30/07/24   PRACTICAL-3

AIM:

To study the Packet Tracer tool Installation & user interface. Overview.

a) Analyse the behaviour of network device using CISCO PACKET TRACER simulator

1. From the network component box, click & drag the below component:
   a: 4 Generic PC's & One HUB
   b: 4 Generic PC's & 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 PC's to the HUB.
   c. Similarly connect 4 PC's to the switch using straight copper-through cable.

3. Click on the PC's connected to hub, go to the desktop tab, click on IP configuration, & enter an IP address and submit mask. here the default gateway & DNS Server information is not needed as there are only two end devices in the network.
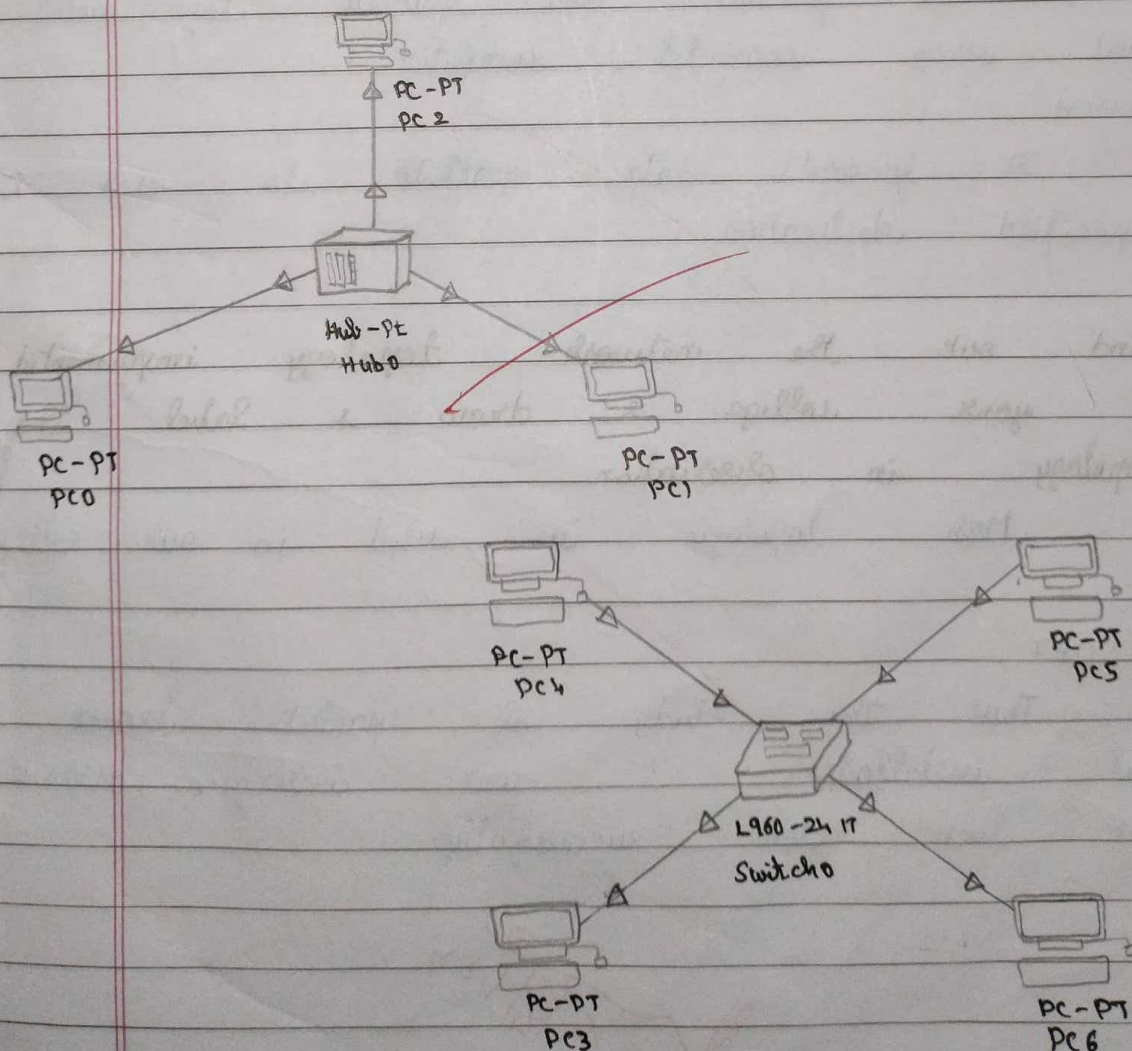
Click on the PDU from the common tool Box.

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

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

5) Repeat step 3 to step 5 for the PC's connected to the switch.

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

PC-PT
PC 2

Hub-Pt
Hub 0

PC-PT
PC0

PC-PT
PC1

PC-PT
PC4

PC-PT
PC5

L960-24 IT
Switch0

PC-PT
PC3

PC-PT
PC 6

PC0	PC1
IP configuration	IP configuration
IP configuration	IP configuration
○ DHCP ⊙ Static	○ DHCP ⊙ Static
IP address ☐	IP address 10.1.1.2
Subnet Mask ☐	Subnet Mask 255.00.0
Default Gateway ☐	Default Gateway ☐
DNS server ☐	DNS Server. ☐

a. From your observation write down the behaviour of switch & HUB in terms of following the packets received by them.

HUB:

The HUB forwards data packets to each and every connected computer.

SWITCH:

It forwards data packet to each and specified destination.

b. Find out the network topology implemented in your college & draw & label the topology in observation.

Mesh topology is used in our college

RESULT:

Thus the study of packet tracer tool installation & user interface overview has been done successfully.