

CN LAB 1

AIM: Create a topology and simulate sending a simple PDU from source to destination using hub and switch as connecting devices and demonstrate ping message.

SCREENSHOTS

USING HUB:

The first screenshot shows a network topology in Cisco Packet Tracer. A central hub (HUB) is connected to six PCs (PC0, PC1, PC2, PC3, PC4, PC5). The interface is in 'Logical' mode, and the simulation is running. The status bar shows 'Time: 00:04:25.533' and 'Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward'.

The second screenshot shows the same topology, but with a 'Command Prompt' window open on PC0. The command prompt displays the following output:

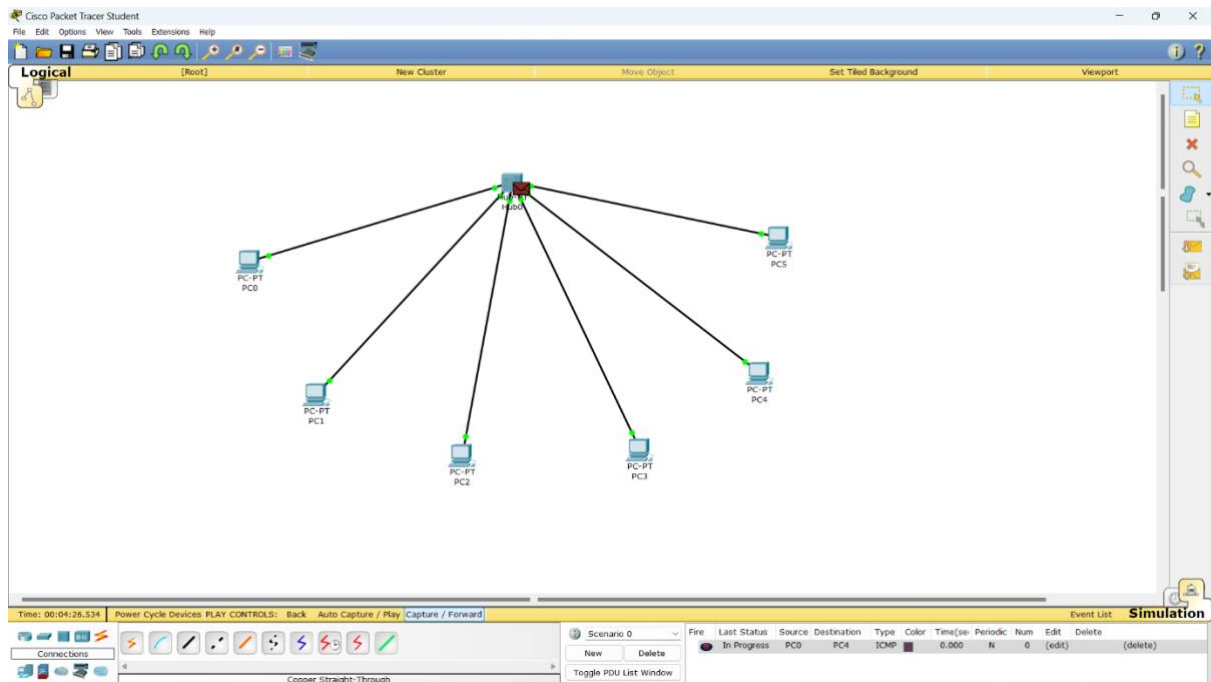
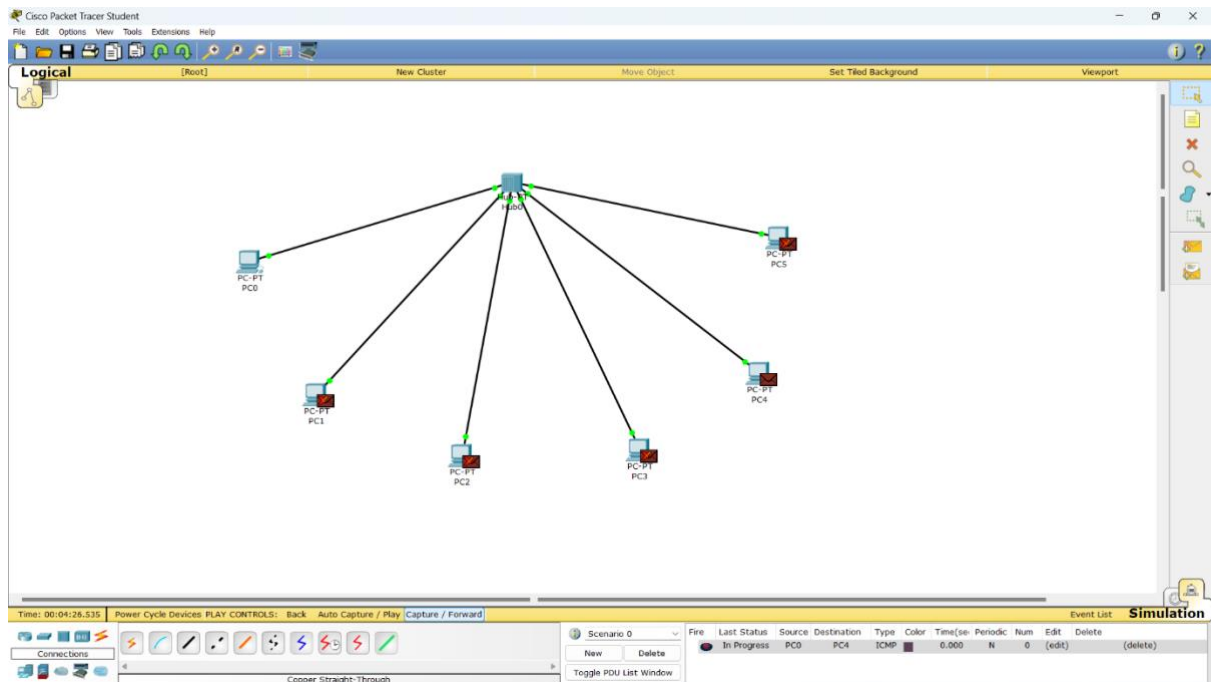
```
PC>ipconfig
FastEthernet0 Connection: (default port)
Link-local IPv6 Address . . . . . FE80::202:1AFF:FE19:2A26
IP Address. . . . . 10.0.0.1
Subnet Mask . . . . . 255.0.0.0
Default Gateway . . . . . 0.0.0.0

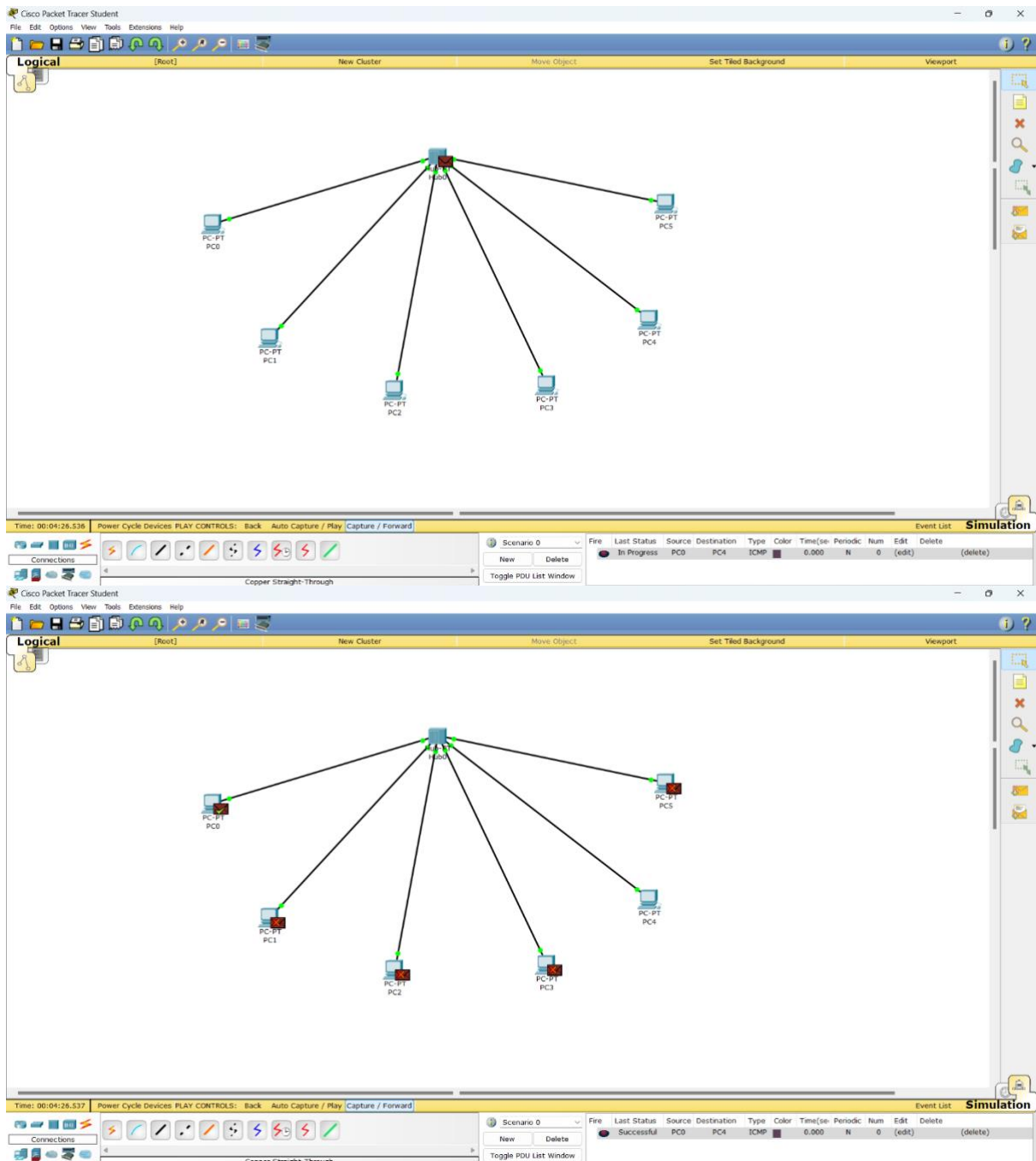
PC>ping 10.0.0.5

Pinging 10.0.0.5 with 32 bytes of data:
Reply from 10.0.0.5: bytes=32 time=1ms TTL=128
Reply from 10.0.0.5: bytes=32 time=1ms TTL=128
Reply from 10.0.0.5: bytes=32 time=1ms TTL=128
Reply from 10.0.0.5: bytes=32 time=1ms TTL=128

Ping statistics for 10.0.0.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milliseconds:
        Minimum = 0ms, Maximum = 4254967295ms, Average = 0ms
PC>
```

The status bar in the second screenshot shows 'Time: 00:04:01' and 'Power Cycle Devices Fast Forward Time'.





USING SWITCH:

The image displays the Cisco Packet Tracer Student interface, showing a network topology and a Command Prompt window.

Network Topology:

- A central switch (S1) is connected to four PCs (PC0, PC1, PC2, PC3).
- PC0 IP: 10.0.0.1, PC1 IP: 10.0.0.2, PC2 IP: 10.0.0.3, PC3 IP: 10.0.0.4.

Command Prompt (PC0):

```
Packet Tracer PC Command Line 1.0
PC>ipconfig

FastEthernet0 Connection (default port)

Link-local IPv6 Address . . . . . : FE80::DE3:FFFF:FEA6:DE3B
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=1ms 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=0ms 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 = 1ms, Average = 0ms

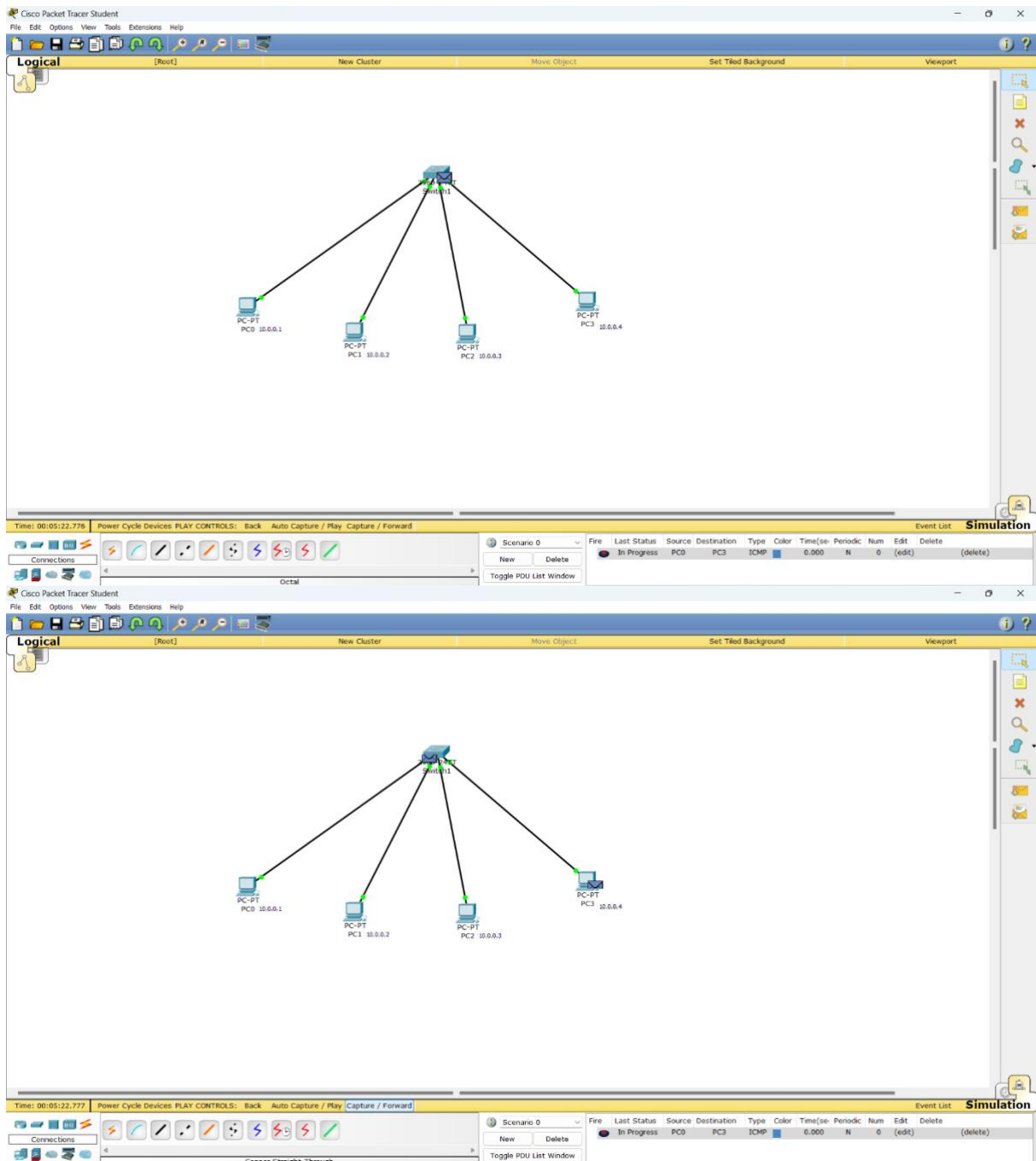
PC>
```

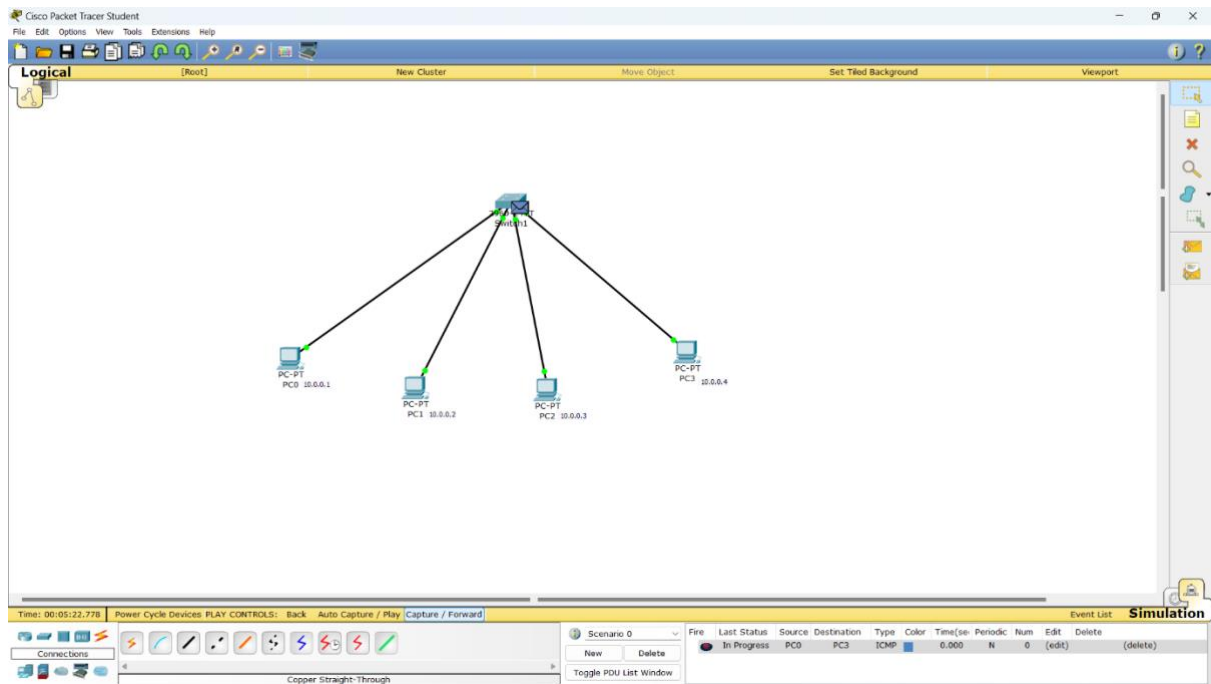
Interface Details:

- Time: 00:04:47
- Power Cycle Devices: Fast Forward Time
- Connections: Copper Straight-Through
- Scenario 0: New, Delete, Toggle PDU List Window
- Realtime

Simulation Mode:

- Time: 00:05:22.775
- Power Cycle Devices: PLAY CONTROLS: Back, Auto Capture / Play, Capture / Forward
- Connections: Copper Straight-Through
- Scenario 0: New, Delete, Toggle PDU List Window
- Simulation
- Event List: In Progress, PC0, PC3, ICMP, 0.000, N, 0, (edit), (delete)





USING HUB AND SWITCH:

