

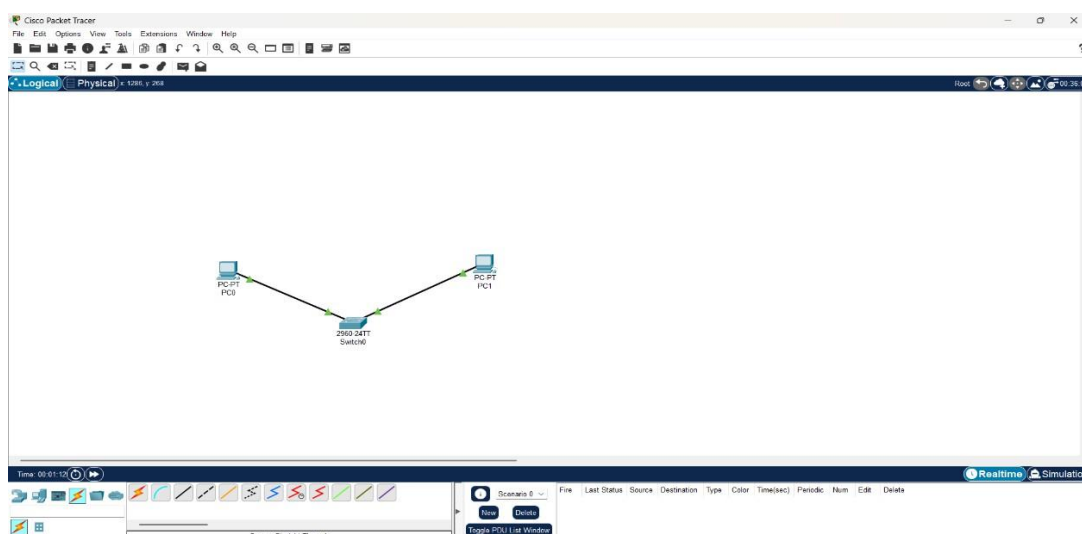
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Class/Section	8501A/S06
Ex. No:	1
Name of the Experiment	Study of Network Tool – Packet Tracer
Google Drive link of the packet tracer file (give view permission):	https://drive.google.com/drive/folders/1FuCTvBTUh5XnyRgpvwUWLt9ISQ4OYKs?usp=drive_link

1. Device Requirements:

1. Switch
2. PC0
3. PC1
4. Wires

2. Network Diagram for your experiment (draw the diagram either hand drawing/ms paint or any other drawing tools)

3. Network Diagram (packet tracer diagram before configuration):

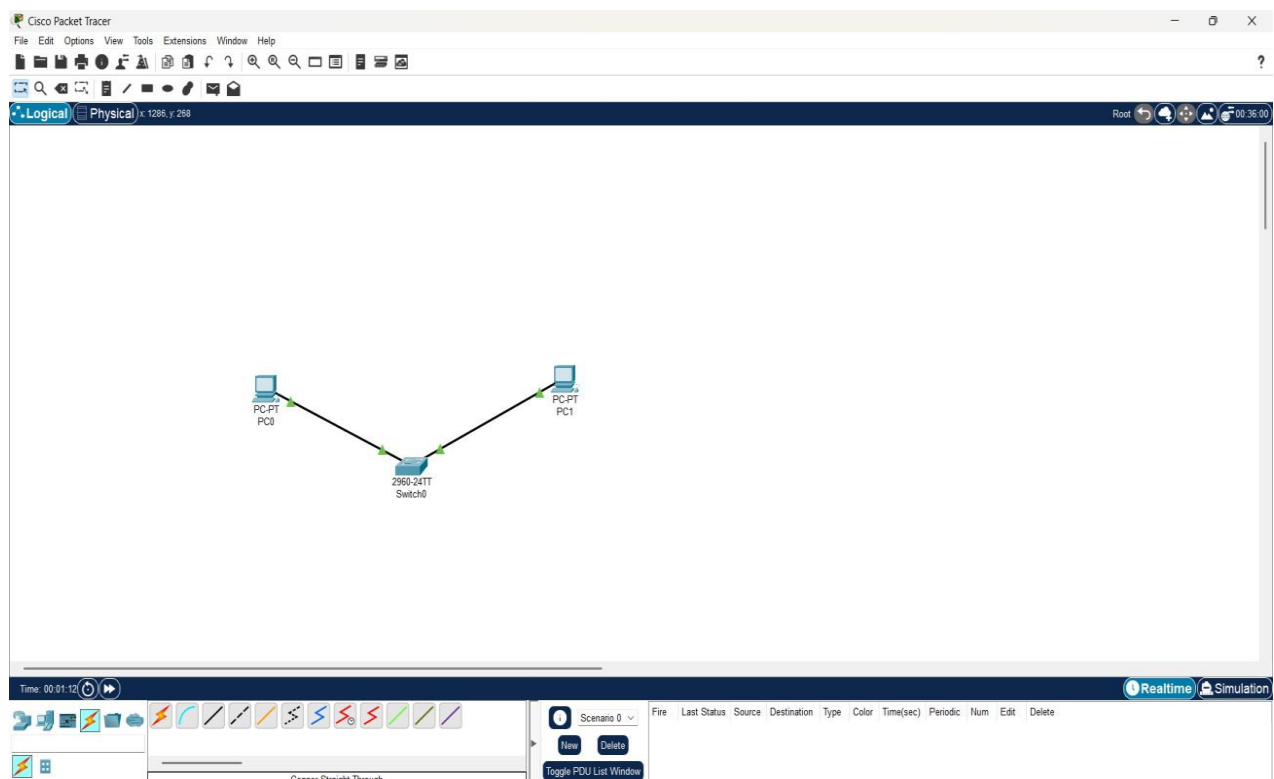


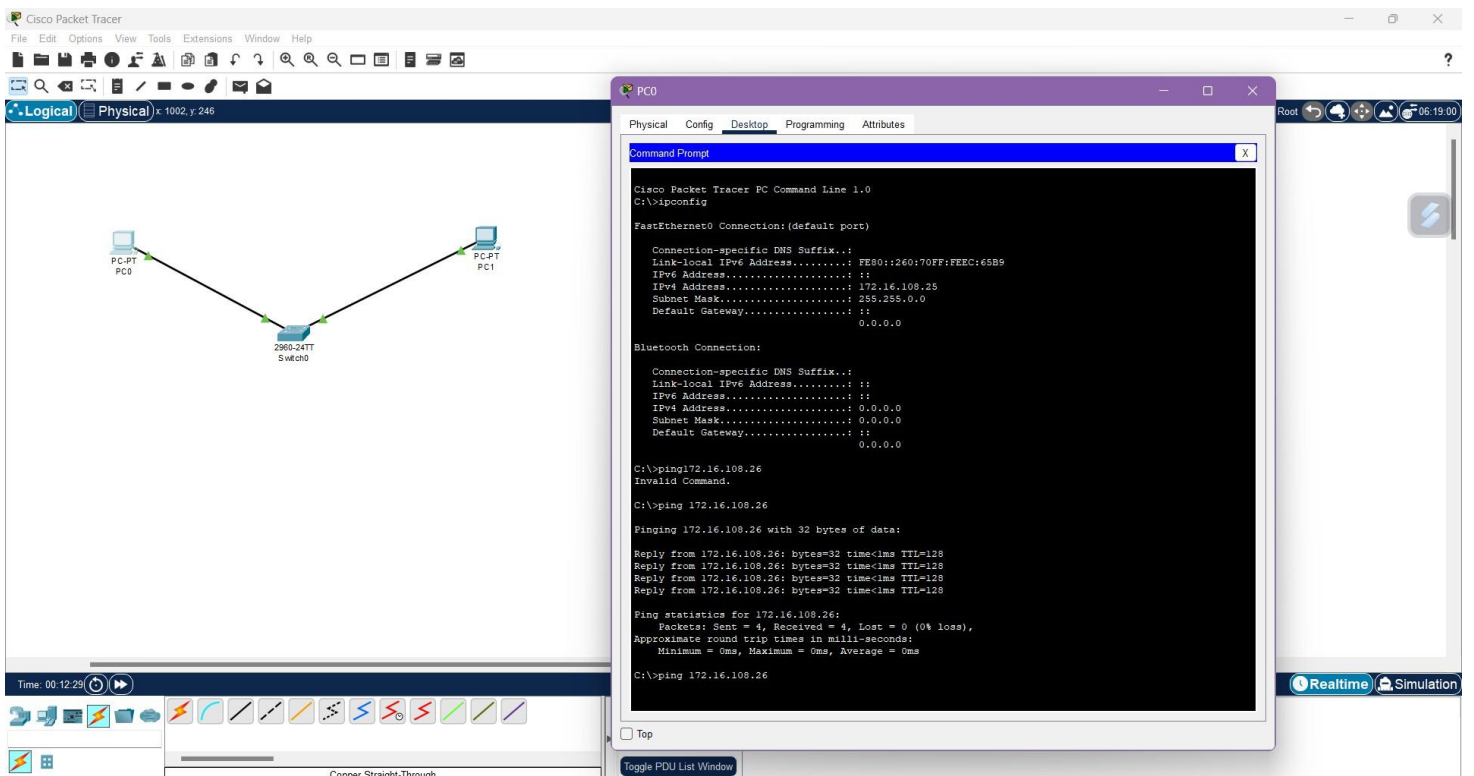
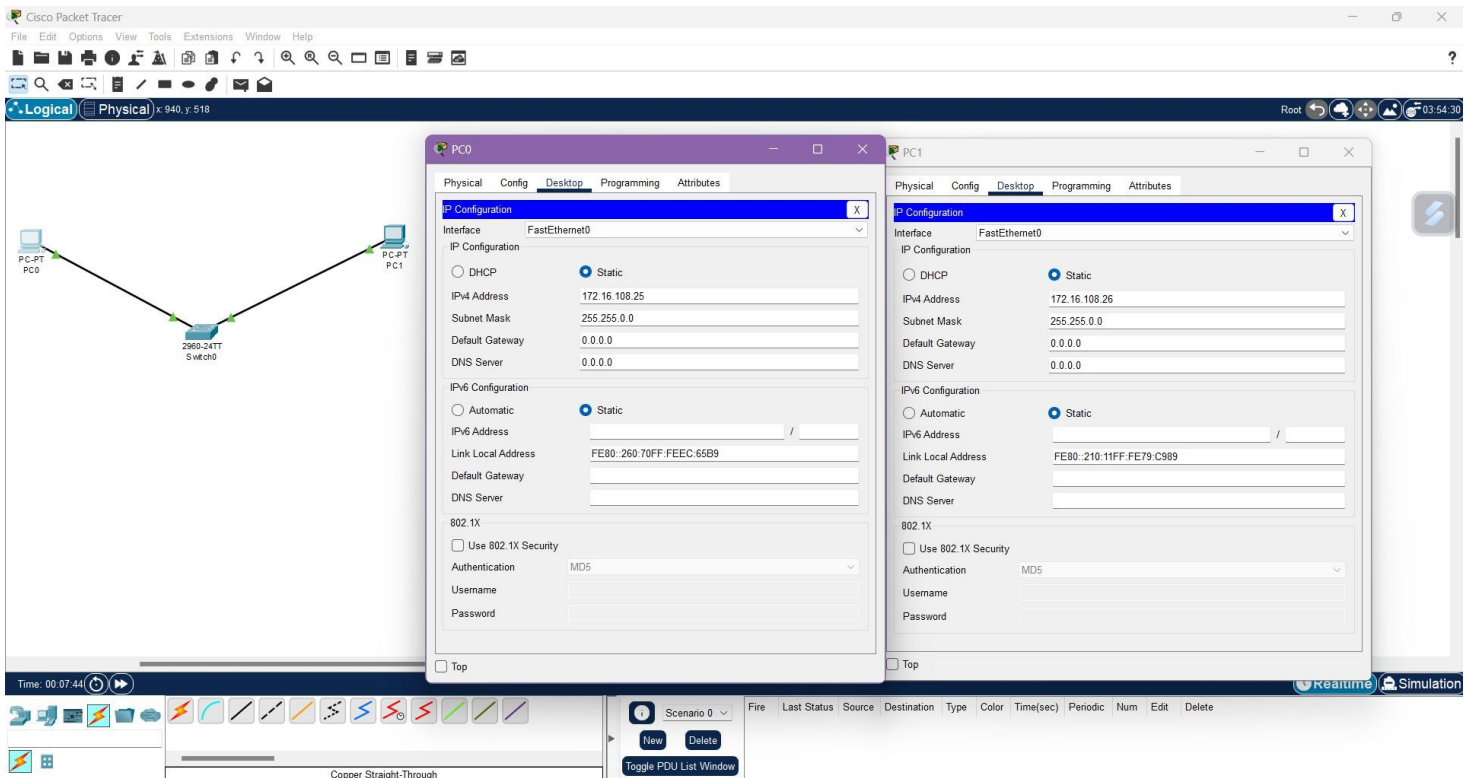
4. Configuration details:

Device Name	Interface Name	IP Address	Subnet mask
PC0	Fa0	172.16.108.25	255.255.0.0
PC1	Fa0	172.16.108.26	255.255.0.0
Switch	Fa0		

5. Commands used in each of the diagram (if any):

1. Ipconfig
2. Ping

6. Output Diagram (Minimum 3 screenshot):**Network Diagram**



The screenshot shows the Cisco Packet Tracer interface. The network topology consists of two PCs (PC-PT PC0 and PC-PT PC1) connected to a 2960-24TT Switch. A command prompt window is open on PC1, displaying the following configuration and output:

```

Connection-specific DNS Suffix...:
Link-local IPv6 Address...: FE80::210:11FF:FE79:C989
IPv6 Address...: ::
IPv4 Address...: 172.16.108.26
Subnet Mask...: 255.255.0.0
Default Gateway...: ::
0.0.0.0

Bluetooth Connection:
Connection-specific DNS Suffix...:
Link-local IPv6 Address...: ::
IPv6 Address...: ::
IPv4 Address...: 0.0.0.0
Subnet Mask...: 0.0.0.0
Default Gateway...: ::
0.0.0.0

C:\>ping 172.16.108.25

Pinging 172.16.108.25 with 32 bytes of data:

Reply from 172.16.108.26: bytes=32 time=1ms TTL=128
Reply from 172.16.108.25: bytes=32 time<1ms TTL=128
Reply from 172.16.108.25: bytes=32 time<1ms TTL=128
Reply from 172.16.108.25: bytes=32 time<1ms TTL=128

Ping statistics for 172.16.108.25:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>

```

Assigning IP Address

The screenshot shows the Cisco Packet Tracer interface with the Event List panel open. The network topology remains the same. The Event List panel displays the following events:

Vis.	Time(sec)	Last Device
0.475	--	
0.476	Switch0	
0.476	Switch0	
2.476	--	
2.477	Switch0	
2.477	Switch0	
4.478	--	

The Event List Filters - Visible Events section lists the following protocols and services:

- ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

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CONCLUSION:

The study concludes that Packet Tracer is a robust and user-friendly tool for network simulation and education. It plays a critical role in preparing individuals for industry certifications and real-world network management challenges. Its capabilities, combined with its accessibility, make it a cornerstone in the toolkit of network engineers and educators.

Rubrics for Experiment Assessment:

Rubrics	Good	Normal	Poor	Marks
Creation of Topology (4)	Created the topology, Identify the proper devices and making the connections (4)	Created the topology, Identify the proper devices, making the connections But missing some features (3)	Created wrong topology, Failed to Identify the proper devices and making connections (1)	
Verify the connectivity (4)	Verified the connectivity in all the levels (4)	Verified the connectivity at some levels (only some nodes) (2)	Verified the connectivity is not done. (1)	
Timely Completion (2)	Completed the lab before the allotted time (2)	Completed the lab after the deadline (1)	Did not submitted before grading (0)	
Total				

Result: Thus the Study of Network Tool - Packet Tracer has been done successfully.