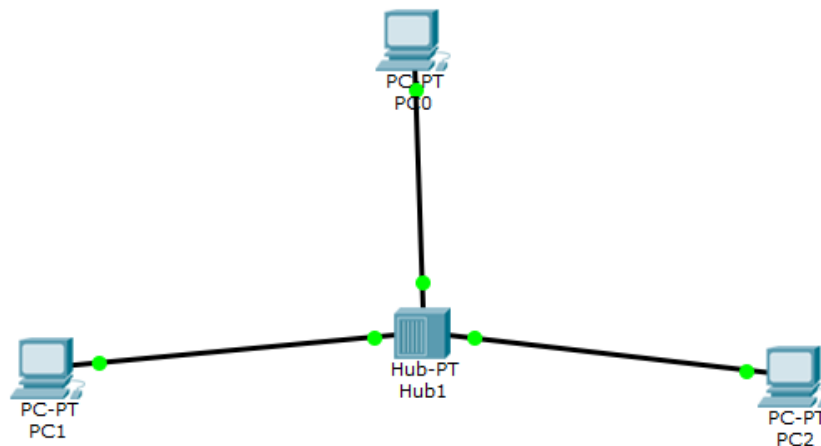


## LAB 1 - COMPUTER NETWORKING (1BM21CS214)

Create a Topology consisting of two or more end devices connected with the help of hub and switch and stimulating simple PDU.

### Hub network

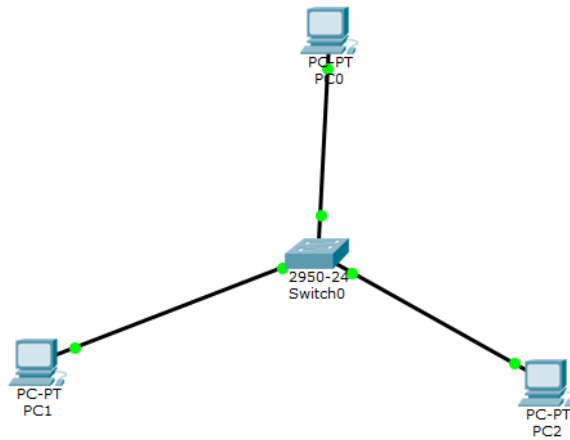


### OUTPUT

In real time, when we use the ping command, we notice that a response is received from the destination.

In simulation mode, the hub gets PDU, it broadcasts to all the connected devices. Then one device accepts and other devices reject the message.

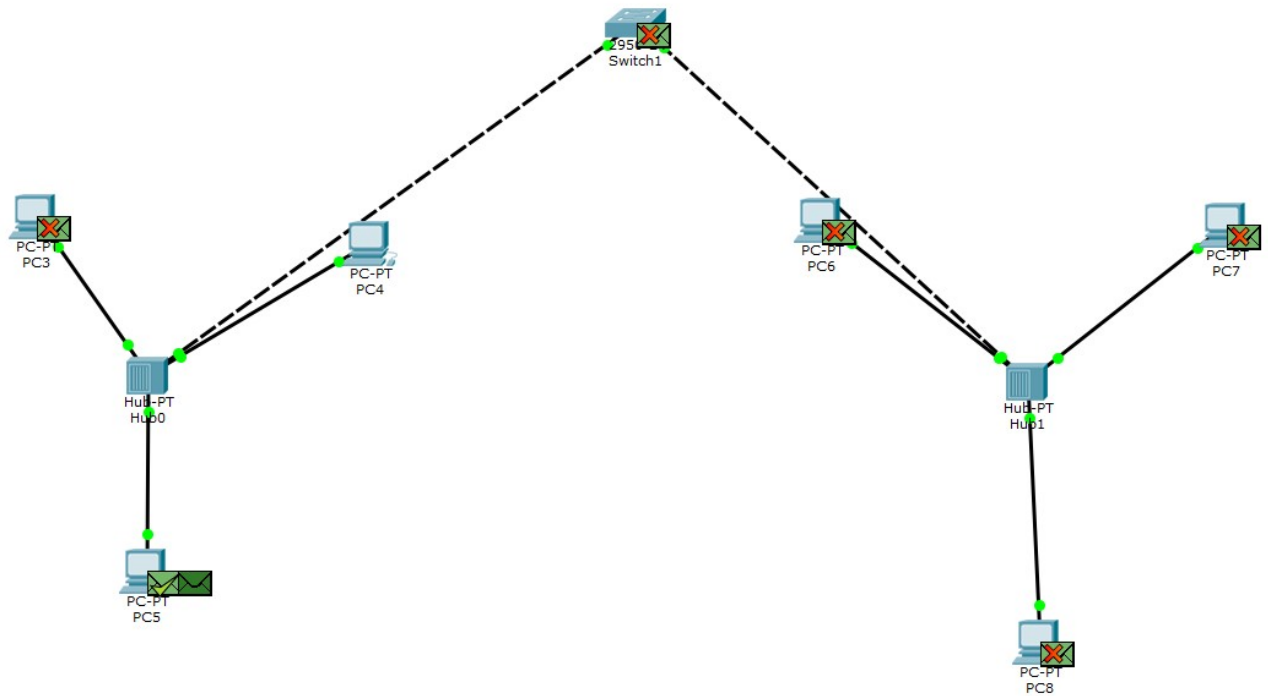
## Switch network



## OUTPUT

In simulation mode, as it receives the PDU switch only transmits or forwards to the destination / mentioned end devices.

## Hub and switch network



### Command Prompt

```
PC>ipconfig

FastEthernet0 Connection:(default port)

    Link-local IPv6 Address.....: FE80::201:43FF:FE6A:3E44
    IP Address.....: 10.0.0.1
    Subnet Mask.....: 255.0.0.0
    Default Gateway.....: 0.0.0.0

PC>ping 10.0.0.4

Pinging 10.0.0.4 with 32 bytes of data:

Reply from 10.0.0.4: bytes=32 time=0ms TTL=128
Reply from 10.0.0.4: bytes=32 time=0ms TTL=128
Reply from 10.0.0.4: bytes=32 time=0ms TTL=128
Reply from 10.0.0.4: bytes=32 time=3ms TTL=128

Ping statistics for 10.0.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 0ms
```

```
Minimum = 0ms, Maximum = 3ms, 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=0ms 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 = 0ms, Average = 0ms

PC>ping 10.0.0.6

Pinging 10.0.0.6 with 32 bytes of data:

Reply from 10.0.0.6: bytes=32 time=0ms TTL=128
Reply from 10.0.0.6: bytes=32 time=0ms TTL=128
Reply from 10.0.0.6: bytes=32 time=2ms TTL=128
Reply from 10.0.0.6: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.0.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

## OUTPUT

The hub broadcast to all the connected devices including the switch then the switch forwards the PDU only to the destination device.