**EXPERIMENT-9**

**DATA LINK LAYER TRAFFIC SIMULATION USING PACKET TRACER**

**ANALYSIS OF CSMA/CD & CSMA/CA**

**Aim**: To implement Data Link Layer Traffic Simulation using Packet Tracer Analysis of CSMA/CD & CSMA/CA.

**Software / Apparatus required:** Packet Tracer / End devices, Switches, connectors. **Requirements:**

1. End device - They are the devices through which we can pass message from one device to another and they are interconnected.

2 Switch/Hub - Interface Between two devices.

3. Cable - Used to connect two devices **Procedure:**

STEP 1: Click on end devices, select generic Pc’s drag and drop it on the window. Click on SWITCH drag and drop it on the window.

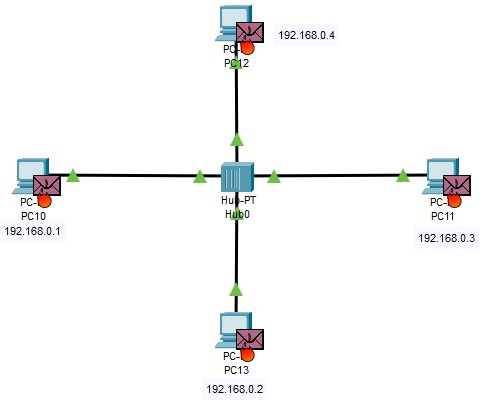
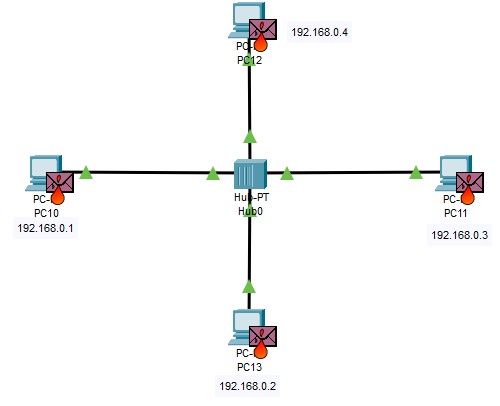
STEP 2: Select the straight through cable and connect all end device to switch. Assign the IP address for all end devices. (Double click the end device Select → desktop → IP configuration static)

STEP 3: Now set the IP address to Host A (192.168.1.1) in static mode. Similarly set IP address for Host B (192.168.1.2) and Host C (192.168.1.3)

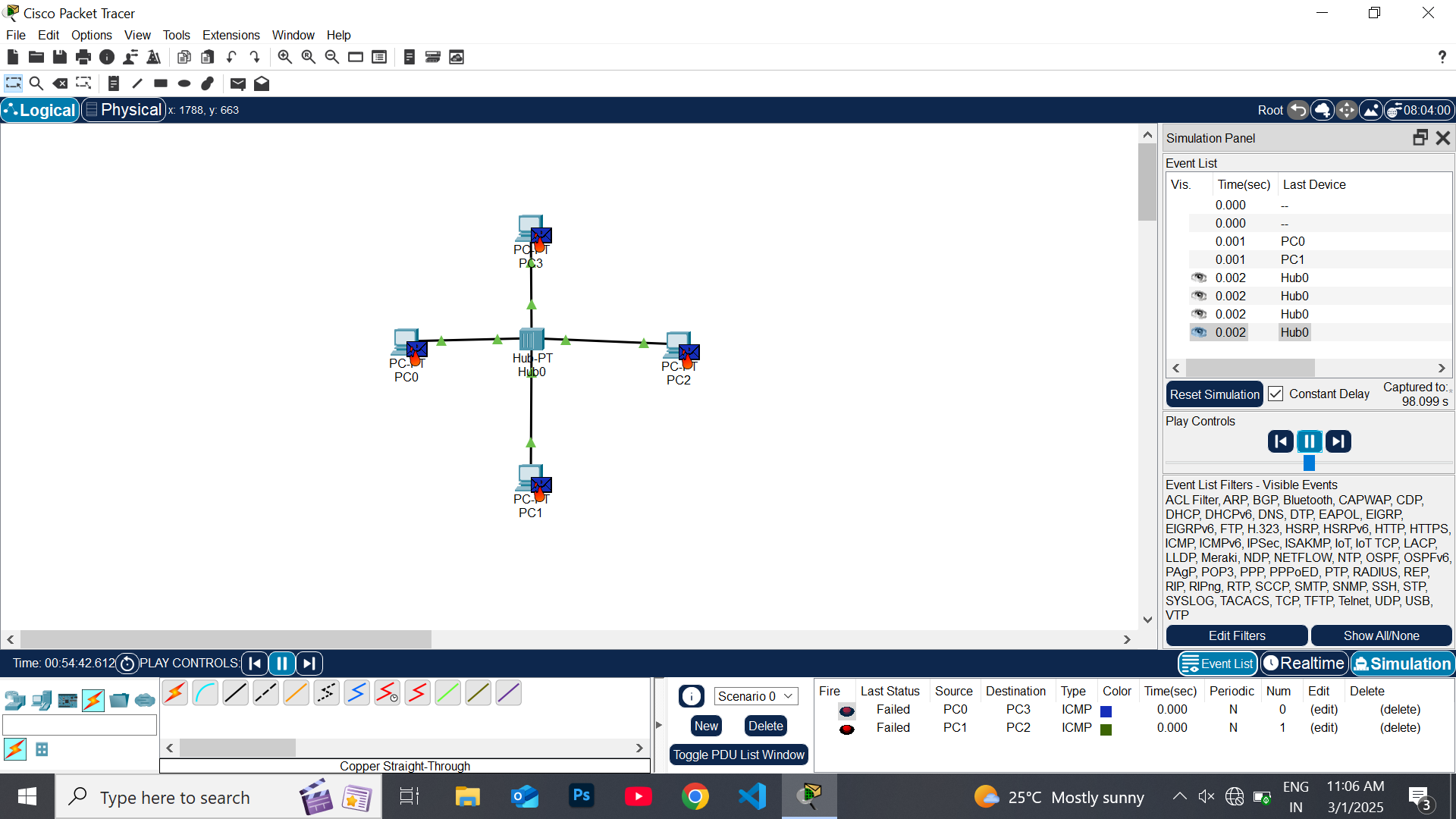
STEP 4: To view the IP address, give ip config command in command prompt. Using ping command, we can establish communication between two host devices.

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

Diagram:



Output:



**Result:** Thus Data Link Layer Traffic Simulation using Packet Tracer Analysis of CSMA/CD & CSMA/CA is implemented successfully.