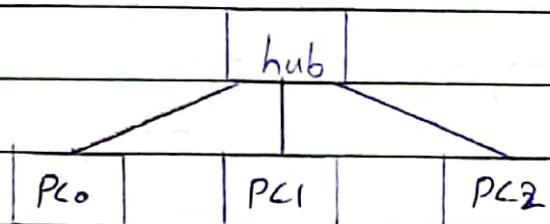


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IBM18CS135

LAB: 11). Topology - HUB• Procedure

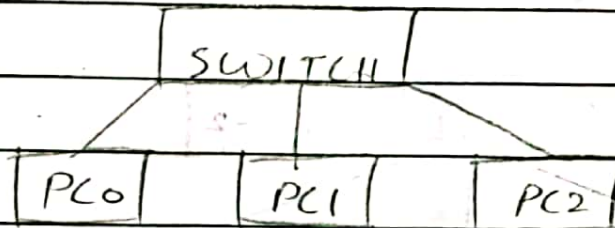
- i) Place one hub and 3 end devices
- ii) Connect the end devices to the hub using cables.
- iii) Set an IP address for each device.
- iv) Select a sample PDU and select a source and destination.

• Observation-

When a source node sends data in a network, the hub receives the data from the source and sends Broadcast over the network, i.e., it sends data to all remaining nodes in the network.

and the node whose destination address matches with the data will accept that data and acknowledge back and the rest of the nodes just ignore it.

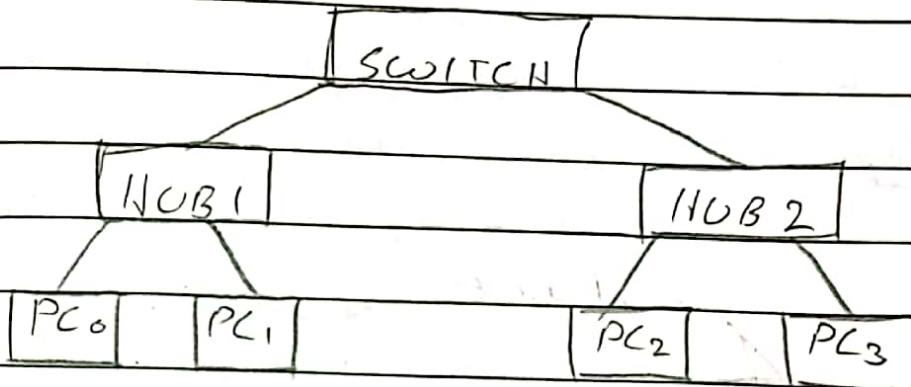
2) • Topology - (SWITCH)



Here the procedure remains same as that of the previous one.

• Observation -

Here also the end-devices are connected to the single device (switch) when a source node sends data to other node, then switch receives the data and sends only to the node whose destination address matches.

3) Topology-Procedure-

→ Place the network devices and end devices and make connections.

→ Sending a message from PC0 to PC2

i) PC0 sends the message, HUB1 receives the message and transmits to the PC1 and the switch. PC1 rejects the message as the destination address does not match.

ii) Then switch transmits message to the HUB2 then HUB2 sends to PC2 and PC3.

iii) PC2 accepts the message and acknowledges back and PC3 rejects the message.