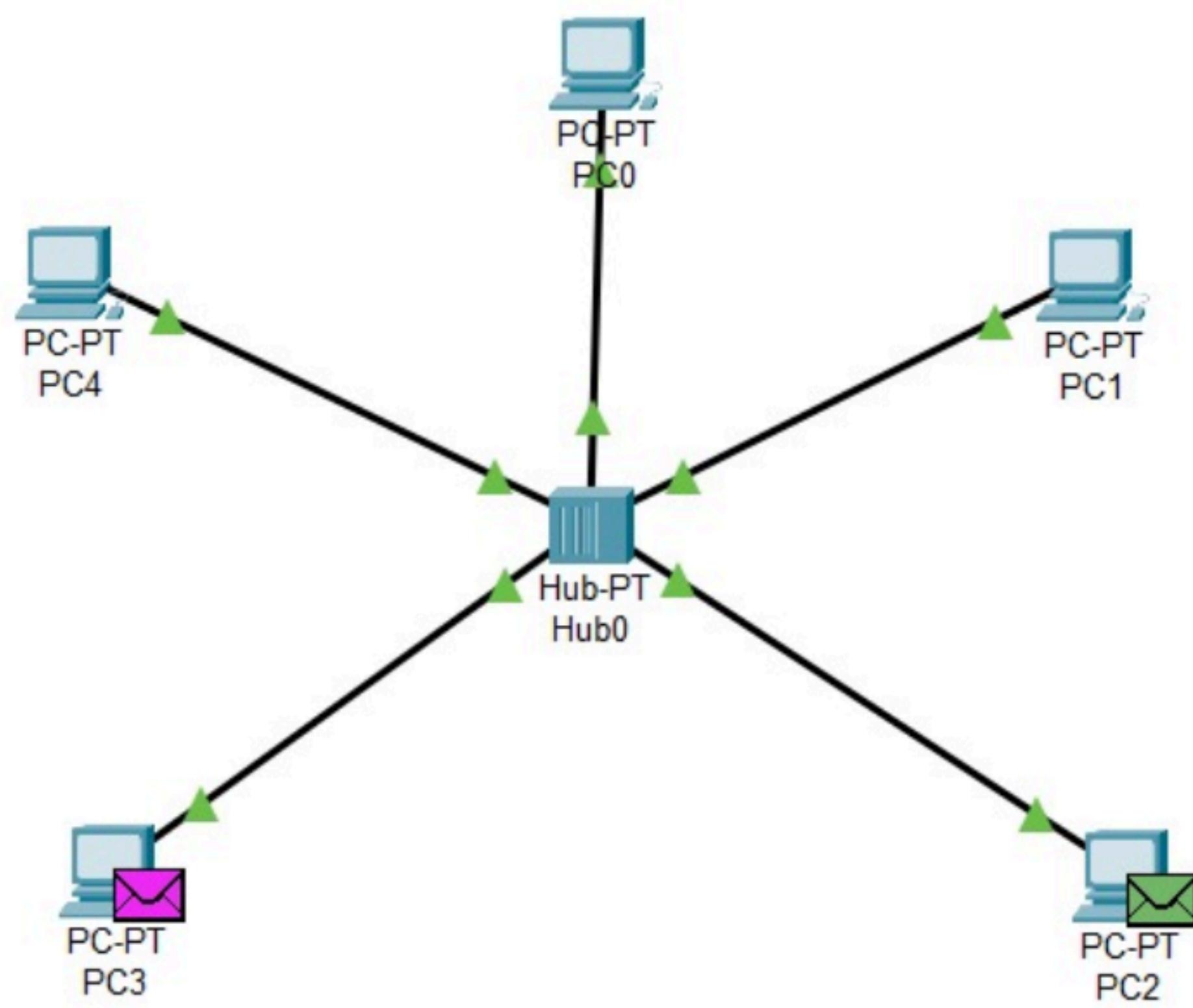
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The  
set

RESULT:-

Thus Data Link Layer Traffic Simulation using Packet Tracer Analysis of CSMA/CD & CSMA/CA successfully done.

DATA LINK TRAFFIC SIMULATION USING CSMA



# EXPERIMENT-10

## MAKING COMPUTER LAB IN CISCO PACKET TRACER

### AIM:-

Making Computer Lab in Cisco Packet Tracer.

### PROCEDURE:-

Step 1: Setup Devices and choose the connection.

(Devices → PCs and Switch + Server)

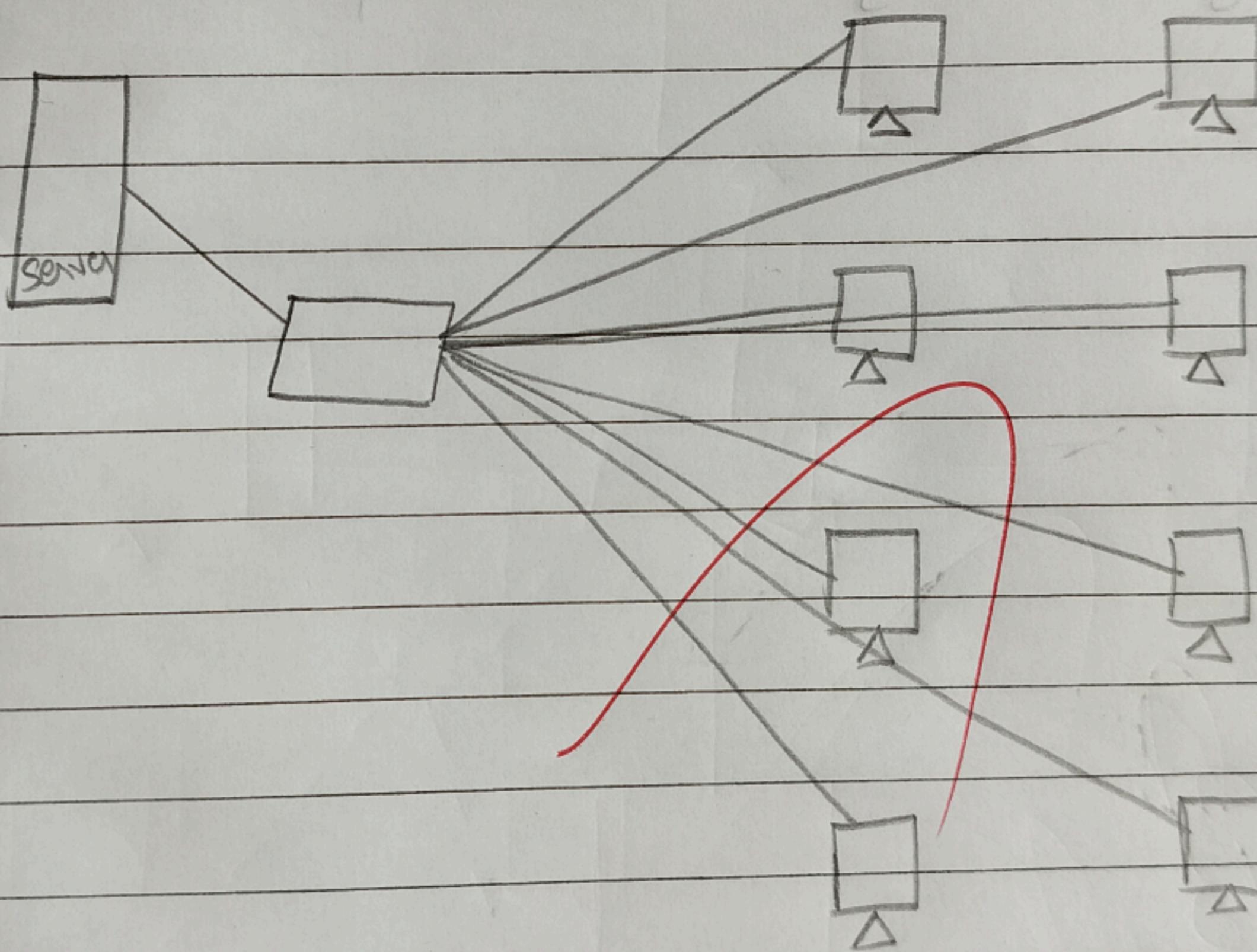
Step 2: Connect via Fast Ethernet using serial cable

Step 3: Configure IPs on End Devices.

Step 4: Configure Router Interfaces → Use routers  
CLI tab to enter interface configuration

Step 5: Test and Expand → Verify the network  
connectivity using ping command.

### DIAGRAM:-



### RESULT:-

Thus the Computer Lab in Cisco Packet Tracer is set up successfully.

