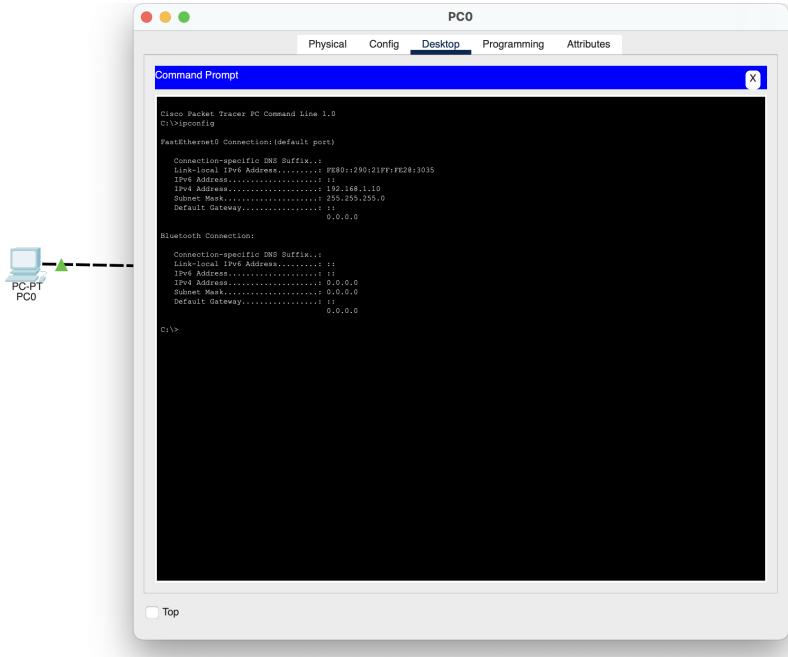
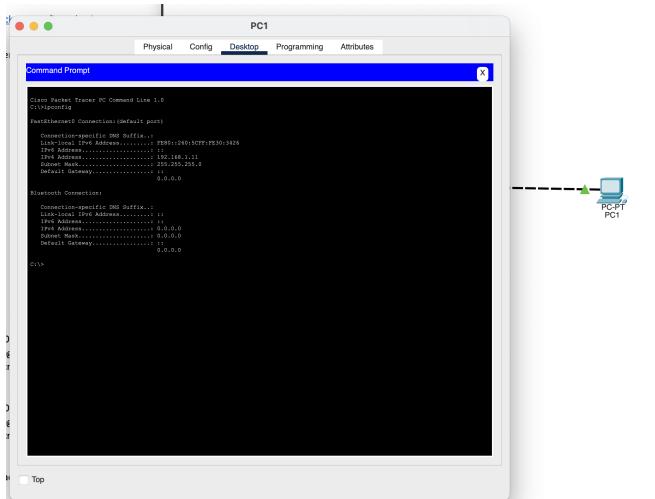


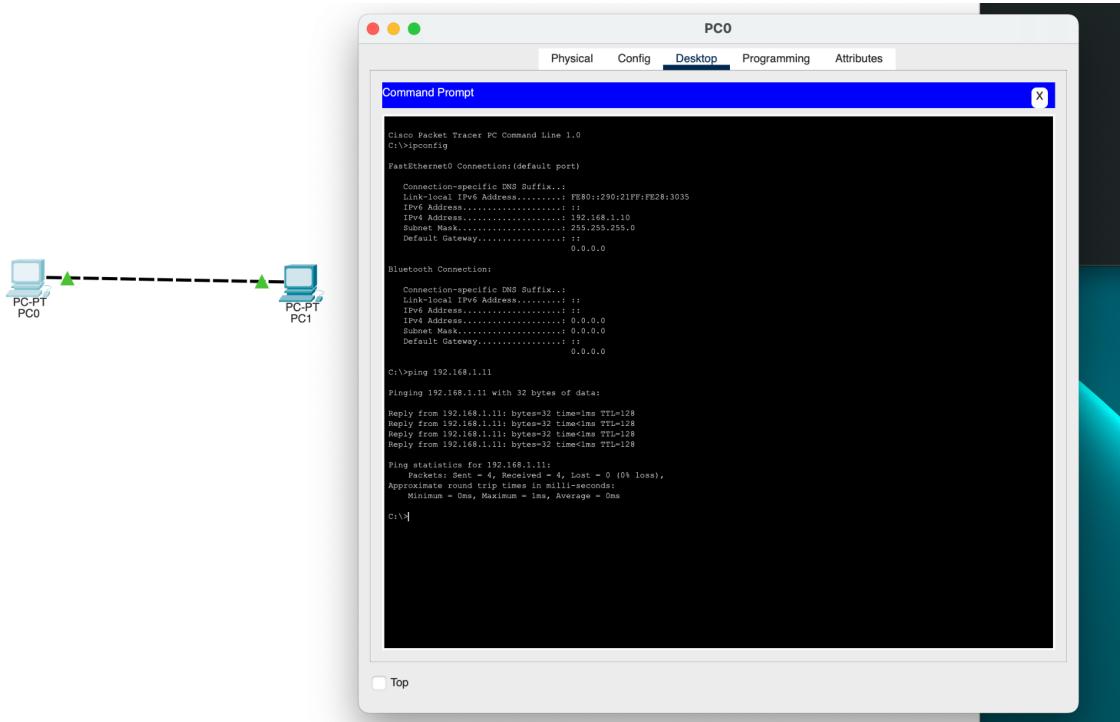
2. On computer PC0, configure IP address 192.168.1.10 and subnet mask 255.255.255.0. Open a command prompt window on PC0 and run command “ipconfig” to verify IP configuration settings. Verify that computer PC0 can ping its own IP address by running command “ping 192.168.1.10”. Submit screenshot of output of “ipconfig”.



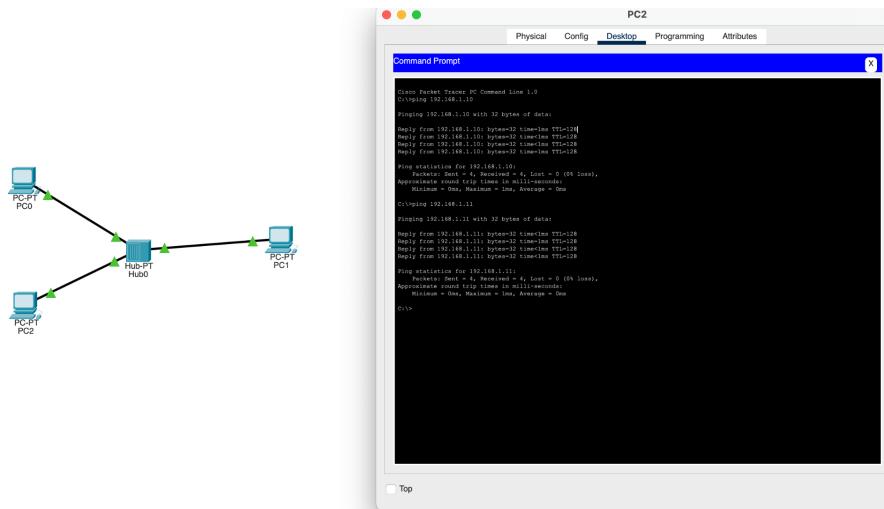
3. On computer PC1, configure IP address 192.168.1.11 and subnet mask 255.255.255.0. Open a command prompt window on PC1 and run command “ipconfig” to verify IP configuration settings. Verify that computer PC1 can ping its own IP address by running command “ping 192.168.1.11”. Submit screenshot of output of “ipconfig”.



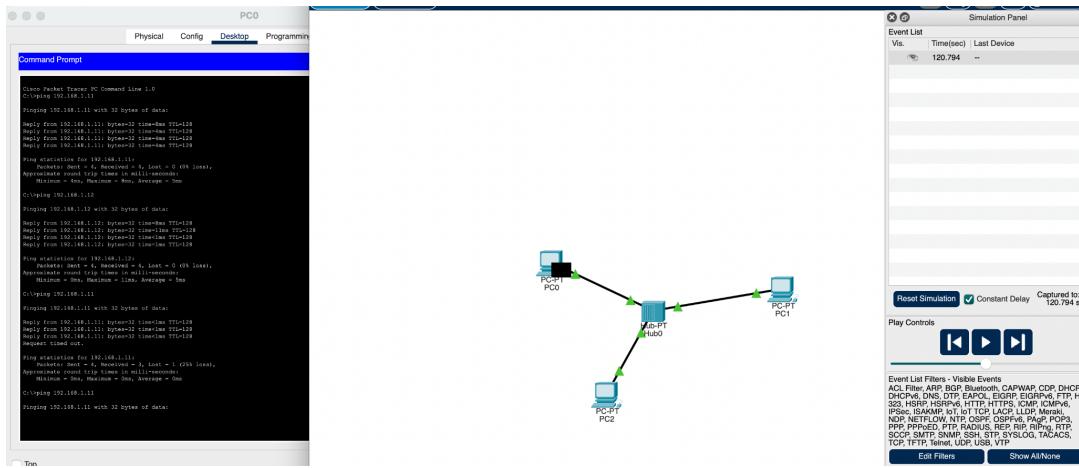
4. On computer PC0, verify that there is network connectivity to PC1 by pinging the IP address of PC1. Submit screenshot of the result of “ping 192.168.1.11”.



5. Modify the network by adding a third computer PC2 and interconnecting the three computers using an Ethernet hub and three Ethernet cables shown below.

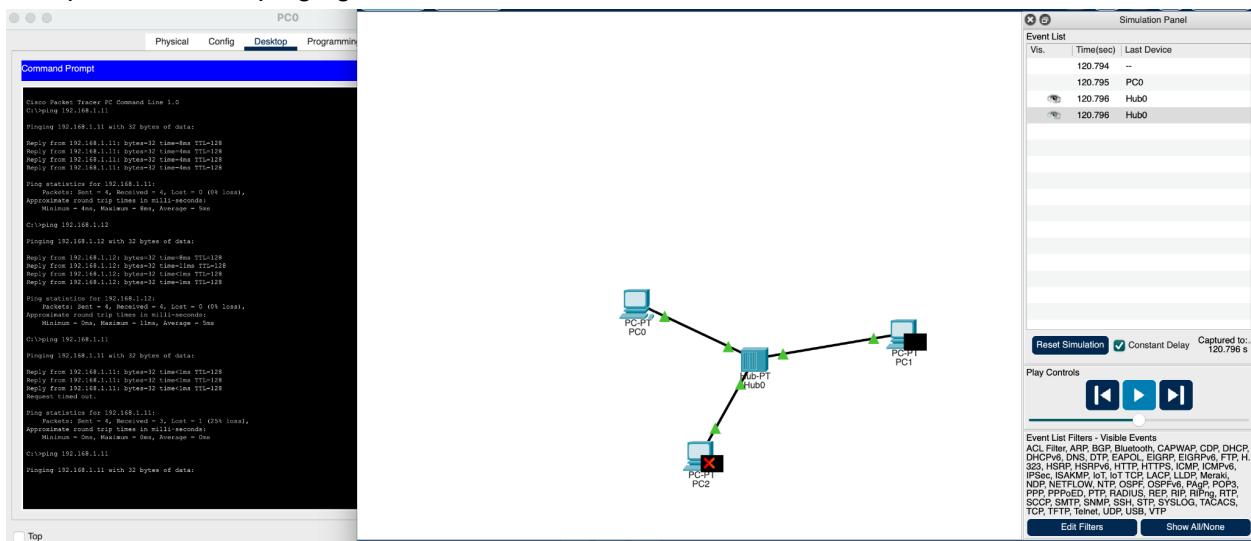


6. On computer PC2, configure IP address 192.168.1.12 and subnet mask 255.255.255.0. Open a command prompt window on PC2 and verify that computer PC2 can ping the IP addresses of PC0 and PC1. Submit a screenshot of the result.

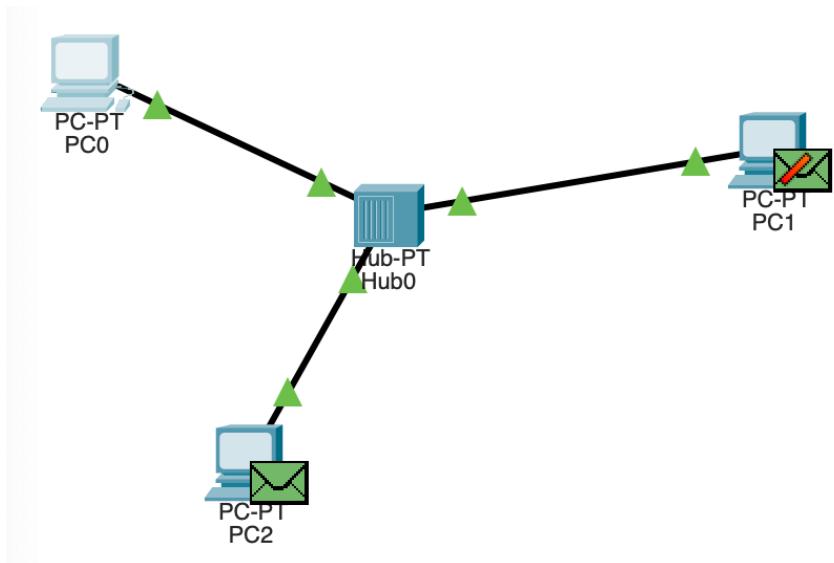


7. Observe how the hub always replicate incoming packets out of all other ports by clicking "Simulation tab" and "Auto Capture/Play" button while pinging PC1 from PC0. Submit a screenshot showing that that the hub is sending a replicated copy from PC0 to PC1 and PC2.

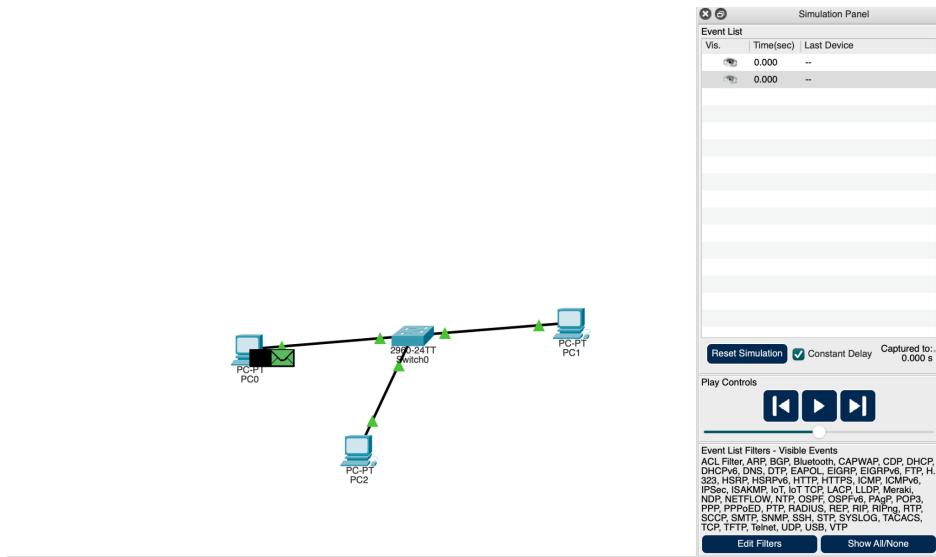
First picture is PC0 pinging PC1

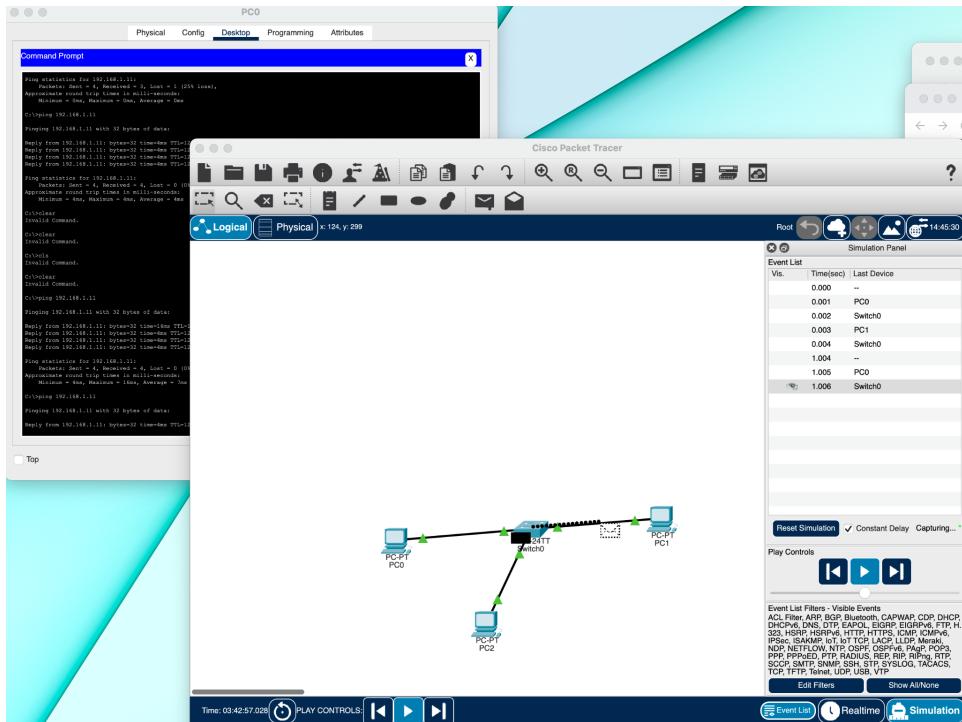


Second picture is PC0 pinging PC2



9. Observe how the switch replicate packets only when necessary by clicking “Simulation tab” and “Auto Capture/Play” button while pinging PC1 from PC0. Submit a screenshot showing where the switch forwards the packet.





10. To see more information related to an Ethernet frame, go to simulation panel and click on any colored square box under the Info column. See how the PDU is processed by clicking the “Next Layer” and “Previous layer” buttons within “OSI Model” tab. See decoded fields of the PDU’s layer 2 and layer 3 headers by clicking on tabs “Inbound PDU Details” and “Outbound PDU Details”. Submit a screenshot showing the contents of each field within a layer-2 header and another screenshot showing the contents of each field within a layer-3 header.

