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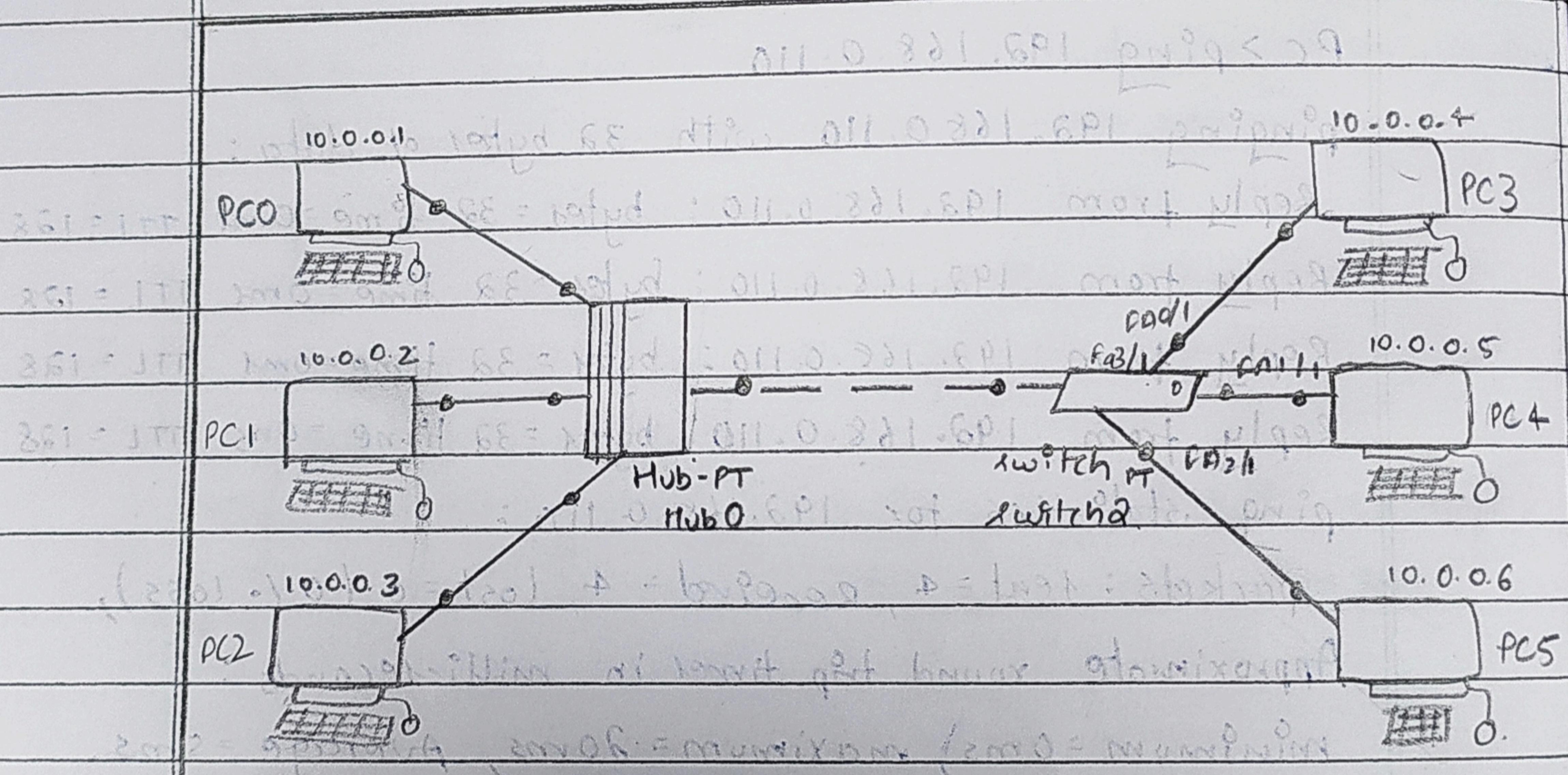
- ① Create a topology and simulate sending a simple PDU from source to destination using simple Hub and switch as connecting domain

Step 1 : select end devices and add generic switch and hub to workspace. Add 6 # PC-PT

Step 2 : make connections using copper straight cable.

Step 3 : Open each PC configuration window and change the IP address to 10.0.0.1, 10.0.0.2, 10.0.0.3, 10.0.0.4, 10.0.0.5, 10.0.0.6 respectively

Step 4 : Save



PC > ping 10.0.0.3

pinging 10.0.0.3 with 32 bytes of data

Reply from 10.0.0.3: bytes = 32 time = 0ms TTL = 128

Reply from 10.0.0.3: bytes = 32 time = 0ms TTL = 128

Reply from 10.0.0.3 bytes = 32 time = 0ms TTL = 128

Reply from 10.0.0.3 bytes = 32 time = 0ms TTL = 128

①

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Ping statistics for 10.0.0.3:

Packets: Sent = 4, Received = 4, Lost = 0 (0.0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

### Scenario : 1

① Sending ~~packet~~ from PC0 to PC1 in hub.

The ~~package~~ is sent from PC0 to the HUB, The HUB

sends the ~~package~~ to PC1 and PC2. Since PC1 is

the receiver it receives the ~~package~~ and sends the acknowledgement back to the HUB which sends it back to

PC0 that is the sender and other PC's.

### Scenario : 2

① Sending ~~packet~~ from PC3 to PC4 in switch.

The ~~package~~ is sent from PC3 to switch PC4 which

receives the ~~packet~~ and since it is the receiver, it

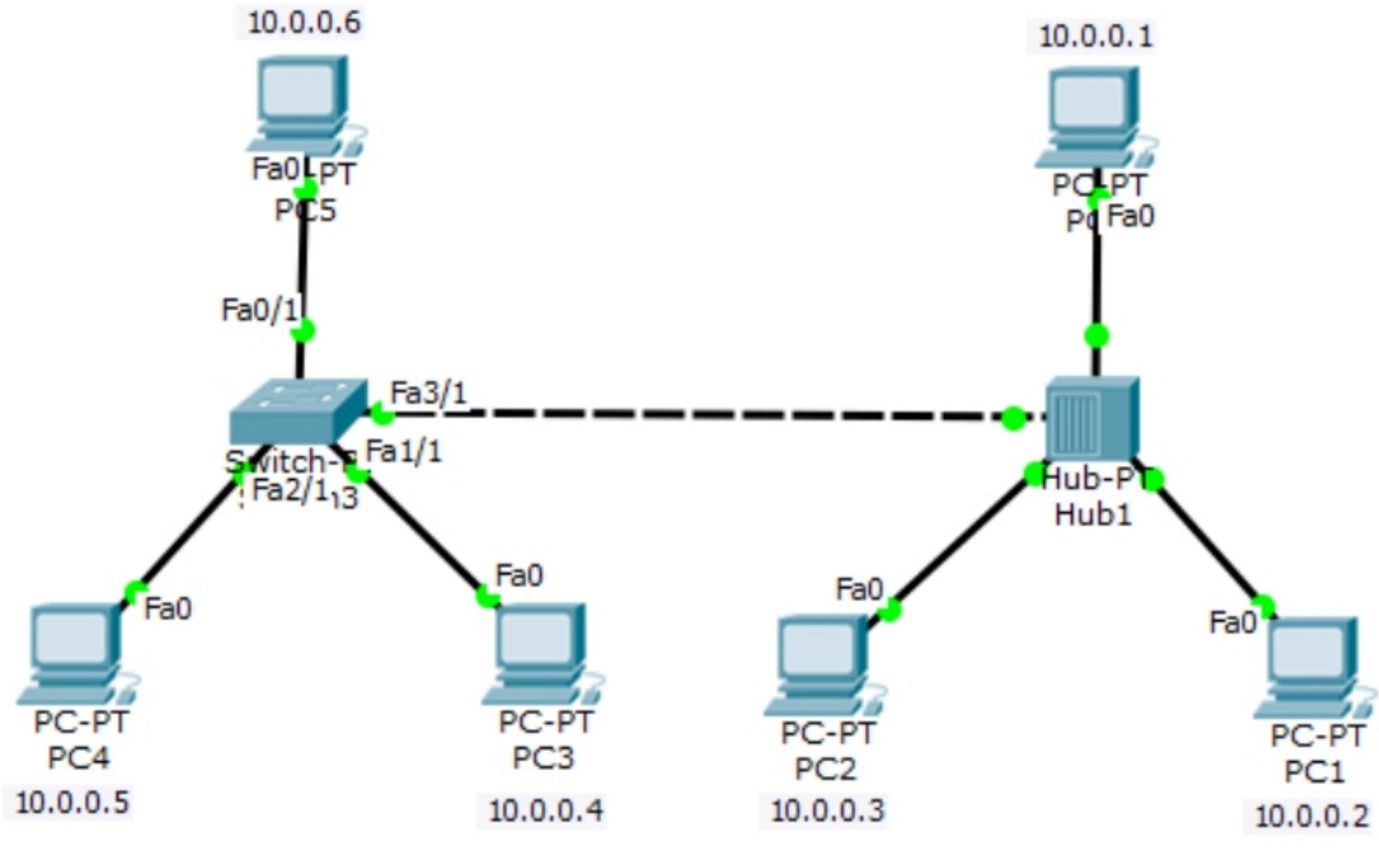
sends the acknowledgement back to the switch that sends to

PC3.

### Scenario : 3

① Sending b/w PC's connected to switch and HUB. Packet is sent from PC0 to PC4. The HUB sends the packet to PC1, PC2 and the switch. The switch sends the packet to PC3 and then PC4 which is the receiver sends the acknowledgement back to switch which sends it back to the HUB which forwards it all the PC's connected to the HUB i.e. PC0, PC1 and PC2.

Ques 16(b)



## Command Prompt

X

```
PC>ping 10.0.0.3

Pinging 10.0.0.3 with 32 bytes of data:

Reply from 10.0.0.3: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 10.0.0.5

Pinging 10.0.0.5 with 32 bytes of data:

Reply from 10.0.0.5: bytes=32 time=0ms TTL=128
Reply from 10.0.0.5: bytes=32 time=0ms TTL=128
Reply from 10.0.0.5: bytes=32 time=7ms TTL=128
Reply from 10.0.0.5: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.0.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 7ms, Average = 1ms
```

```
PC>ping 10.0.0.45  
  
Pinging 10.0.0.45 with 32 bytes of data:  
  
Request timed out.  
Request timed out.  
Request timed out.  
Request timed out.  
  
Ping statistics for 10.0.0.45:  
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),  
PC>
```