EX NO: 03 CISCO PACKET TRACER

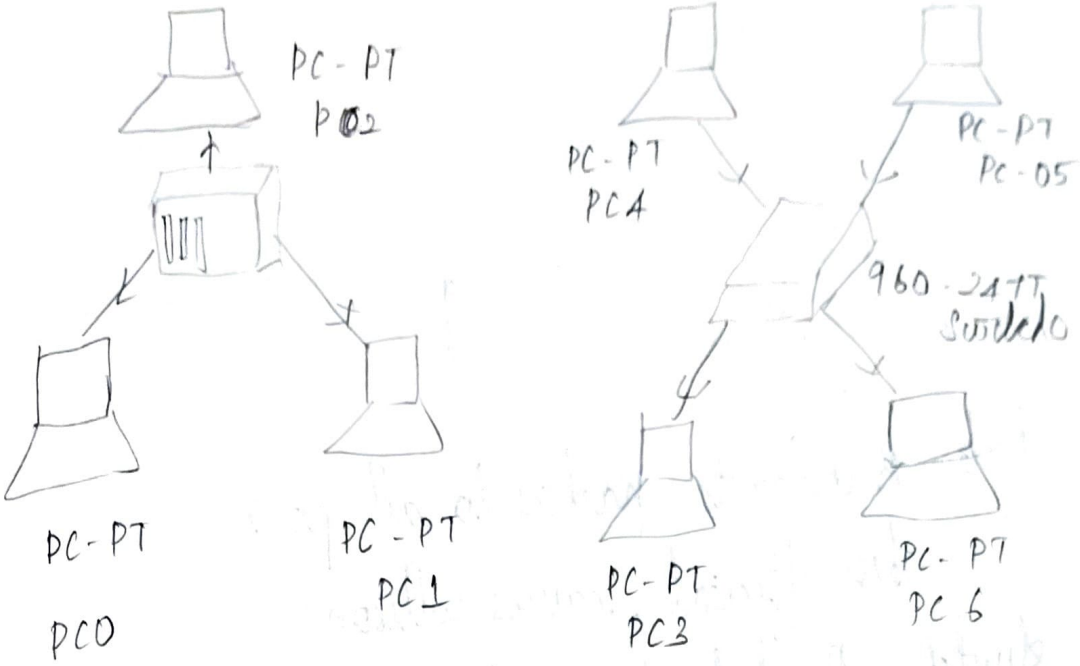
DATE: 30.7.23.

AIM.

→ To study the Packet tracer tool Installation & User Interface Overview

Analyse the behaviour of network devices using CISCO PACKET TRACER simulator

1. From the network component box, click & drag-and-drop the below components
   a. 4 Generic PCs and One HUB
   b. 4 Generic PCs and One Switch
2. Click on Connections
   a. Click on copper Straight-Through cable
   b. Select one of the PC & connect it to HUB using the cable. The link LED should glow in green, indicating that the link is up. Similarly connect remaining 3 PCs to the HUB
   c. Similarly connect 4 PCs to switch using copper straight-through cable



3. Click on the PC connected to hub, go to Desktop tab, click on IP config & enter an IP address & subnet mask,

Click on PDU from common tool bar

a. Drag and Drop it on one of PC (source machine) & drop it on another PC (Destination machine) connected to HUB

4. Observe the flow of PDU from source PC to distination PC by selecting Realtime mode of simulation

5. Repeat step #3 to step #5 for the PCs connected to the switch

6. Observe how HUB & switch are forwarding the PDU & write your observation about Switch & HUB

Student Observation:

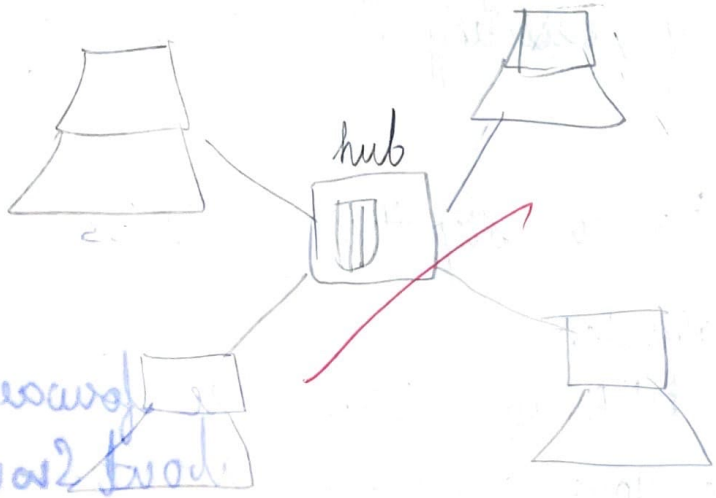
a. Write down the behaviour of switch and HUB in terms of forwarding the packets received by them

hub: Broadcasts packets to all ports
less efficient: causes collisions

Switch: Packets to specific ports based on mac address
more efficient: reduces collisions

b) find out the network topology implemented in your college

Star → All cables run to hub
If one cable fails, only that computer is unable to use the network



Result:

Thus the CISCO Packet Tracer is studied and ~~executed~~ verified

30/7/24