Name:

Abubaker Attique

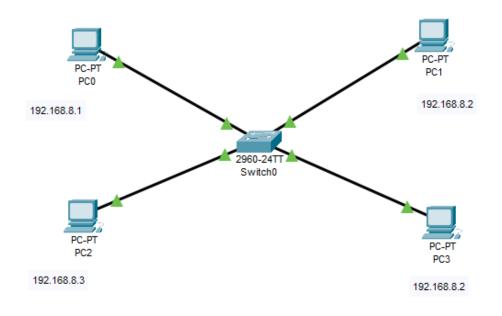
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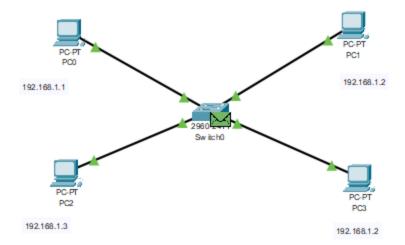
P20-0560

Section:

5-A

Task 1:

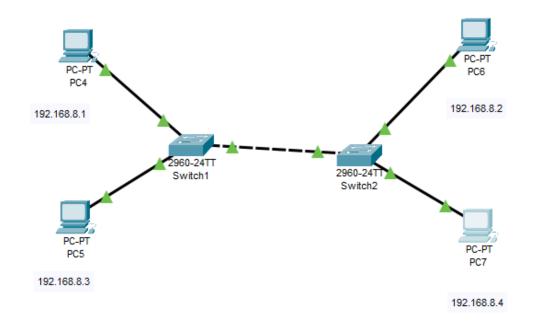




Description:

First we will construct switch & PC and connect PC's with switch using Straight-through wire. After that we will assign IP addresses of type class C to devices . The host device receives the response from the switch.

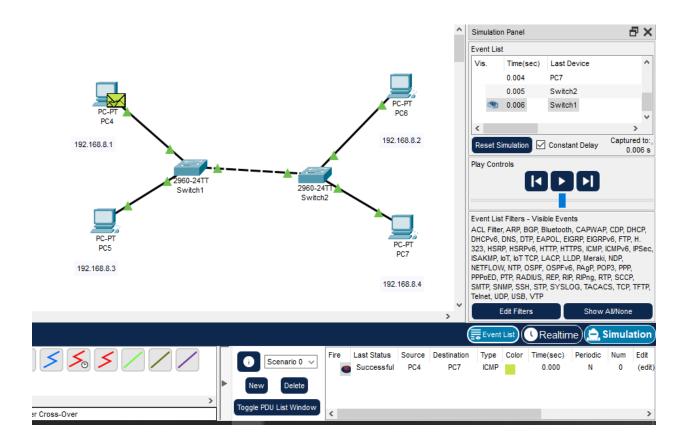
Task 2:



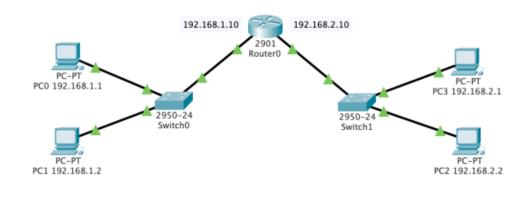
Solution:

Description:

We will construct 2 switches and 4 pcs and connect 2 PC's with each switch using Straight-Through wire. After that we will assign IP addresses of type class C to devices.



Single router:



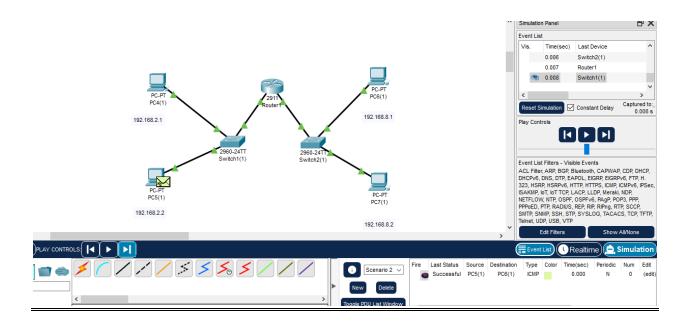
Solution:

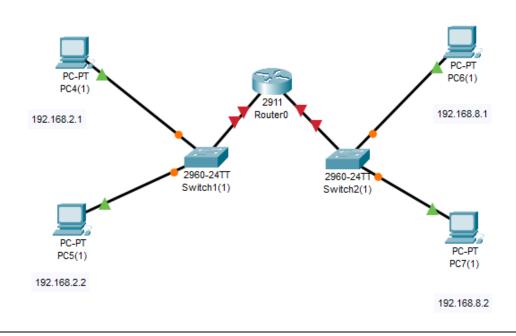
Description:

1)

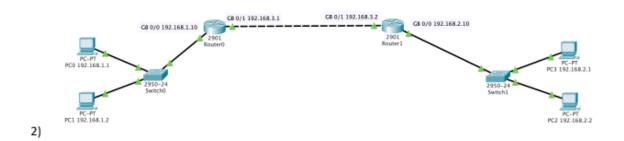
We will construct 2 switches, router and 4 pc and connect 2 PC's with each switch and connect both switches with router using Straight-Through wire. After that we will assign IP addresses of type class C. The host device will sends a

packet to switch and switch will broadcast the packet. The router then sends a packet to the switch. The switch will sends a packet to the connected device. The switch then sends a message to the router. The router will sends a message to the switch and switch then it will send response to the host device.

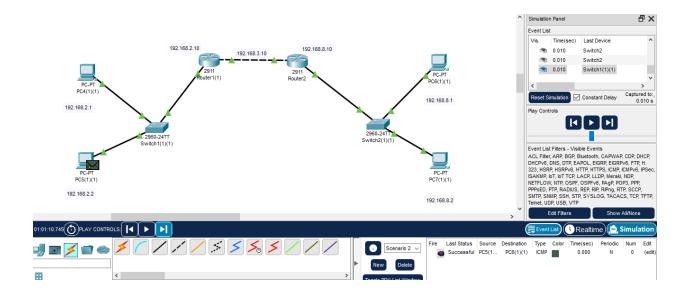




Multiple router



SOLUTION:



Task 3:



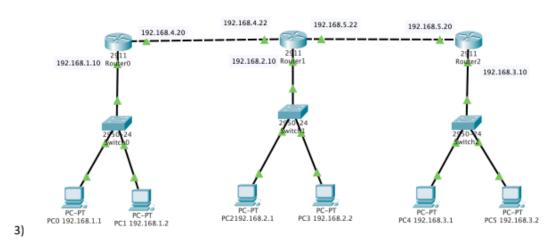
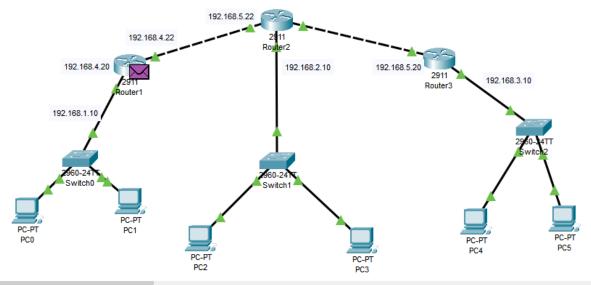
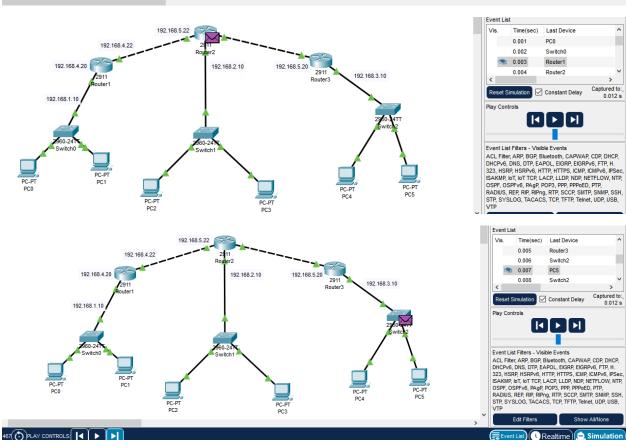


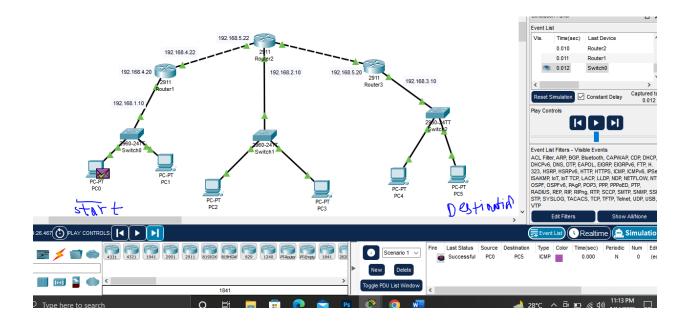
Figure 3 Communication using three routers

SOULUTION:

In task 3 we will construct 3 switches, routers & 6 pcs and connect 2 PC's with each switch and connect switches with each router using Straight-Through wire. After connection we will assign IP addresses of type class C to devices . We will simulate in the simulation host device sends a packet to switch. Switch will broadcast the packet, Then the router sends a packet to the switch, the switch will again sends a packet to the connected devices. The switch then sends a response to the router. The router sends a response to the switch and switch then responds to the host device. And we will see the successful in the simulation as well.







Sr. No.	Key	Fast Ethernet	Gigabit Ethernet
1	Successor	Fast Ethernet is successor of 10- Base-T-Ethernet.	Gigabit Ethernet is successor of Fast Ethernet.
2	Network speed	Fast Ethernet speed is upto 100 Mbps.	Gigabit Ethernet speed is upto 1 Gbps
3	Complexity	Fast Ethernet is simple to configure.	Gigabit Ethernet is quiet complex to configure.
4	Delay	Fast ethernet generates more delay.	Gigabit ethernet generates less delay than Fast Ethernet.
5	Coverage Limit	Fast Ethernet coverage limit is upto 10KM.	Gigabit Ethernet coverage limit is upto 70KM.
6	Round trip delay	Fast Ethernet round trip delay is 100 to 500 bit times.	Gigabit Ethernet round trip delay is 4000 bit times.