

DATA COMMUNICATION AND NETWORKING PRACTICAL -CAP 276

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ROLL NO – 64 (DOC14)

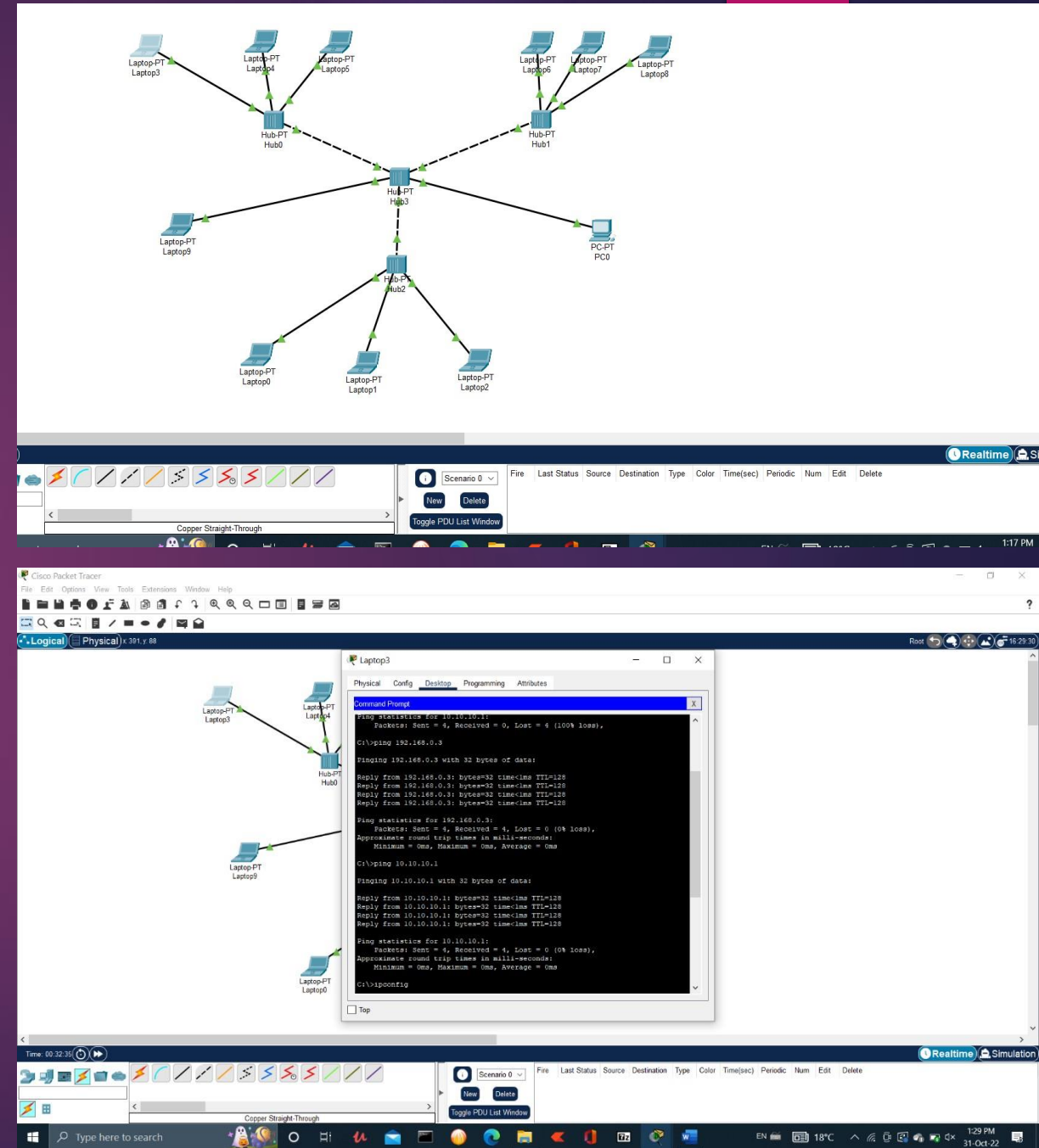
REG NO - 12221979

Q1.TREE TOPOLOGY

Step 1: First, open the Cisco packet tracer desktop and select the devices given below:

Step 2: Configure the PCs (hosts) with IPv4 address and Subnet Mask according to the IP addressing table given above.

Step 3: Verify the connection by ping command.



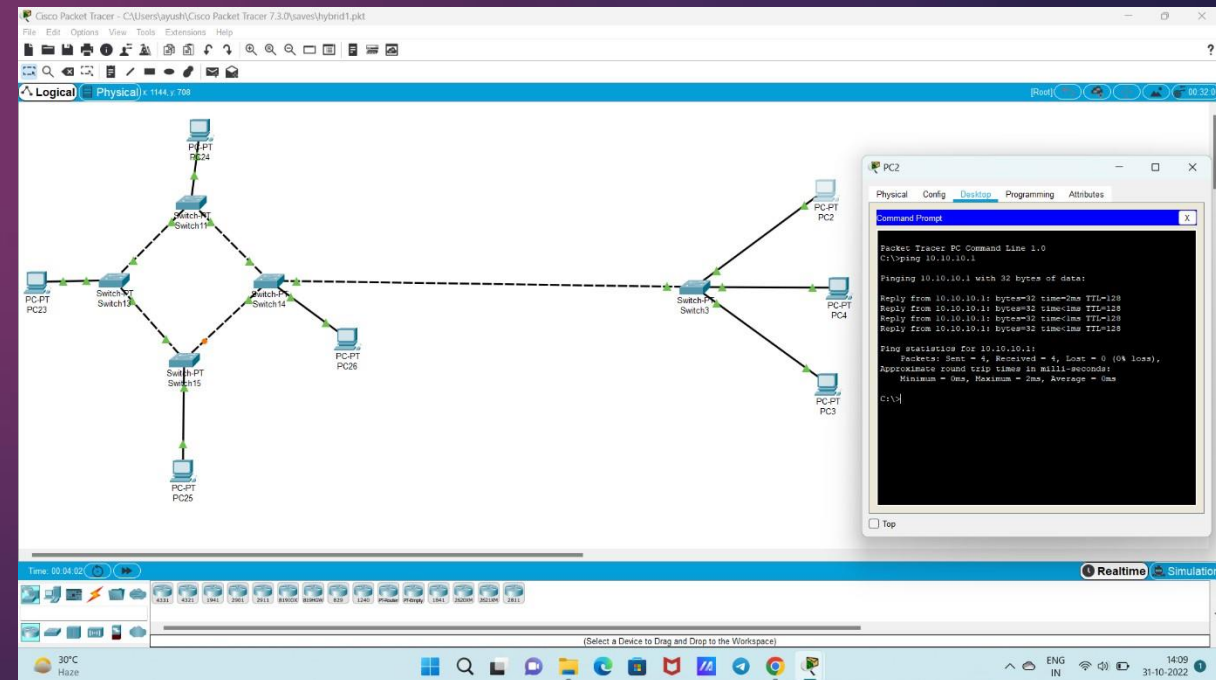
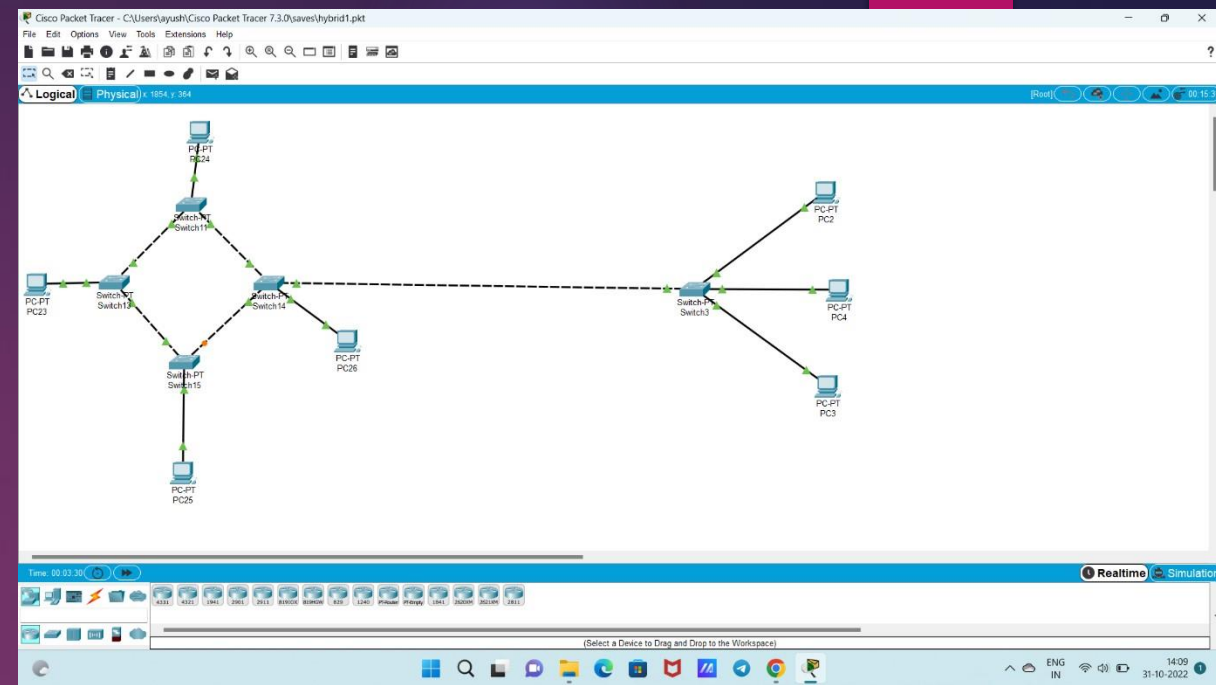
Q2. Hybrid topology using ring and tree topology.

Step 1: First, open the cisco packet tracer desktop and select the devices

Step 2: Configure the PCs (hosts) with IPv4 address and Subnet Mask according to the IP addressing table given above.

Step 3: Verify the connection by ping command.

- Use the ping command to verify the connection.
- We will check, if we are getting any replies or not.
- As we can see here getting replies from a targeted node on both PCs. Hence the connection is verified.

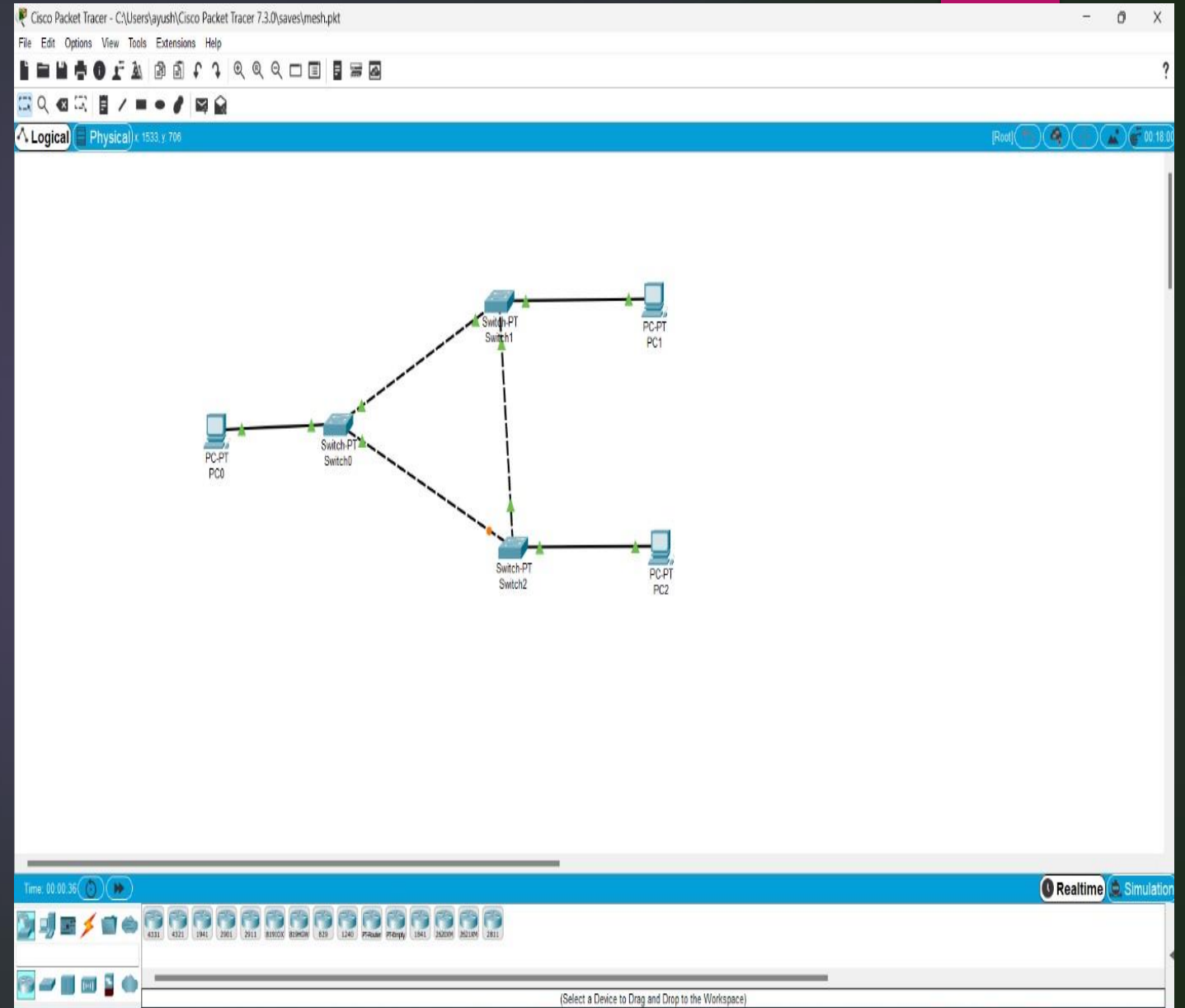


Q3. MESH TOPOLOGY

Step 1: First, open the Cisco packet tracer desktop and select the devices given below

Step 2: Configure the PCs with IPv4 address and Subnet Mask according to the IP addressing table given below.

Step 3: Verify the connection by ping command.



Cisco Packet Tracer - C:\Users\ayush\Cisco Packet Tracer 7.3.0\saves\mesh.pkt

File Edit Options View Tools Extensions Help

Logical Physical x 985, y 699

[Root] 00:36:30

PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.2

Pinging 192.168.0.2 with 32 bytes of data:

Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time=2ms TTL=128
Reply from 192.168.0.2: bytes=32 time=2ms TTL=128

Ping statistics for 192.168.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 1ms

C:\>
```

Time: 00:01:13

Realtime Simulation

Cisco Packet Tracer - C:\Users\ayush\Cisco Packet Tracer 7.3.0\saves\mesh.pkt

File Edit Options View Tools Extensions Help

Logical Physical x 1090, y 704

[Root] 00:45:00

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.983	--	Switch1	STP
	0.984	Switch1	PC1	STP
	0.984	Switch1	Switch0	STP
	0.984	Switch1	Switch2	STP
	0.985	Switch0	Switch2	STP
	0.985	Switch0	PC0	STP
	0.985	Switch2	PC2	STP

Reset Simulation ☒ Constant Delay Captured to: 0.985 s

Play Controls

Event List Filters - Visible Events

AQL 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, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgg, POP3, PPPoE, PPTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Time: 00:01:28.781

PLAY CONTROLS

(Select a Device to Drag and Drop to the Workspace)