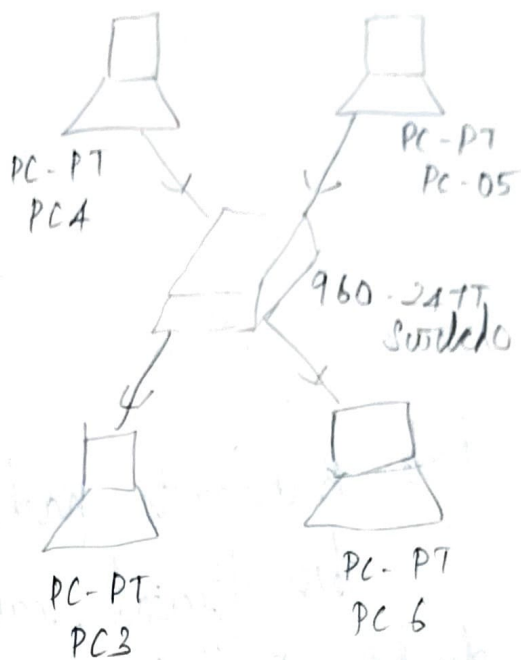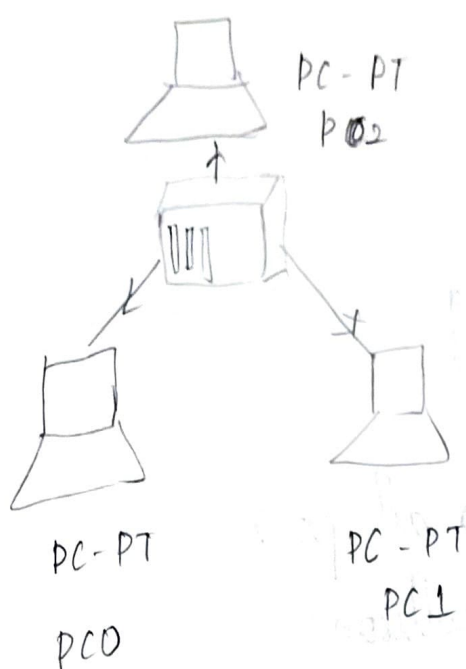EX NO: 03

DATE: 30·4·23.

CISCO PACKET TRACER

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 Steaight-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 4PCs to switch using copper steaight - through cable

PC - PT
P 02

PC - PT
PCA

PC - PT
PC - 05

960 - 24 TT
Switch0

PC - PT
PC0

PC - PT
PC1

PC - PT
PC3

PC - PT
PC 6

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 destination 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
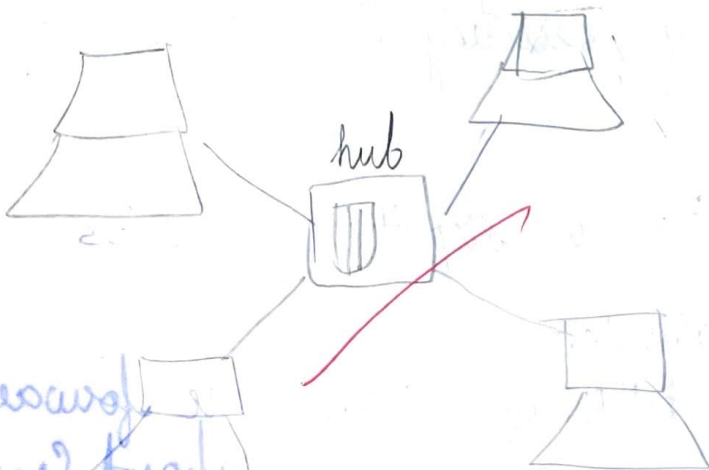
   hub: Broadcasts packets to all ports
        Less efficient: causes collisions

   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

hub

forwarding
Switch
HUB

Result:

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

30/7/24