

## 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 Student. A central hub (HUB) is connected to six PCs (PC0, PC1, PC2, PC3, PC4, PC5). The interface is in the 'Logical' view, and the status bar indicates 'Simulation' mode. The time is 00:04:25.533.

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

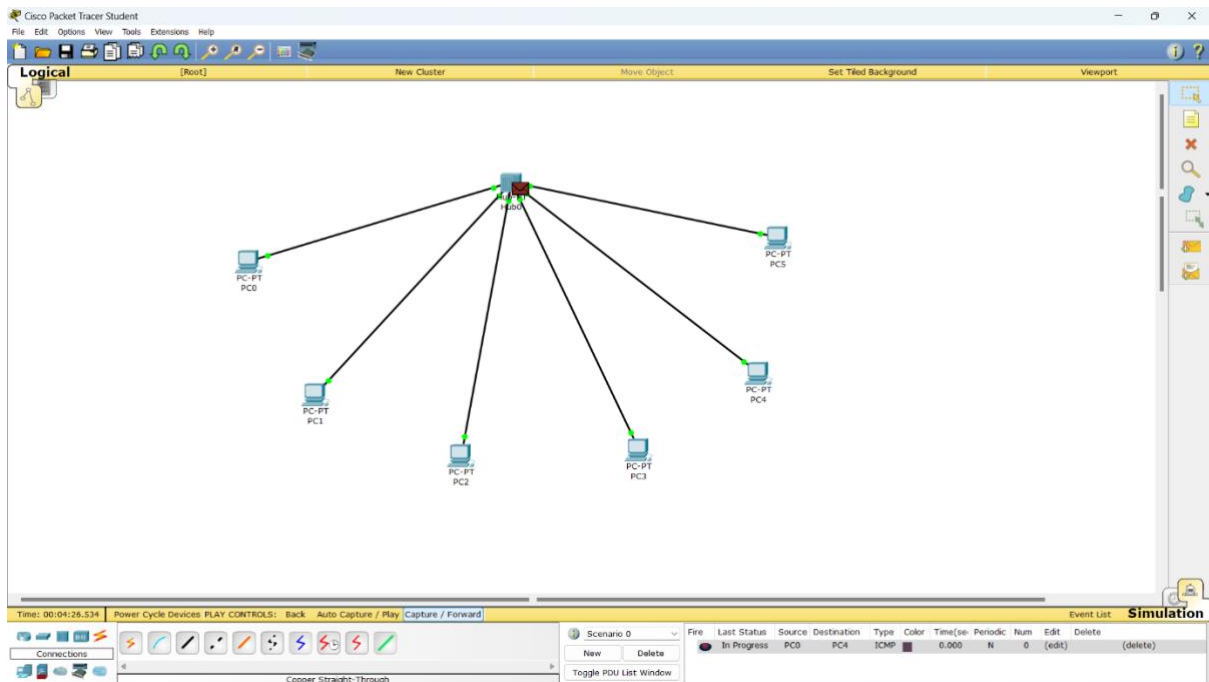
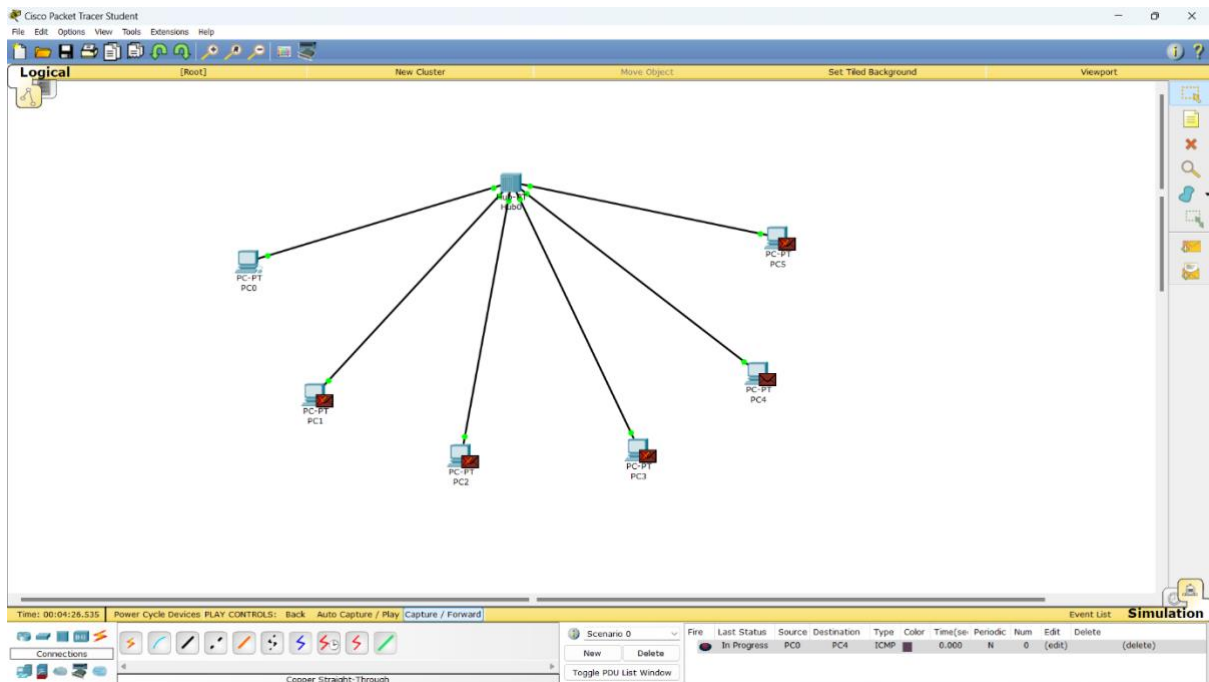
```
PC>ipconfig
FastEthernet0 Connection: (default port)
Link-local IPv6 Address . . . . . FE80::202:1AFF:FE19:2A26
IP Address. . . . . 10.0.0.1
Subnet Mask . . . . . 255.0.0.0
Default Gateway . . . . . 0.0.0.0

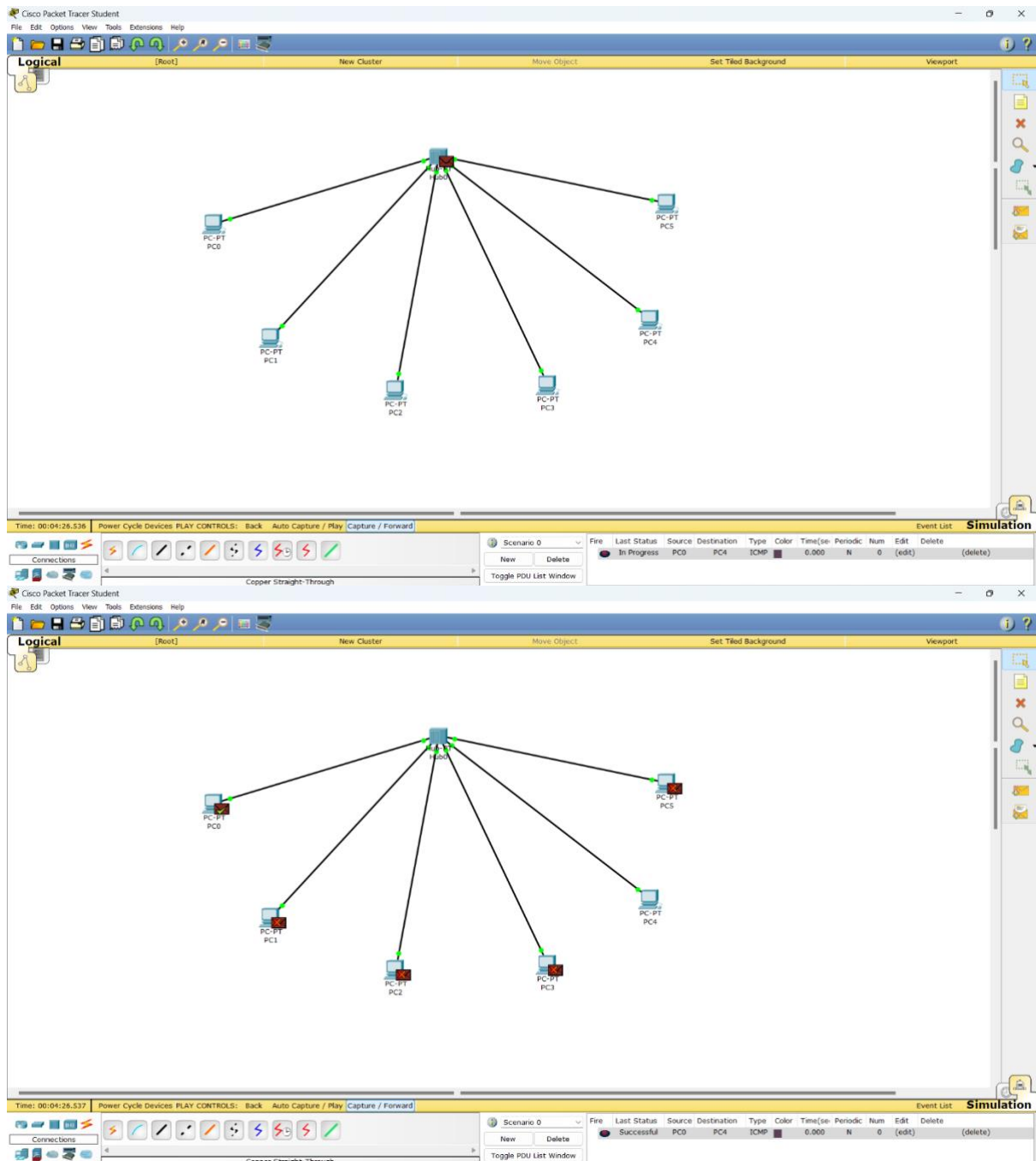
PC>ping 10.0.0.5

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 indicates 'Realtime' mode, and the time is 00:04:01.





## USING SWITCH:

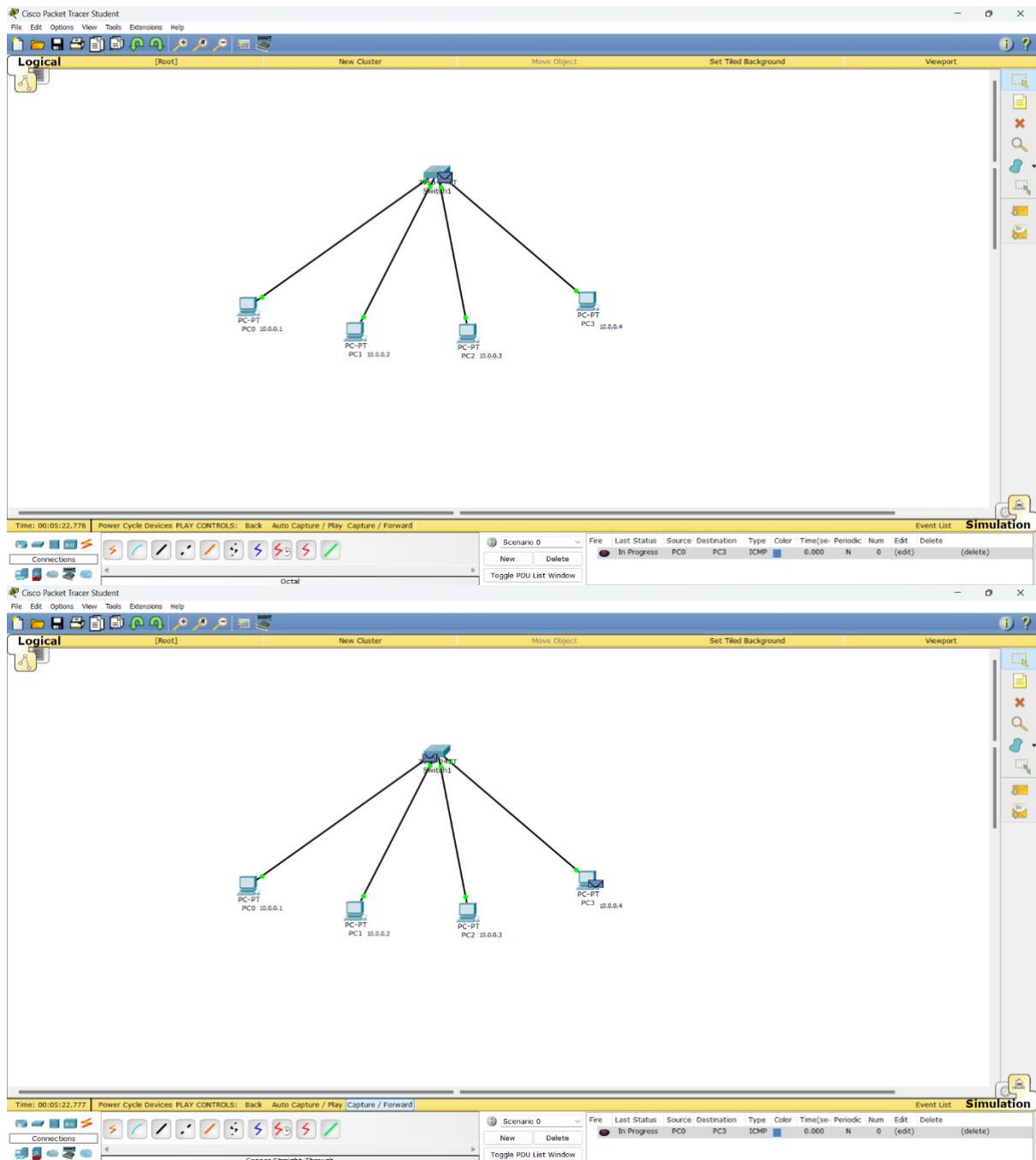
The image displays two screenshots of the Cisco Packet Tracer Student interface, illustrating a network configuration and a command prompt window.

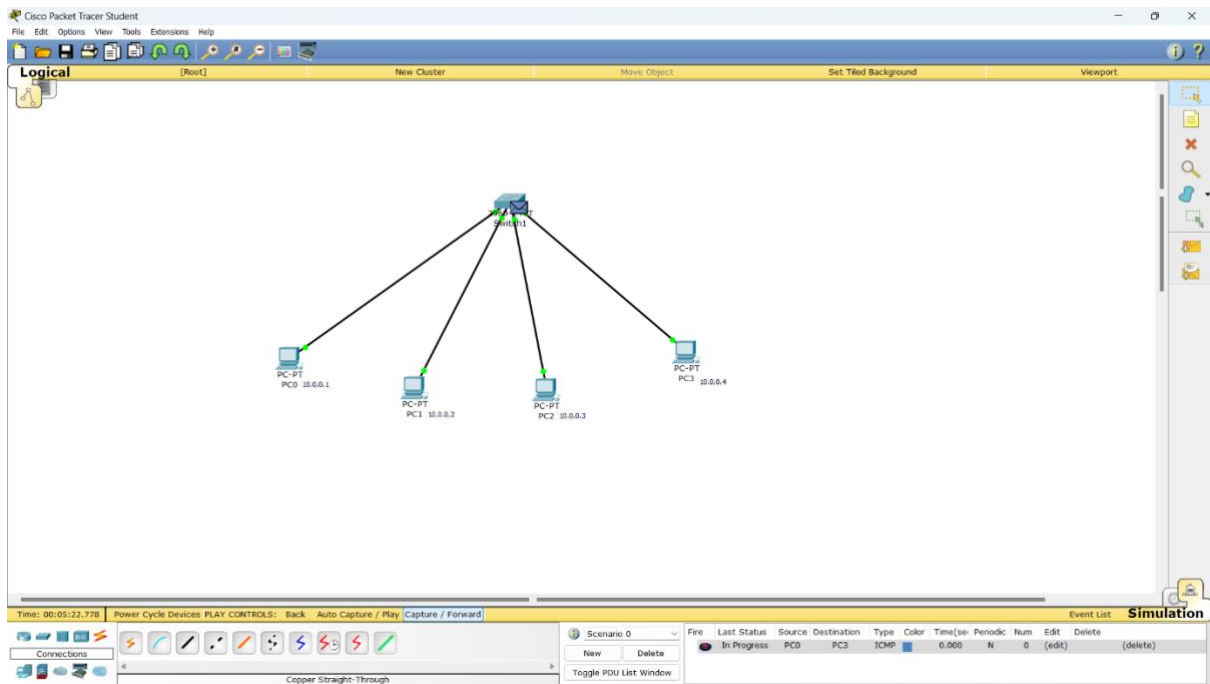
**Top Screenshot:** The interface shows a network topology with a central switch (Switch1) connected to four PCs (PC0, PC1, PC2, PC3). The PCs are labeled with their IP addresses: PC0 10.0.0.1, PC1 10.0.0.2, PC2 10.0.0.3, and PC3 10.0.0.4. A command prompt window is open, showing the output of the 'PC>ping 10.0.0.4' command. The output indicates a successful ping with 100% success rate and 0% loss.

```
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
```

**Bottom Screenshot:** The interface shows the same network topology. The status bar at the bottom indicates the simulation is running, with the time at 00:05:22.775. The event list shows a packet capture for PC0 to PC3 using ICMP, with a time of 0.000 seconds and 0 packets captured.





## USING HUB AND SWITCH:

