Computer Networks

Lab Assignment Documentation

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III CSE AIML-A

Lab 1: Implementation of Network Topologies

Procedure:

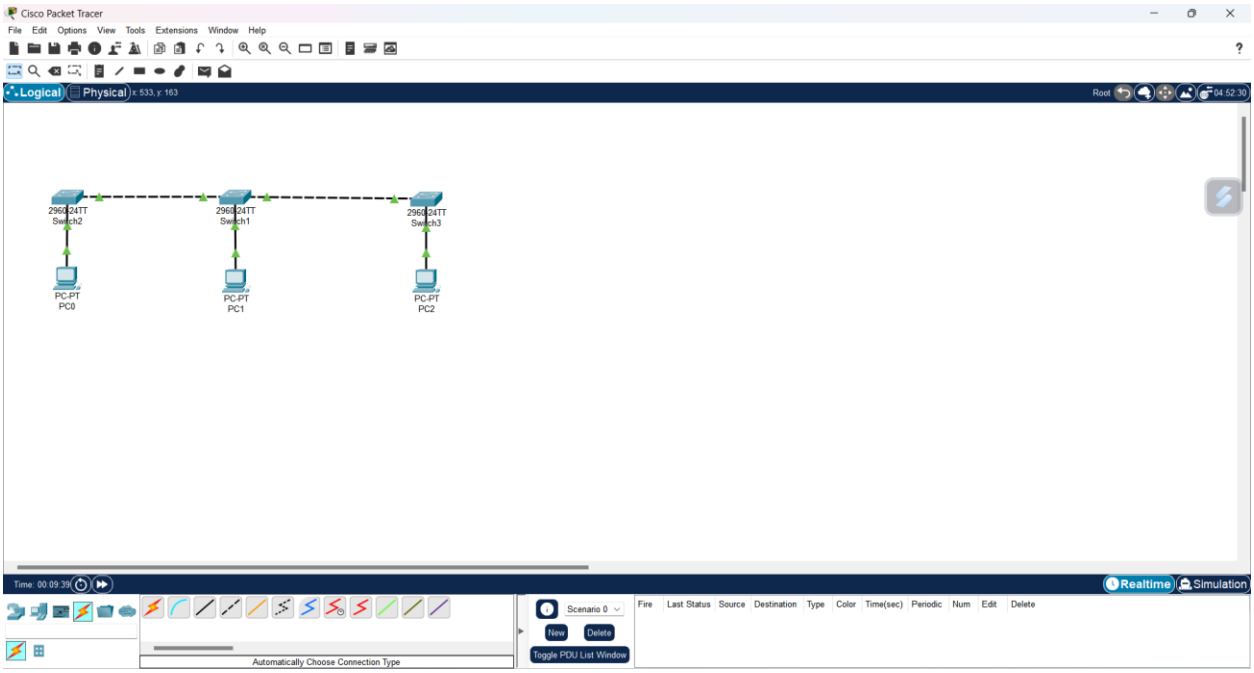
1. Open Packet Tracer:

■ Launch Cisco Packet Tracer on your computer.

2. Implement a Bus Topology:

■ Drag three computers onto the workspace.

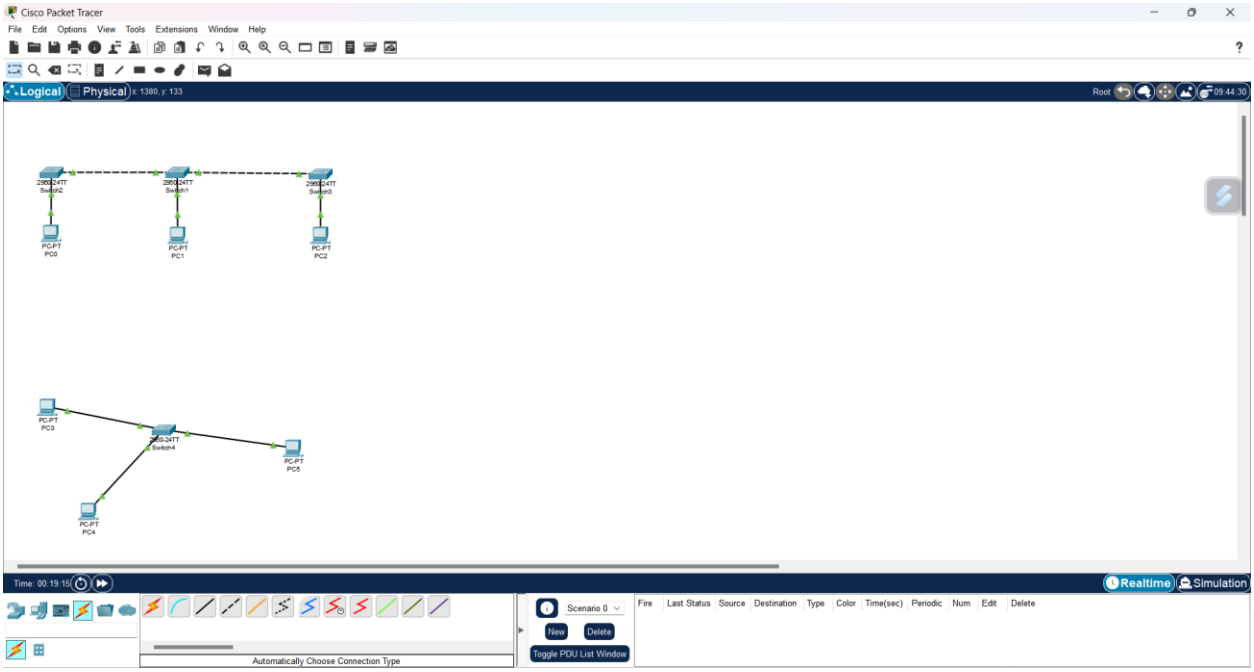
■ Connect them using a single backbone cable (Coaxial Cable).



3. Implement a Star Topology:

■ Drag three computers and a switch onto the workspace.

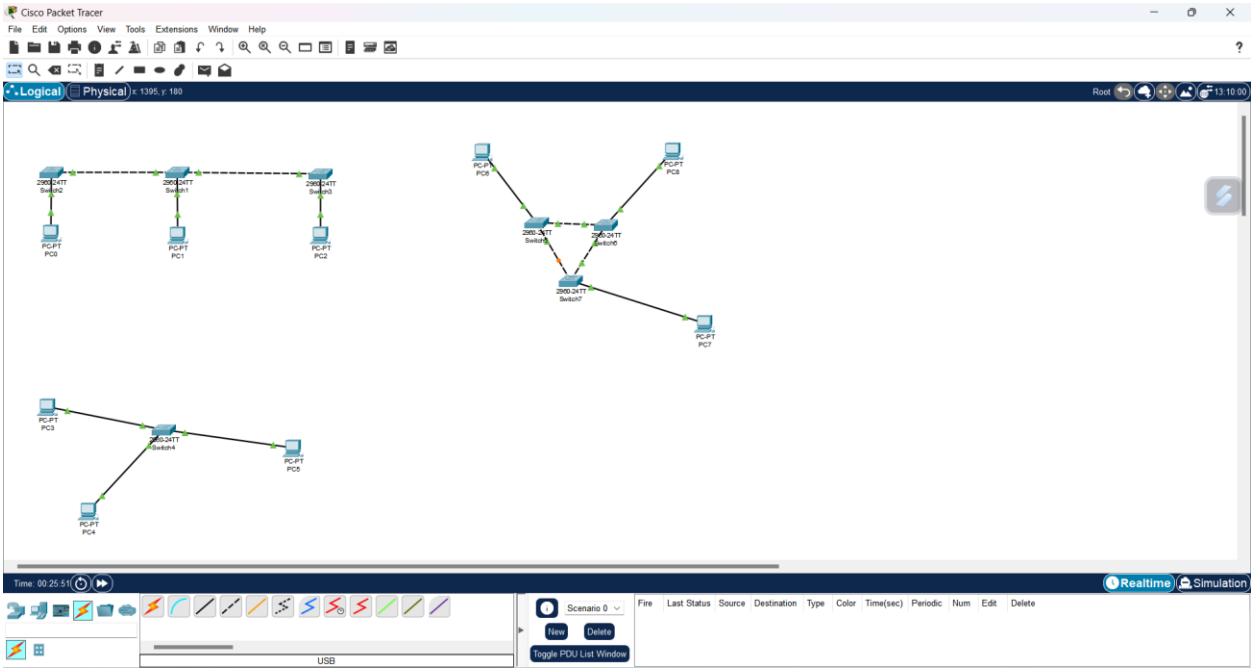
■ Connect each computer to the switch using straight-through Ethernet cables.



4. Implement a Ring Topology:

■ Drag three computers onto the workspace.

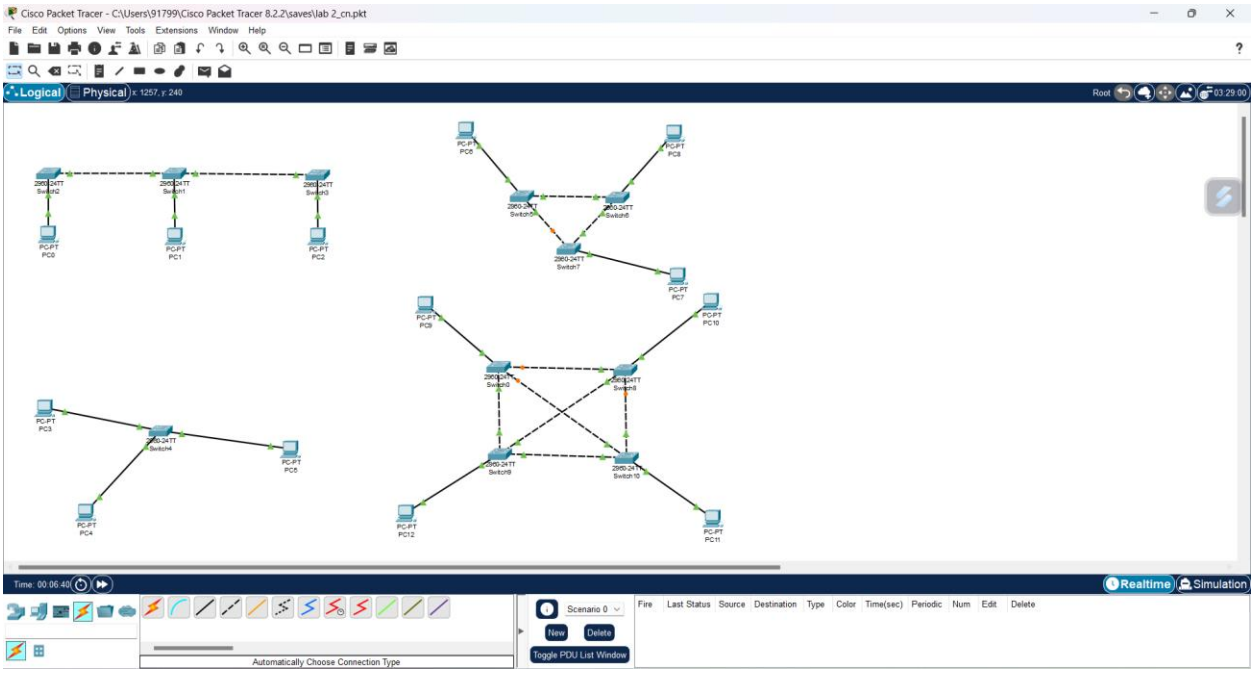
■ Connect them in a circular manner using crossover cables.



5. Implement a Mesh Topology:

■ Drag three computers onto the workspace.

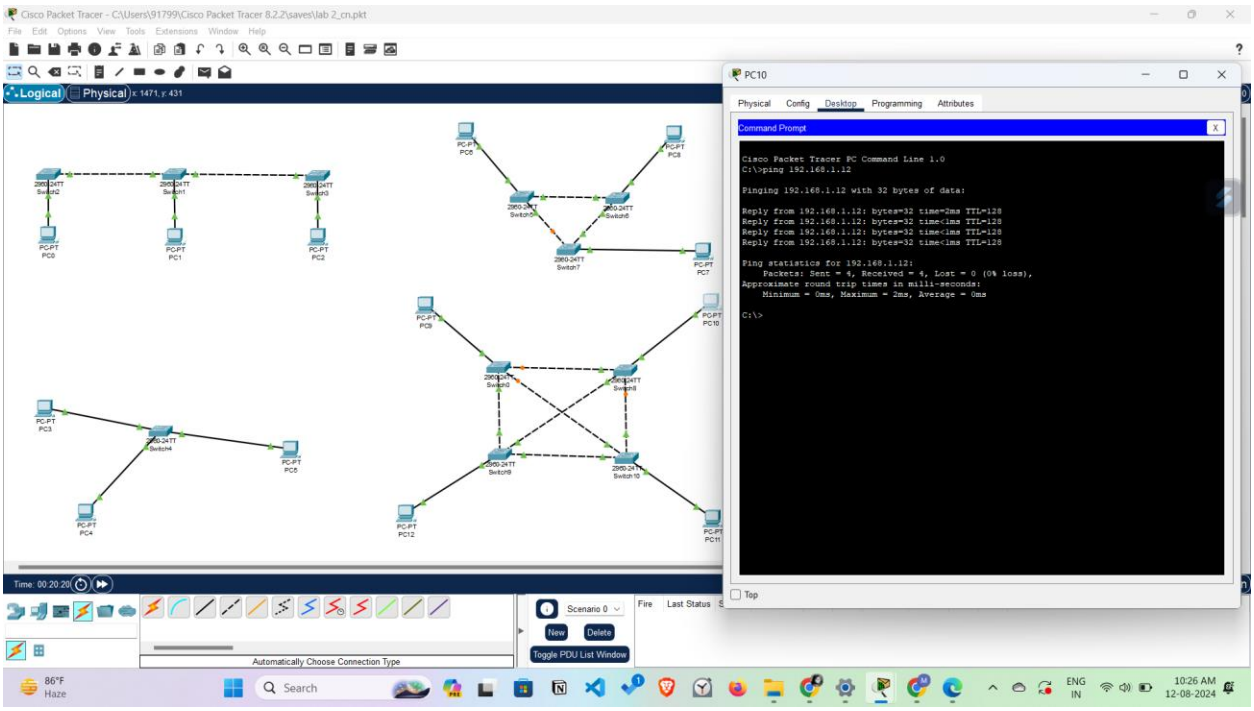
■ Connect each computer to every other computer using crossover cables.



6. Test Connectivity:

■ For each topology, assign IP addresses to the computers.

■ Use the “ping” command to test connectivity between all computers.


Cisco Packet Tracer - C:\Users\91799\Cisco Packet Tracer 8.2.2\saves\lab 2_cn.pkt
File Edit Options View Tools Extensions Window Help
Logical
Physical
PC10
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.12
Pinging 192.168.1.12 with 32 bytes of data:
Reply from 192.168.1.12: bytes=32 time=2ms TTL=128
Reply from 192.168.1.12: bytes=32 time<1ms TTL=128
Reply from 192.168.1.12: bytes=32 time<1ms TTL=128
Reply from 192.168.1.12: bytes=32 time<1ms TTL=128
Ping statistics for 192.168.1.12:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 2ms, Average = 0ms
C:\>
Top
Time: 00:20:20
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Automatically Choose Connection Type
86°F
Haze
Search
ENG
IN
10:26 AM
12-08-2024