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Subject Name - Computer Networks  
Subject Code - TMC - 203

Q1 . Problem Statement :- There is an organization A with multiple departments. Design a network for the HR department and the size of the department is 10 users. Also, show the communication between user number 1 and user number 5 of the network.

Objective :- To create a LAN within an organization using devices and ~~hub~~<sup>switch</sup> as an connector.

Description :-

Switch - A switch is a device in a computer network that connects other devices together. Multiple data cables are plugged into switch to enable communication b/w different network devices.

LAN - LAN is a local area Network that interconnects computers within a limited area such as a residence, school, etc.

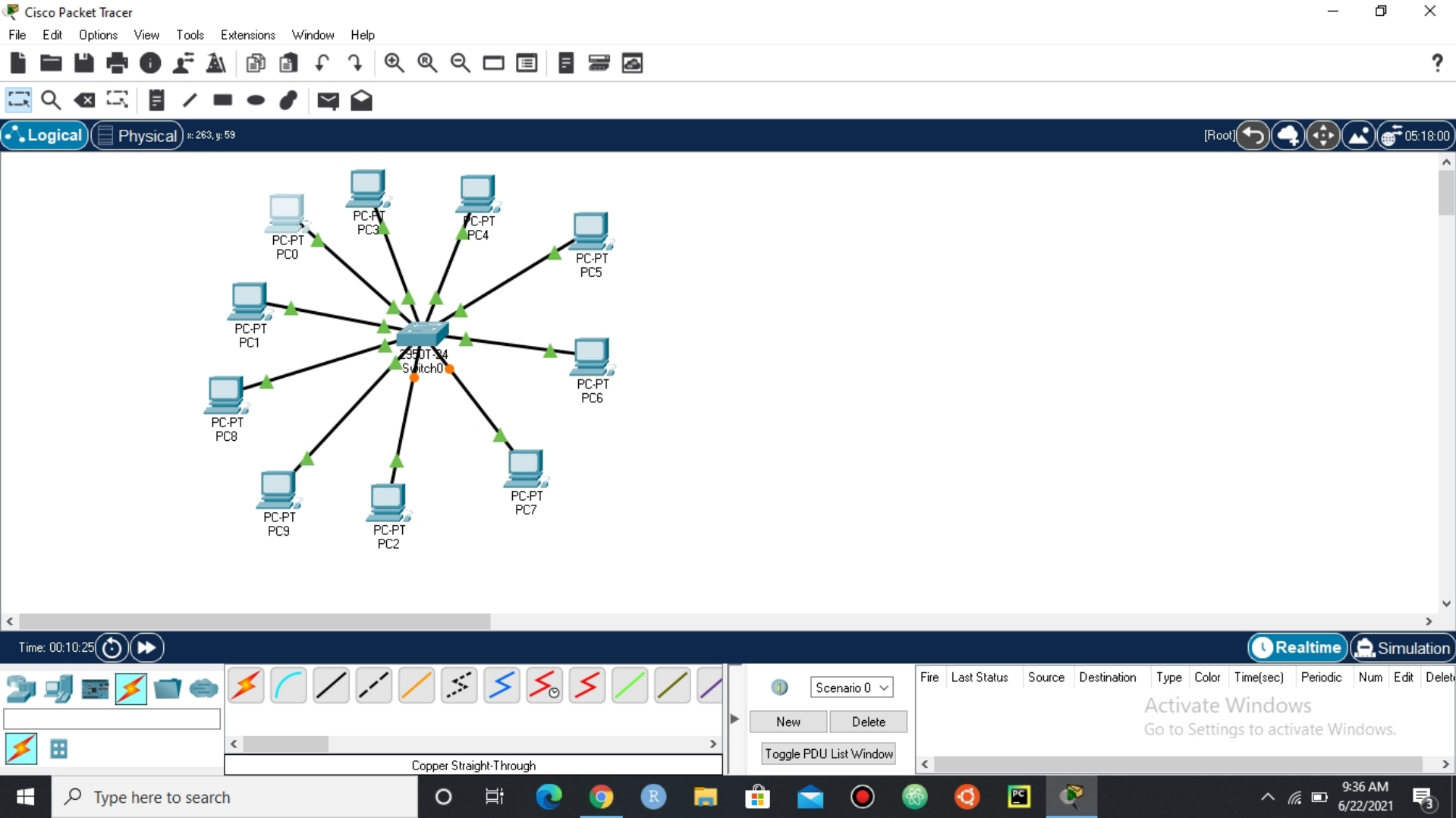
Saumya

Step 1 - Create a network design using 10 pcs and 1 switch as a connector.

Step 2 - Give IP to pcs by going to ipconfig option.

Step 3 - Using ping command in command prompt, show the connection between pc 0 and pc 4.

Saunika



Cisco Packet Tracer

File Edit Options View Tools Extensions Window

Logical Physical n: 270, y: 70

PC-PT PC0

PC-PT PC1

PC-PT PC8

PC-PT PC9

Time: 00:10:56

Copper Straight-Through

PC0

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.1

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::20A:41FF:FE9D:366D

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

Close

[Root]

05:34:30

Realtime Simulation

ination Type Color Time(sec) Periodic Num Edit Delet

Activate Windows

Go to Settings to activate Windows.

Type here to search

9:36 AM 6/22/2021

Cisco Packet Tracer

File Edit Options View Tools Extensions Window

Logical Physical 228, 122

PC-PT PC1

PC-PT PC0

PC-PT PC9

PC-PT PC8

Time: 00:16:03

Copper Straight-Through

PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.5

Pinging 192.168.1.5 with 32 bytes of data:

Reply from 192.168.1.5: bytes=32 time<1ms TTL=128
Reply from 192.168.1.5: bytes=32 time<1ms TTL=128
Reply from 192.168.1.5: bytes=32 time<1ms TTL=128
Reply from 192.168.1.5: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

☐ Top

Toggle PDU List Window

[Root]

08:14:30

Realtime Simulation

Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
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Activate Windows  
Go to Settings to activate Windows.