31/7/25 Ex-3 Experiments on Cisco packet tracer

AIM: To study the packet tracer tool installation and user interface

Steps

1) From the network component box click and drag and drop the below components
   1) 4 Generic pcs and one HUB
   2) 4 Generic pcs and one switch

2) Click on Connections
   1) Click on copper straight-through cable
   2) Select one of the pc and connect it to HUB using the cable the link LED should glow in green.

3) Similarly connect 4pcs to the switch using copper straight through cable

3) Click on the pc's connected to HUB, go to the desktop tab, click on IP Configuration and enter the IP address and subnet mask here the default gateway and DNS server information is not needed

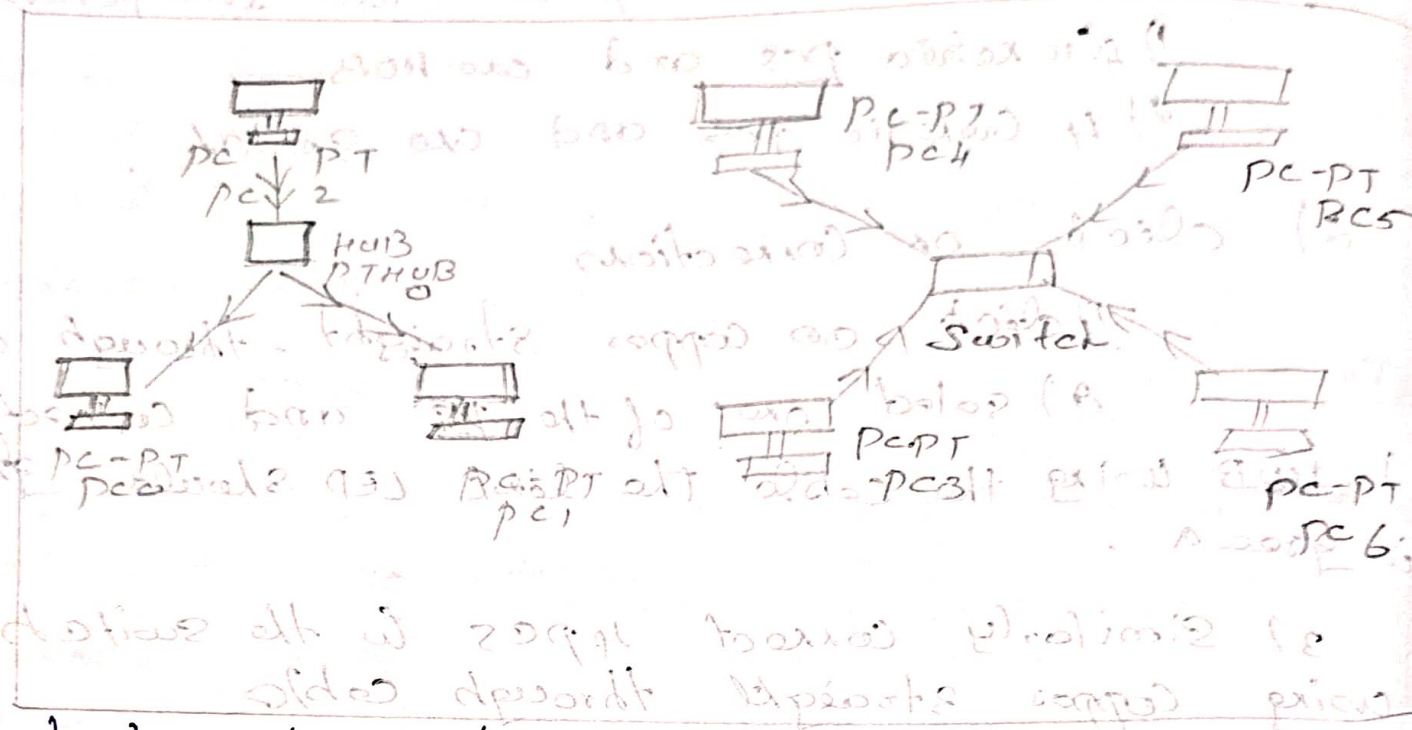
4) drag and drop the PDU on one of the pc and the drop it on another pc connected to the Hub

4) observe the flow of PDU from source pc to destination pc by selecting the realtime mode of simulation

(v) Repeat step 3 to steps for the pc's connected to the Switch.

(vi) Observe the HUB and Switch and forwarding the PDV and write your observation.

Output:



Student observation

① Behaviour of Switch and HUB in terms of forwarding packets received by them

Switch

(i) works at Layer 2 (Data link layer)

(ii) Reduces collisions by creating separate domains and provides better performance

Hub

(i) works Layer 1 (physical layer) of the OSI model

(ii) Causes more collision and less efficient network.

(b) Network topology used in our college.

Star Topology : All pcs are connected to a central switch. It is easy to manage troubleshoot and expand.

Result

The CISCO packet tracer tool installation and UI overview have been studied successfully.//