

CS361

LABORATORY 1

**NAME:**

ARCHIT AGRAWAL

**ROLL NO. :**

202051213

**SECTION:**

2B

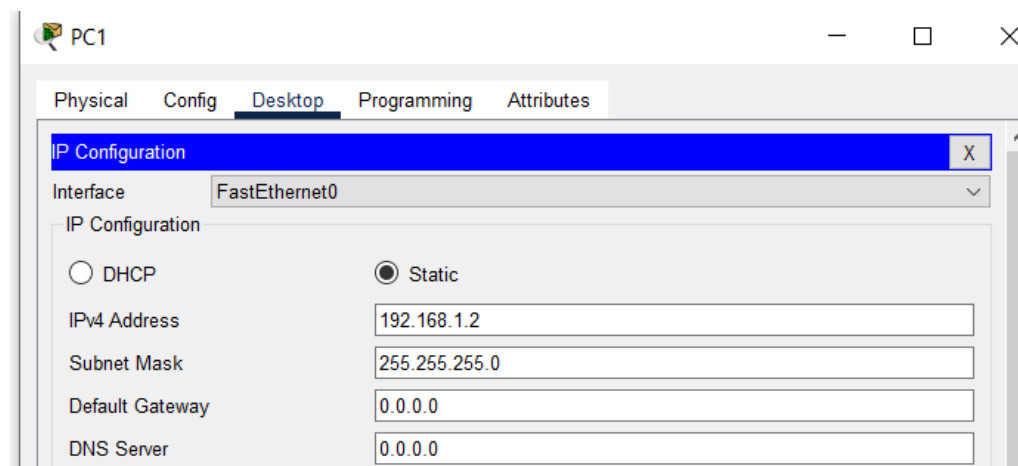
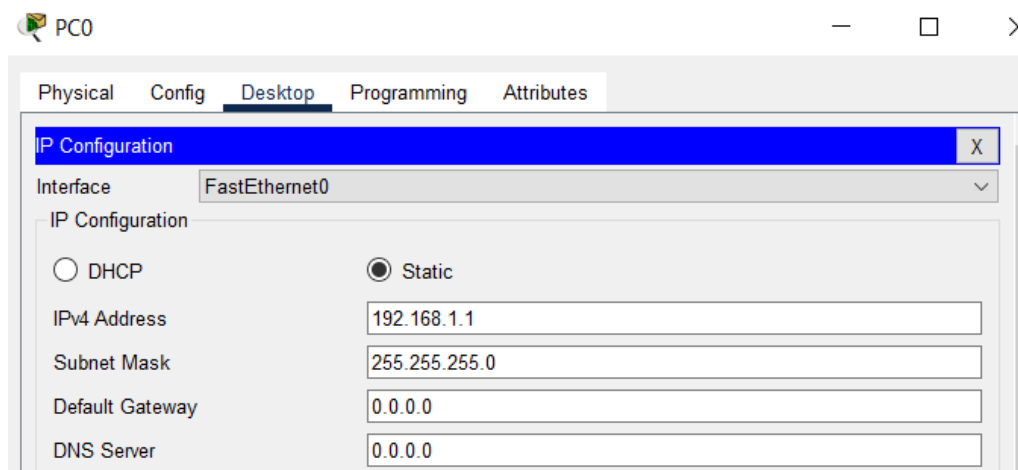
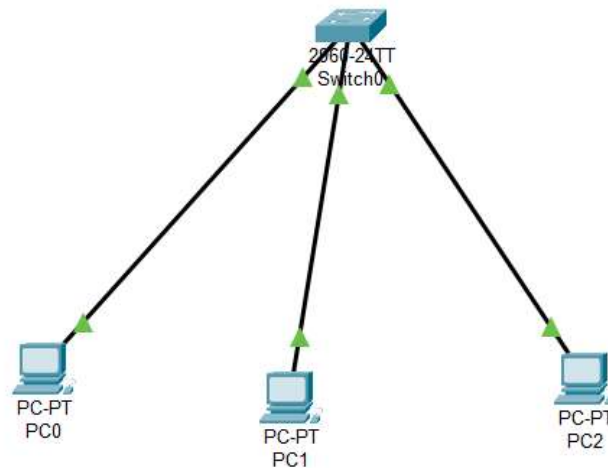
**1. Write the differences between switch and hub?**

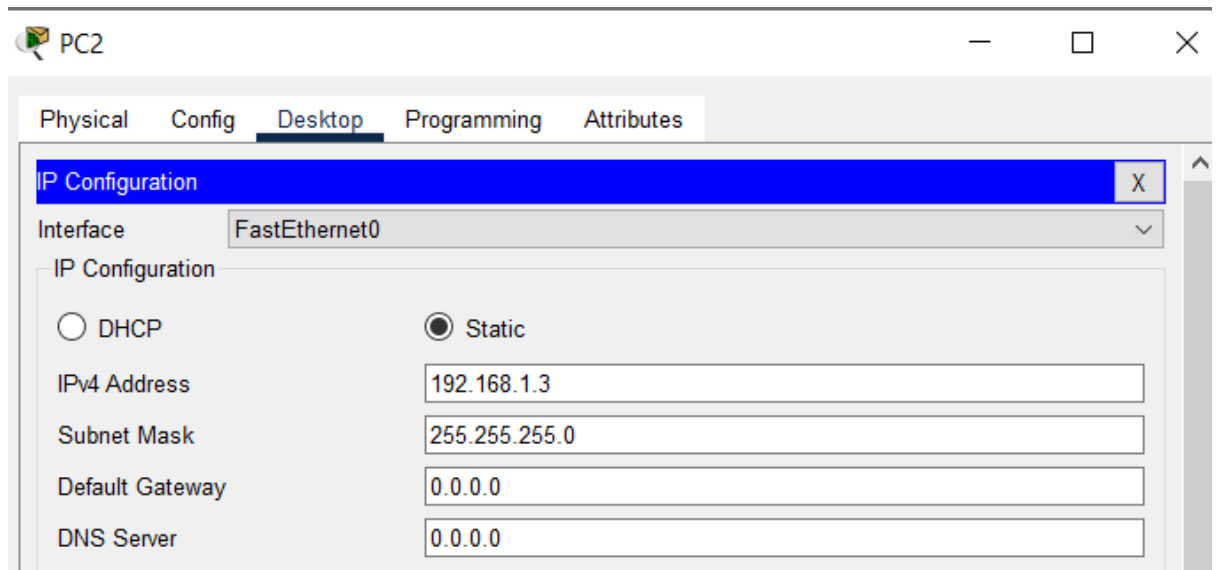
**Hub** is a networking device which is used to transmit the signal to each port (except one port) to respond from which the signal was received.

**Switch** is a network device which is used to enable the connection establishment and connection termination on the basis of need.

<b><i>Hub</i></b>	<b><i>Switch</i></b>
Hub is operated on the Physical layer of the OSI model.	The switch is operated on the Data link layer of OSI Model.
Hub is a broadcast type transmission.	While switch is a Unicast, multicast and broadcast type transmission.
Hub cannot be used as a repeater.	The switch can be used as a repeater.
Hub is a half-duplex transmission mode.	Switch is a full duplex transmission mode.

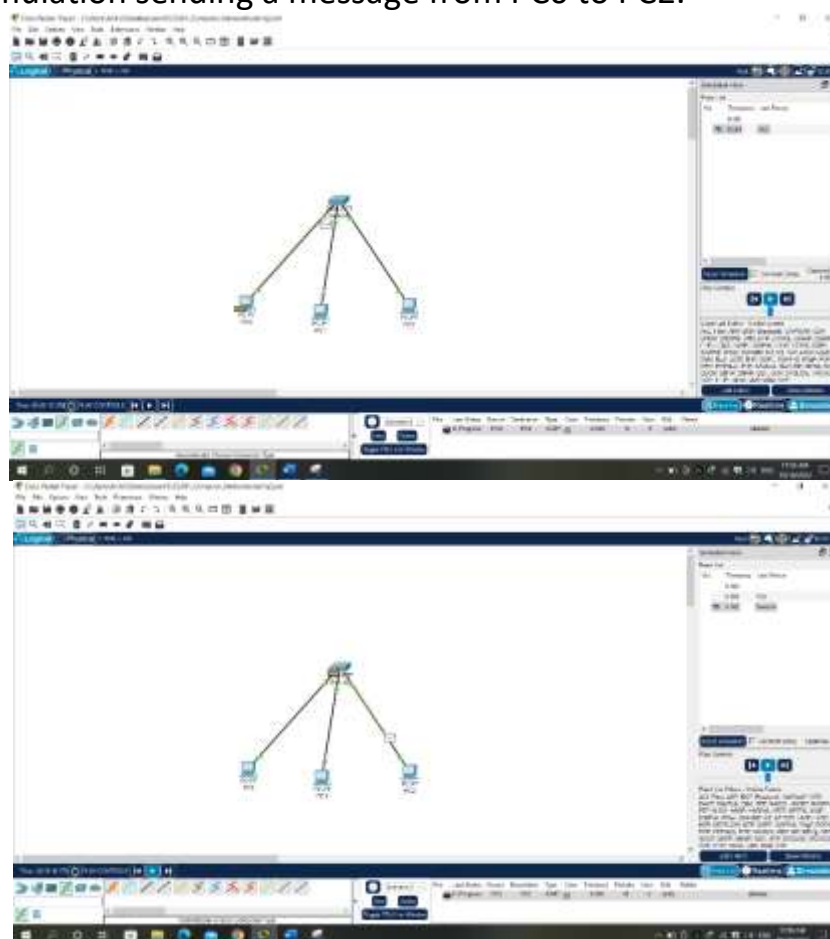
**2. Create a small network using a switch and show that the message transferred from one end device to other is successful.**

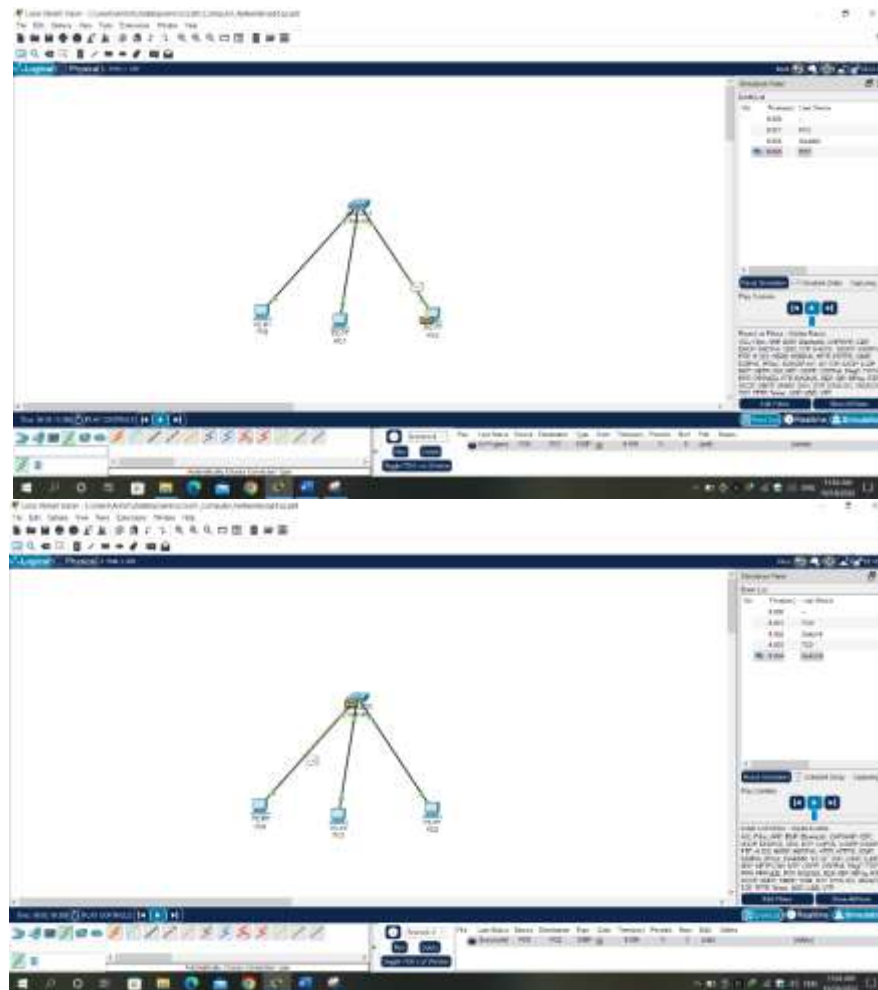




Switch can unicast, multicast and broadcast messages as it stores a MAC address table.

Using Simulation sending a message from PC0 to PC2.

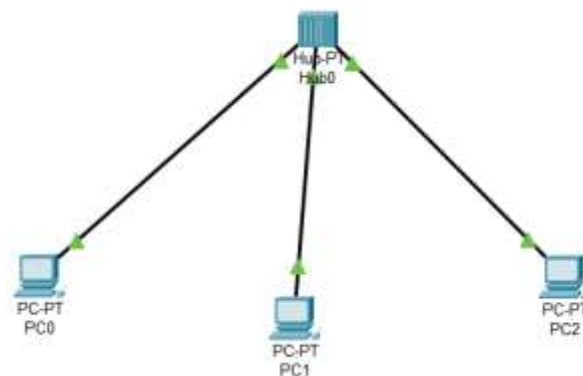




### 3. Create a small network using a hub and show that the message transferred from one end device to other is successful.

IP configuration is same as Q2.

Hubs broadcast each message.



Using Simulation sending a message from PC0 to PC2.

