Ex:NO:3 CISCO PACKET TRACER

Date : 30.7.23

Aim: To study the packet tracer tool installation and user interface overview

Analyse the behaviour of network device using Cisco packet Tracer simulator

1) From the network component box, click and drag and drop the below components

a) 4 Generic PCs & one Hub

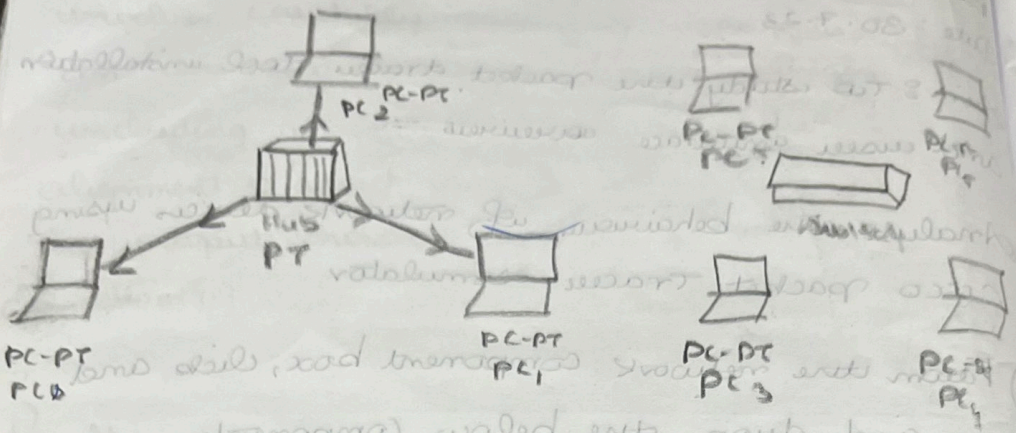
b) 4 Generic PCs and one switch

2) Click on Connection:

a) click on copper Straight - through cable,

b) select one of the PC and connect it to HUB using the Cable the link LED should glow in green indicating that 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 IP PC's connected to hub, go to the desktop tab click on IP configuration & enter an IP address & subnet mask.

Click on the PDU from ~~message~~ common tool bar

a) Drag & drop it on one of PC & then drop it on another PC connected to HUB.

4) Observe the flow of PDU from source PC to destination PC by selecting the realtime mode of simulation

5) repeat step # 3-6 ~~step #5~~ for PC's connected to switch

6) Observe how HUB & switch are forwarding the PDU & write your observation & conclusion about the behaviour of switch & hub

Student observation:

a) Write down the behaviour of switches and hubs in terms of forwarding the packets received by them.

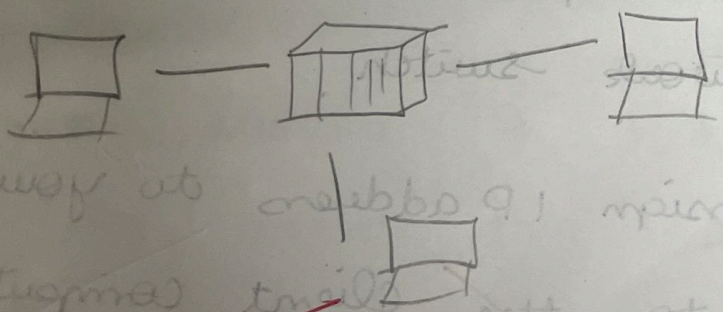
hub: broadcast packets to all ports
less sufficient: causes collisions

switch: packet to specific ports based on mac address
more efficient: reduces collisions

b) find out the network topology implemented in your college & draw & label that topology in observation book

star ~~Mesh~~ topology:

All cables run to central connection point.
If one cable breaks or fails only computer connected to cable is unable to use network.



Result:

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The program is executed successfully.

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