

31/7/24

Practical-3

CISCO PACKET TRACER

Aim:-

To understand and study the Packet tracer tool installation and user interface.

d) Analyse the behaviour of network devices using Cisco Packet Tracer simulator

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

a. 4 Generic PCs and One HUB

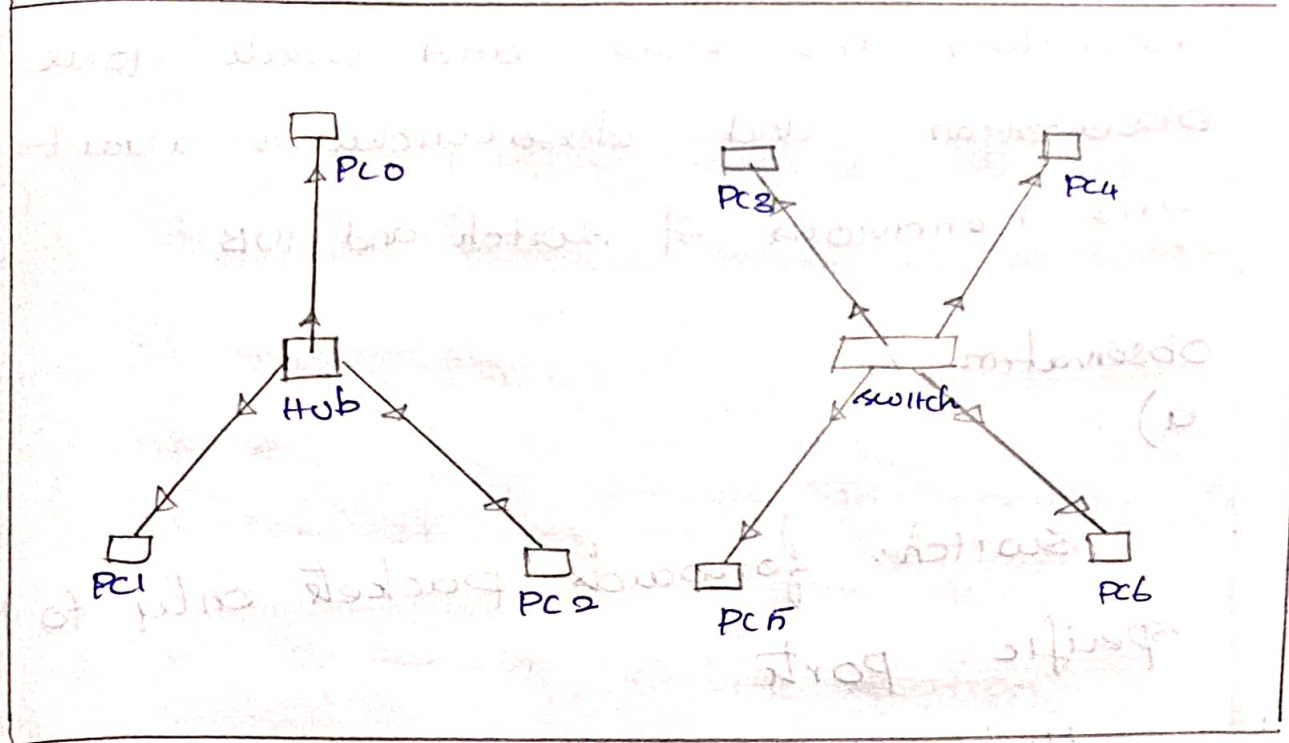
b. 4 Generic PCs and One switch

2. Click on Connections:

a. Click on Copper straight-through cable

b. Select one of the PC and connect it to HUB using the cable. The Link LED should glow

c. Similarly connect 4 PC to the switch using copper straight-through cable



3. Click on the PCs connected to hub,

click on IP Configuration and enter IP, the default gateway and DNS Server information is not needed as there are only two end devices.

IP Configuration	
ODHCP	Static
IP Address	<input type="text" value="10.1.1.1"/>
Subnet Mask	<input type="text" value="255.0.0.0"/>
Default gateway	<input type="text"/>
DNS server	<input type="text"/>

IP Configuration	
DHCP	Static
IP Address	<input type="text" value="10.1.1.2"/>
Subnet Mask	<input type="text" value="255.0.0.0"/>
Default gateway	<input type="text"/>
DNS server	<input type="text"/>

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

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

6. Observe how the HUB and switch can

forwarding the PDU and write your observation and draw conclusion about the behaviour of switch and HUB

observation

a):

Switch: forwards packets only to the specific ports

Hub: Broadcasts packets to all the connected devices

b)

Mesh topology

In a mesh topology each device is connected to every other device in the network providing high redundancy and reliability.

Result:-

The equipment was successfully executed and o/p is verified.