ADVANCE COMPUTER NETWORK
EXTERNAL PRACTICAL

Submitted By -
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CSE(EVE) - 7th sem

Question 1) Run Bus topology on the packet tracer.

Aim: Run Bus topology on the packet tracer.

Theory: Bus topology uses one main cable to which all nodes are directly connected. The main cable acts as a backbone for the network. One of the computers in a network typically acts as the computer server.
Advantage of bus topology is that it is easy to connect a computer or peripheral device. The second advantage is that the cable requirements are relatively small, resulting in lower cost.
This type of topology is not suitable for large networks.

Steps as follows:

Step 1: Launch the packet tracer

Step 2: Build the Topology
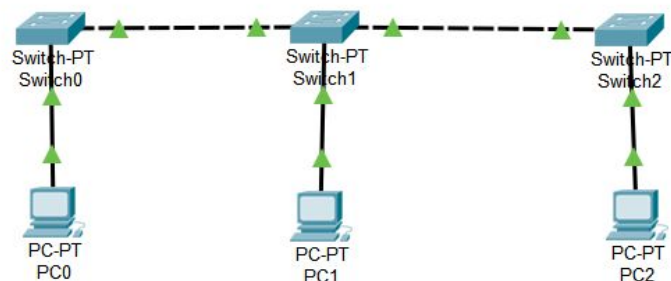First select three switches, three clients and connect them by FastEthernet wires.

Fig 1) Bus Topology

Step 3: Configure the End Devices:

Configure the clients by providing their IP Address and subnet mask**.**

Configure PC0

Click on PC0. Then configure it as follows:

      a. Click on the Desktop tab.

      b. Click on the IP Configuration Icon.

      c. Then click on the IP Address dialog box.

      d. Type in 192.168.1.1 as the IP address and press enter.

      e. A default value of 255.255.255.0 should appear in the Subnet Mask.
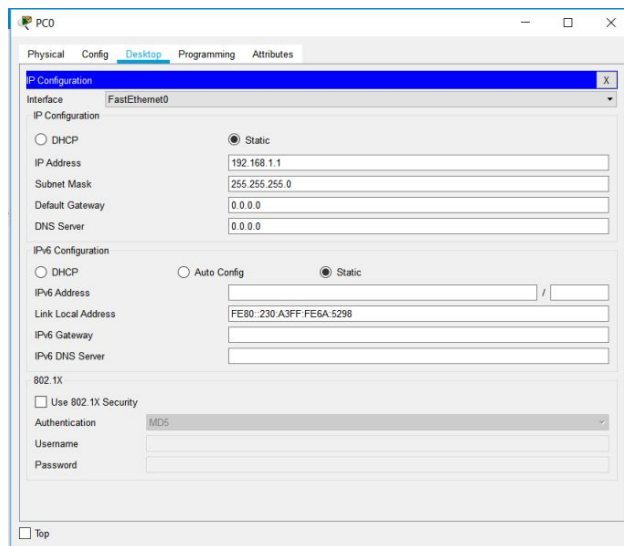

Fig 2) IP Configuration of PC0

Configure PC1

Click on PC1. Then configure it as follows:

      a. Click on the Desktop tab.

      b. Click on the IP Configuration Icon.

      c. Click on the IP Address dialog box.

      d. Type in 192.168.1.2 as the IP address and press enter.

      e. A default value of 255.255.255.0 should appear in the Subnet Mask.

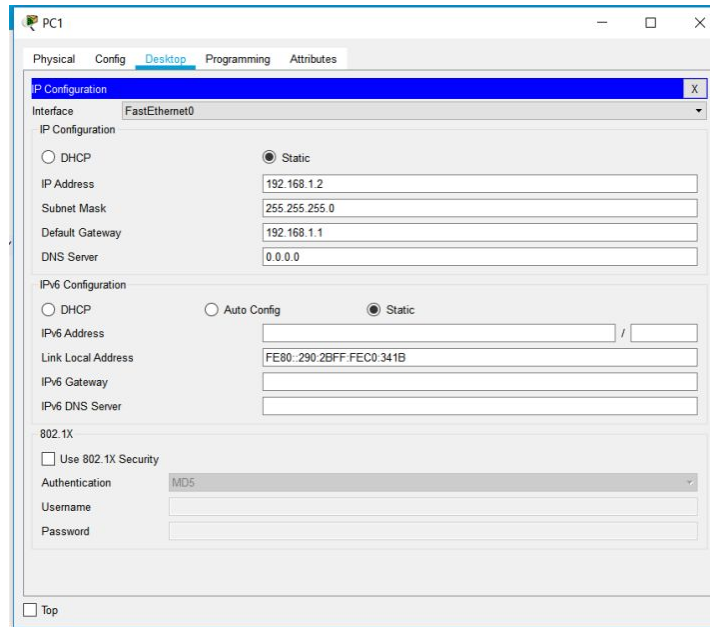   f. Type in 192.168.1.1 as the default gateway address.

Fig 3) IP Configuration of PC

Configure PC2

Click on PC2. Then configure it as follows:

       a. Click on the Desktop tab.

       b. Click on the IP Configuration Icon.

       c. Click on the IP Address dialog box.

       d. Type in 192.168.1.3 as the IP address and press enter.

       e. A default value of 255.255.255.0 should appear in the Subnet Mask.

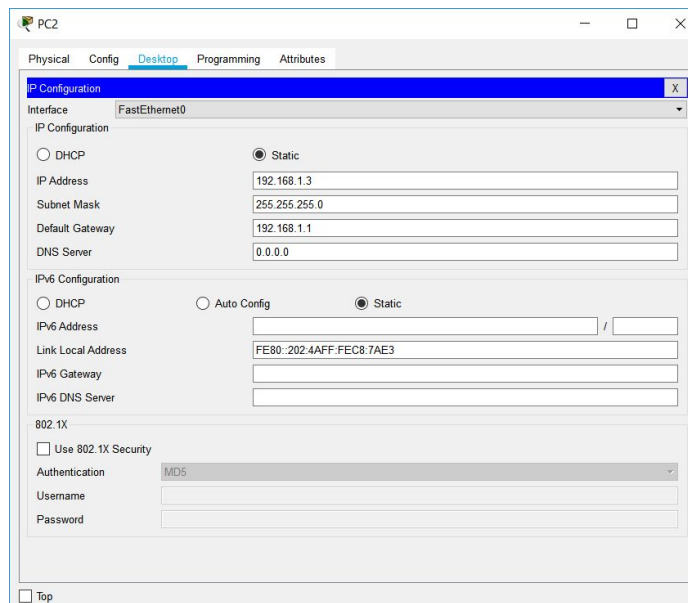   f. Type in 192.168.1.1 as the default gateway address.

Fig 4) IP Configuration of PC2

Step 4: Check the configuration of the topology:

    a.   In Realtime mode, add a simple PDU from PC0 to PC2 and check the status at the bottom right corner of packet tracer.

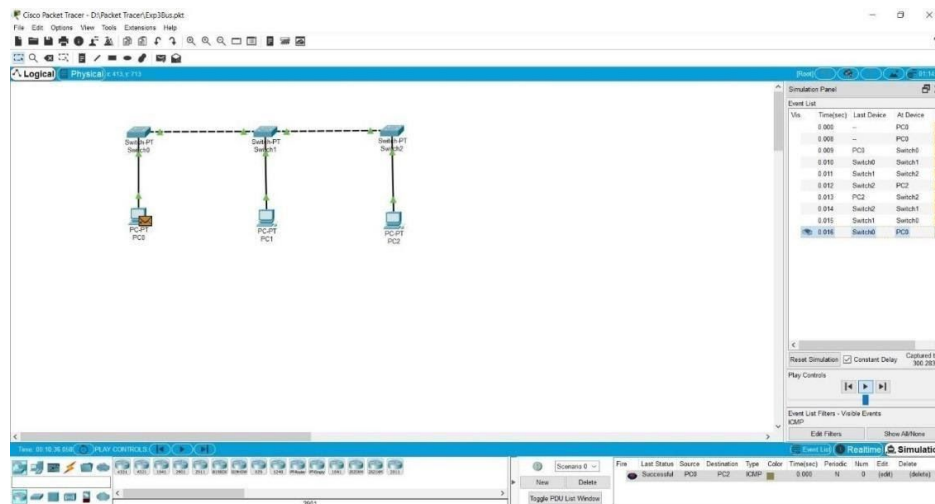   b.   If the status is given as Successful then the configuration of the topology is correct otherwise there is some error in the IP configuration of the topology.

Fig 5) Message Transferred in Realtime Mode