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Course - MCA - 'B'

Roll no. - 2001119

Subject Name - Computer Network (practical)

Subject Code - TMC-203

Q1) +

Ans 1) +

Problem Statement :- To design a network for the HR department and the size of the department. And, to show the communication between users.

Objectives :- The objective of this experiment is to satisfy data communication requirements while minimizing expense. And to design a network between a switch and to PC's and show communication between PC1 and PC5.

Description :-

LAN: LAN is a local area network that interconnect computers within a limited area such as an organisation, school, lab, university or office building.

Rankit

Step 1: → Network design

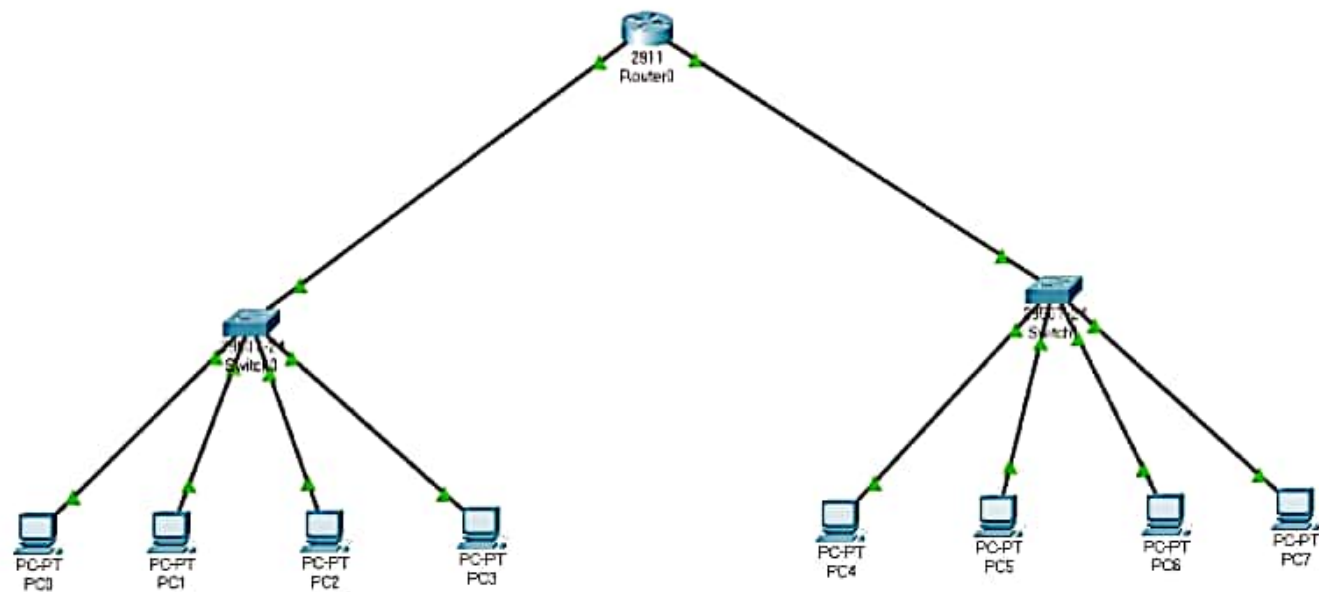
Step 2: → IP configuration

setting the IP address for PC's

Step 3: → Connectivity

using the ping command to check the connectivity.

Ranjit



Time: 00:10:00

Realtime Simulation

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

Scenario 0

New Delete

Toggle PDU List Window

Copper Straight-Through

PC0

Physical Config Desktop Programming Attributes

IP Configuration

InterfaceFastEthernet0

IP Configuration

☐ DHCP

☒ Static

IPv4 Address10.0.0.1

Subnet Mask255.0.0.0

Default Gateway10.0.0.5

DNS Server0.0.0.0

IPv6 Configuration

☐ Automatic

☒ Static

IPv6 Address

Link Local AddressFE80:2E3:A3FF:FE11:8EAE

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

AuthenticationMO5

Username

Password

☐ Top

GEU

PC-PT PC1

PC-PT PC1

GEU

PC-PT PC6

PC-PT PC7

Time 00:17:35.635

PLAY CONTROLS

Scenario 1

New

Delete

Toggle PDU List Window

Fire

Last Status

Source

Destination

Type

Color

Time(sec)

Periodic

Num

Edit

Delete

Event List

Realtime

Simulation

Copper Straight Through

PC4

Physical Config Desktop Programming Attributes

IP Configuration

InterfaceFastEthernet0

IP Configuration

☐ DHCP

☒ Static

IPv4 Address192.168.1.1

Subnet Mask255.255.255.0

Default Gateway192.168.1.5

DNS Server0.0.0.0

IPv6 Configuration

☐ Automatic

☒ Static

IPv6 Address

Link Local AddressFE80::202:18FF:FEA2:C30R

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

AuthenticationMD5

Username

Password

Top

GEU

PC-PT PC1

PC-PT PC1

GEU

PC-PT PC6

PC-PT PC7

Time 00:17:45.535

PLAY CONTROLS

Event List

Realtime

Simulation

Scenario 0

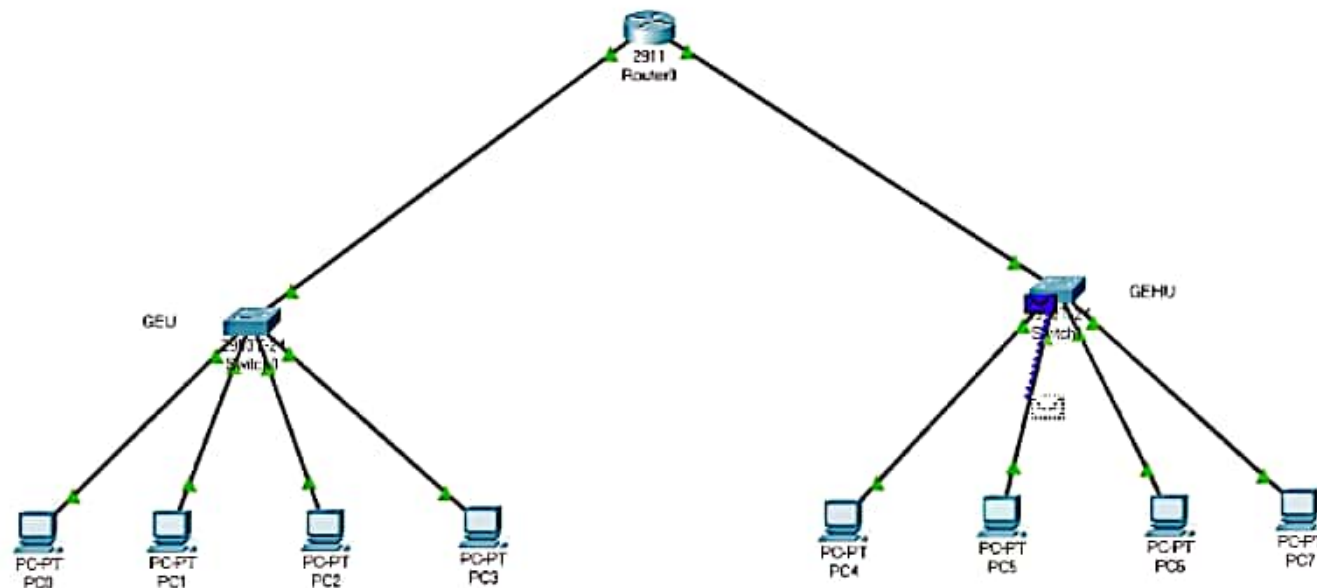
New

Delete

Toggle PDU List Window

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

Copper Straint Thruout



# Simulation Panel

## Event List

Vis	Time(sec)	Last Device	At Device	T
	0.000	-	PC0	
	0.001	PC0	Switch0	
	0.002	Switch0	Router0	
	0.003	Router0	Switch1	
	0.004	Switch1	PC5	
	0.005	PC5	Switch1	
	0.006	Switch1	Router0	
	0.007	Router0	Switch0	
	0.008	Switch0	PC0	
	0.391	-	Switch1	

Reset Simulation ☒ Constant Delay Captured to: 0.391 s

## Play Controls



Event List Filters - Visible Events  
 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, SCDP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Event List Realtime Simulation

Time: 00:17:46.016 PLAY CONTROLS

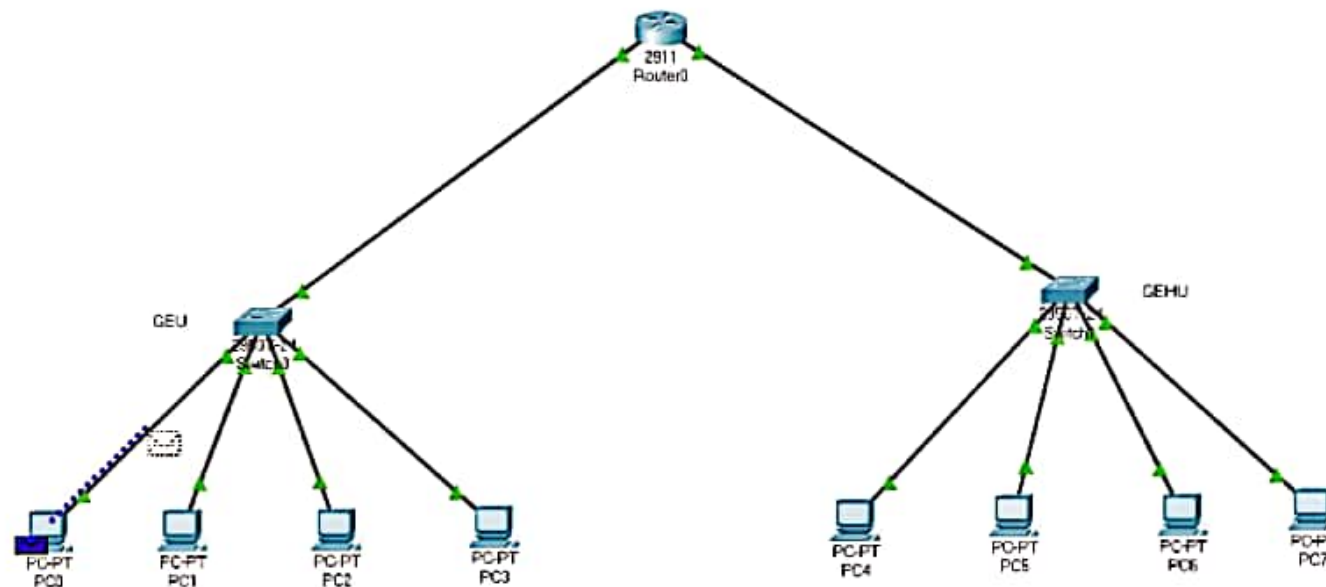


Scenario 0  
 New Delete  
 Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
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	Successful	PC0	PC5	ICMP		0.000	N	0	(edit)	(delete)
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Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device
	0.030	-	PC0
	0.031	PC0	Switch0

Reset Simulation ☒ Constant Delay Capturing

Play Controls

Event List Filters - Visible Events

AOL 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, Mavik, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPv6, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Time 00:17:45.535 PLAY CONTROLS

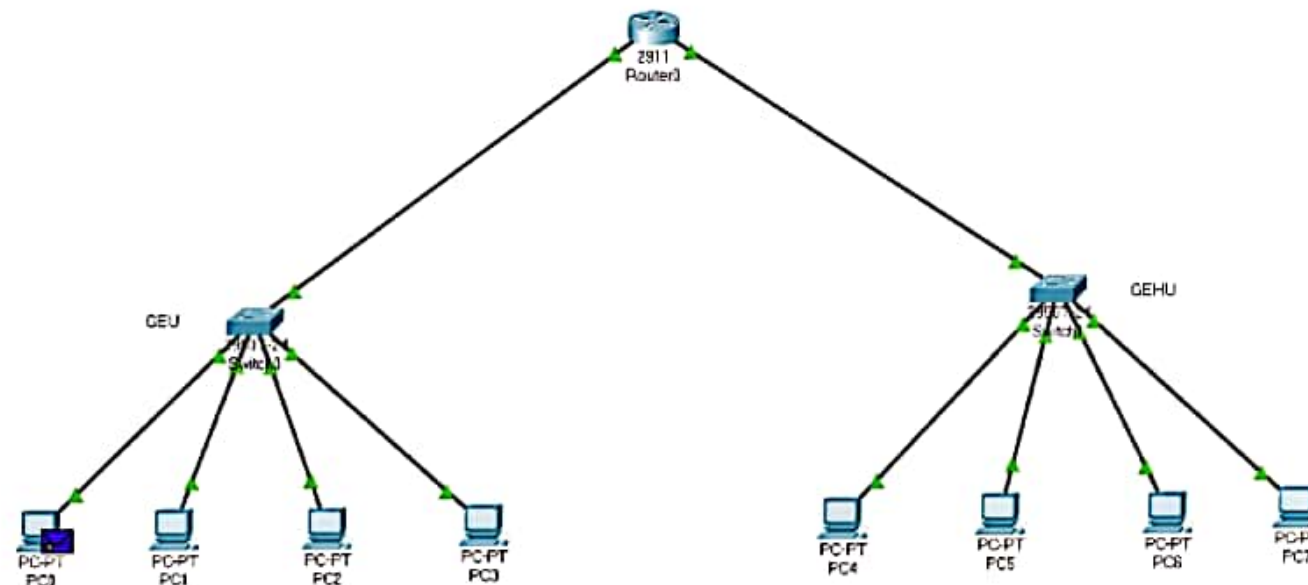
Cooper Straight Through

Scenario 0

New Delete

Toggle FDU List Window

File	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
In Progress		PC0	PC5	ICMP		0.030	N	0	(add)	(delete)



Simulation Panel

Event List

Vis.	Time(sec)	Lost Device	At Device	T
	0.000	-	PC0	
	0.001	PC0	Switch0	
	0.002	Switch0	Router0	
	0.003	Router0	Switch1	
	0.004	Switch1	PC5	
	0.005	PC5	Switch1	
	0.006	Switch1	Router0	
	0.007	Router0	Switch0	
	0.008	Switch0	PC0	
	0.381	-	Switch1	

Reset Simulation ☒ Constant Delay Captured to 0.381 s

Play Controls

Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, RTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Time: 00:17:46.018 PLAY CONTROLS

Diagram editing tools: Erase, Copy, Paste, Undo, Redo, Lasso, Line, Arrow, Text, etc.

Connect Straight-Through

Scenario 1

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC5	ICMP		0.000	N	0	(edit)	(delete)