19/02/25

EXPERIMENT-8
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 3. Switch/Hub - Interface Between two devices
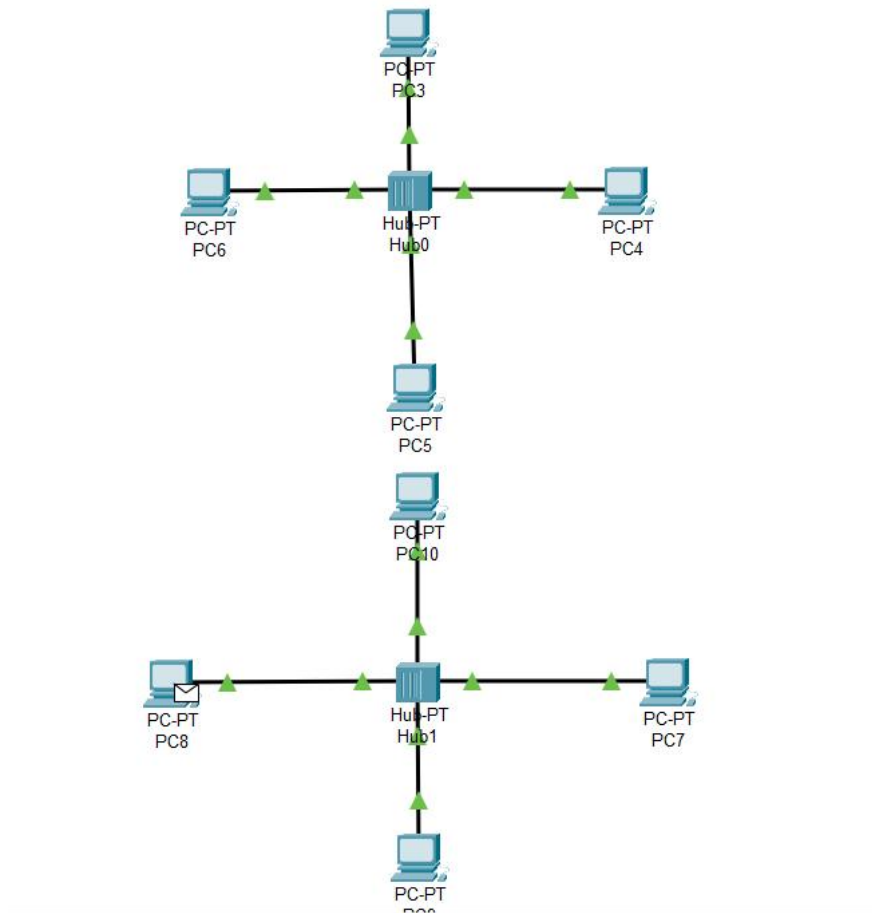. Cable - Used to connect two devices

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.