Name → Pushpendra Rawat

Rollno → [redacted] 2001109

Sec → C

Course → MCA

Subject → Computer Networks

Q1→ Problem Statement → There is an organisation A with Multiple departments

Design a network for HR department & the size of department is 10 users Also show the communication of user 1 and user 5 of the network.

objective → To design a network b/w a switch and 10 · PCs and show the communication between PC 1 & PC 5.

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

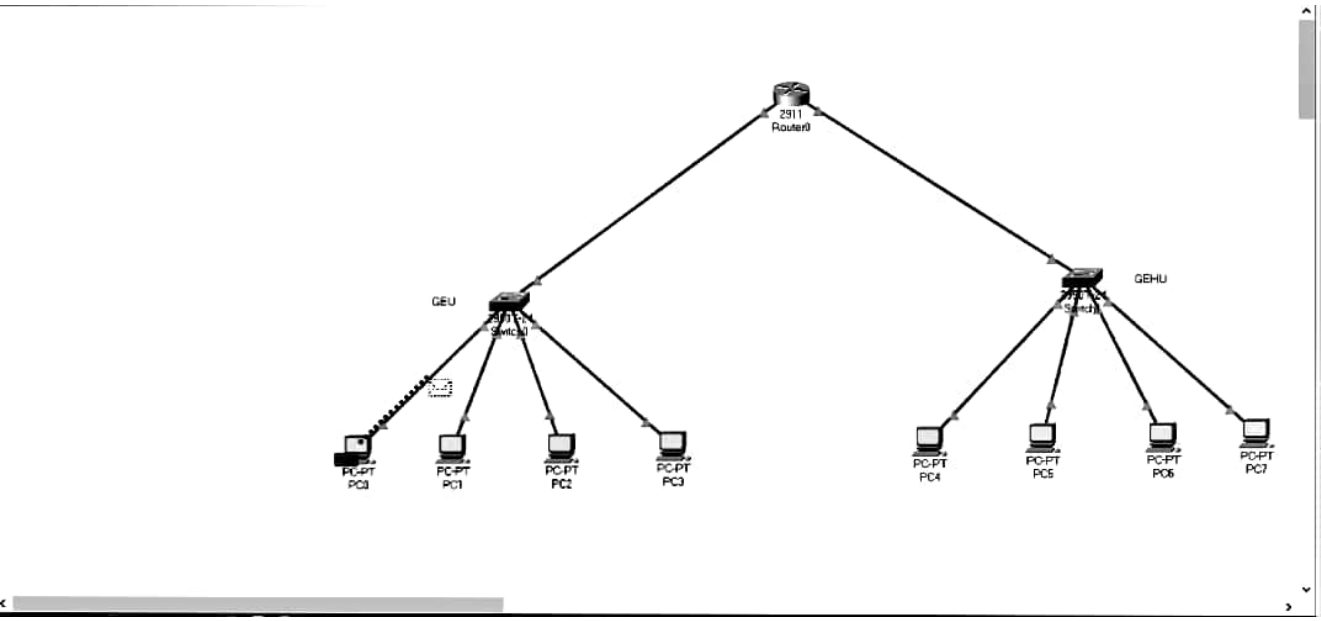
Step1- Network Design

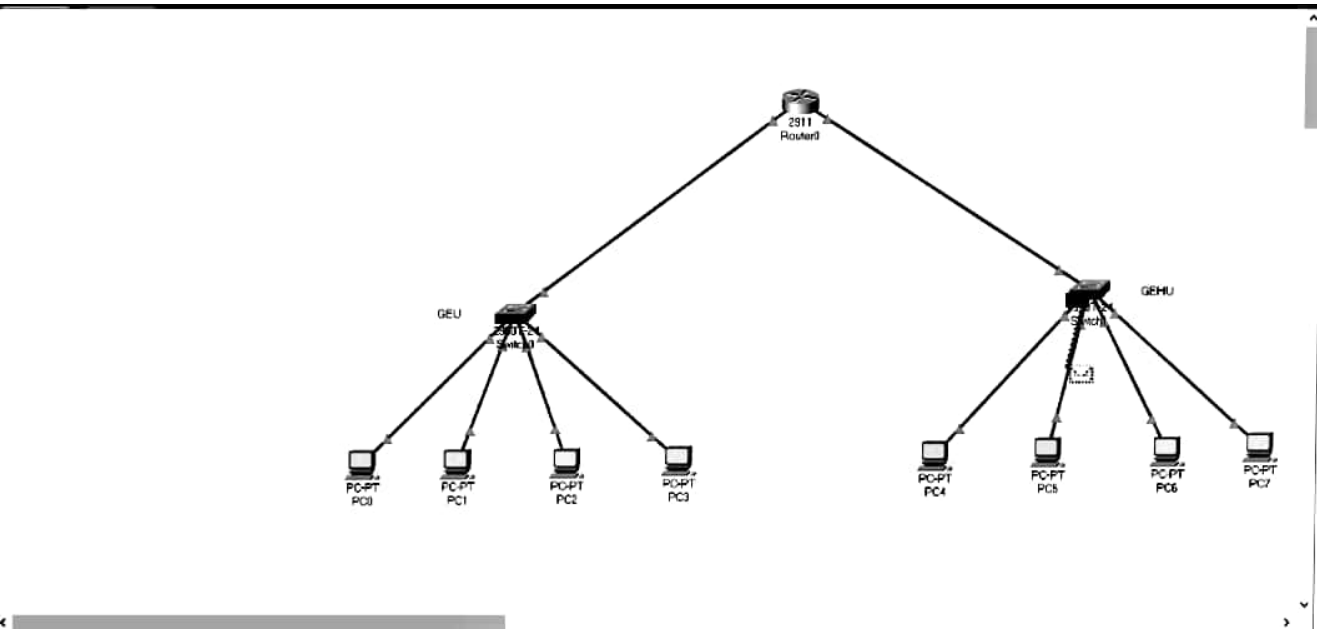
Step2 → IP Configuration

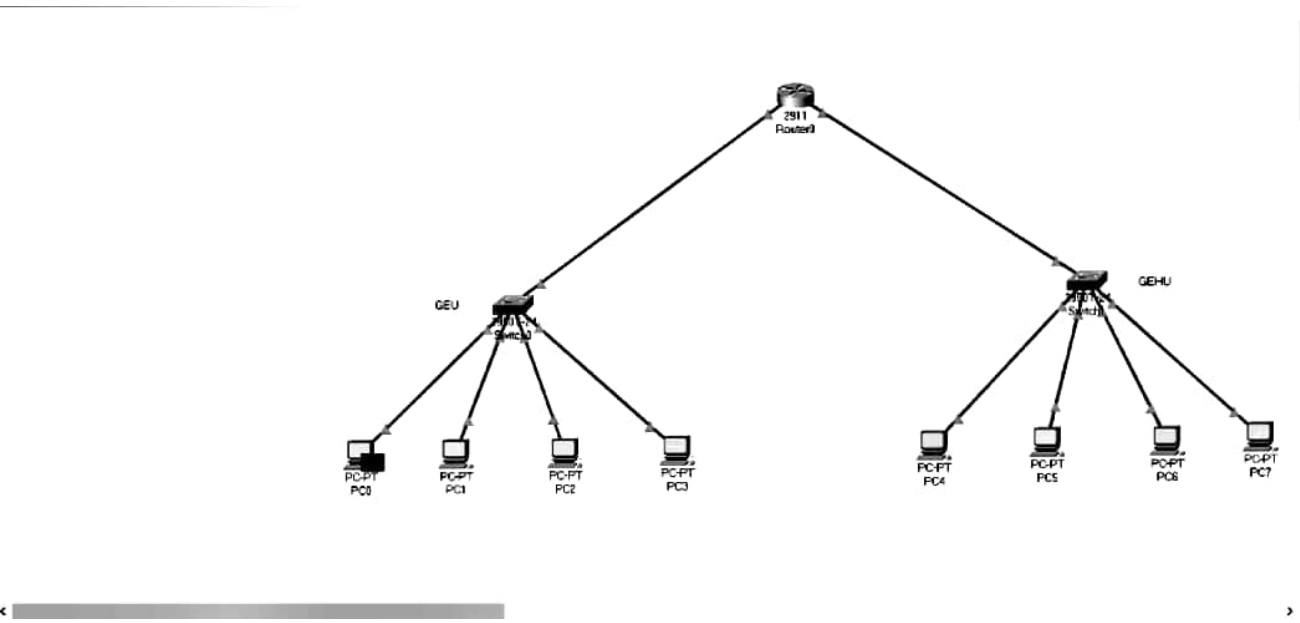
Setting the IP address for PC's.

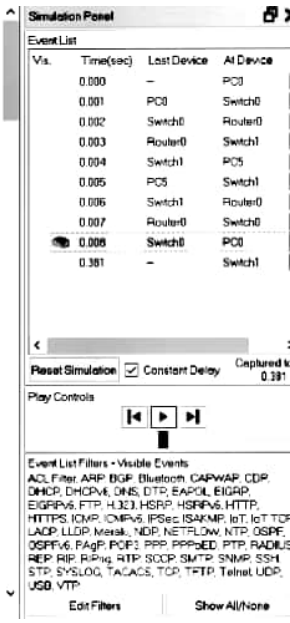
Step3 → Connectivity.

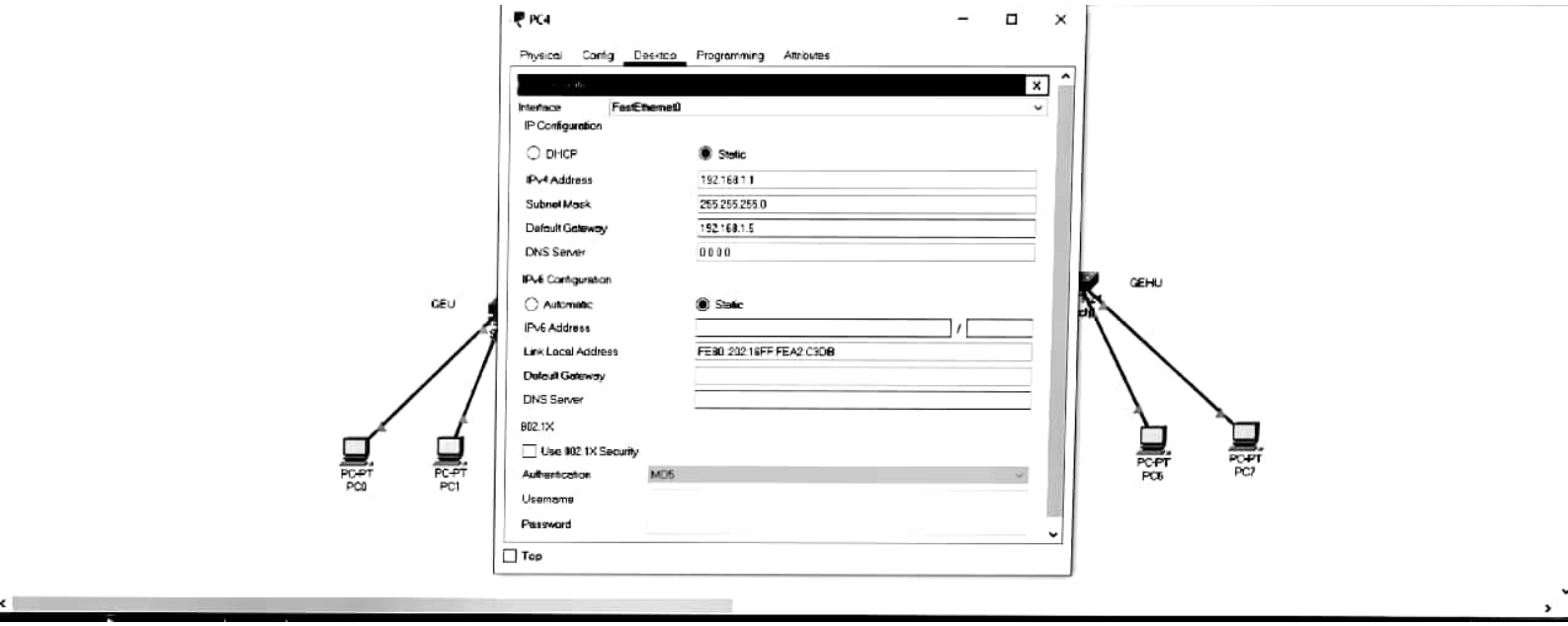
using the Ping command to check the Connectivity.

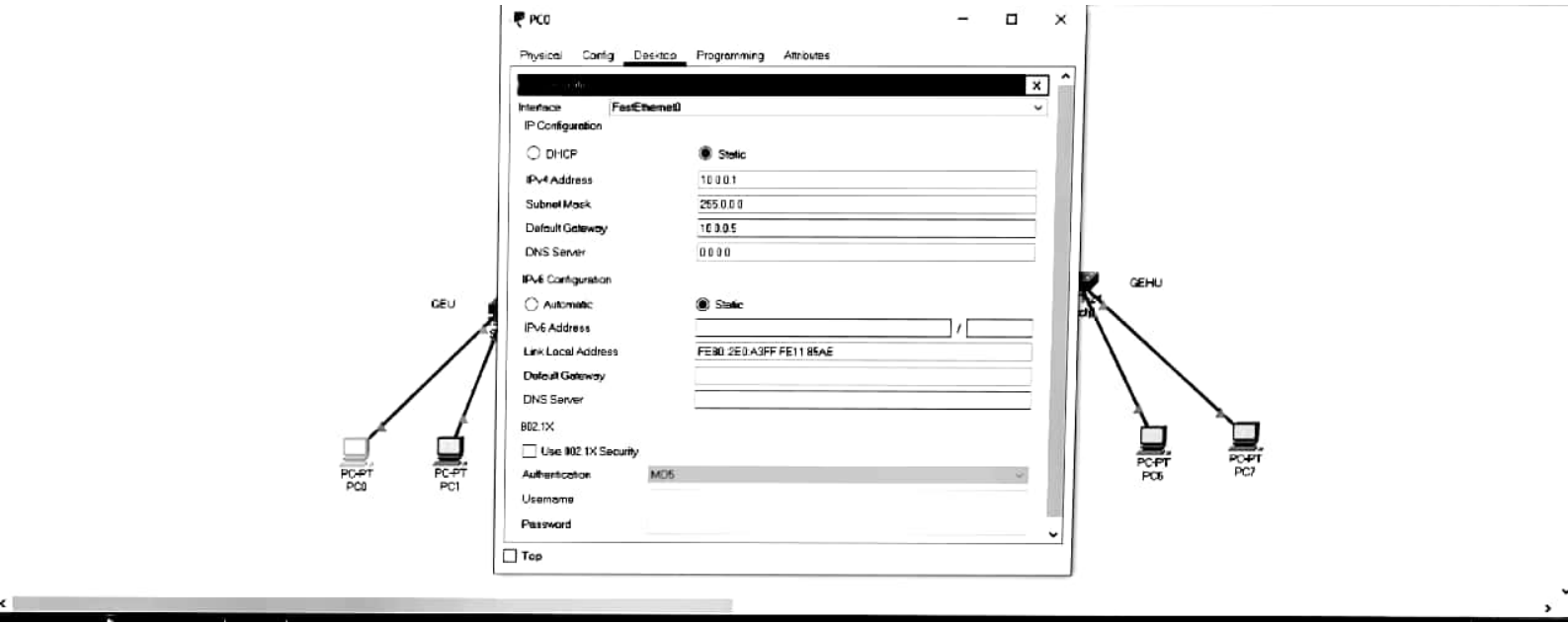


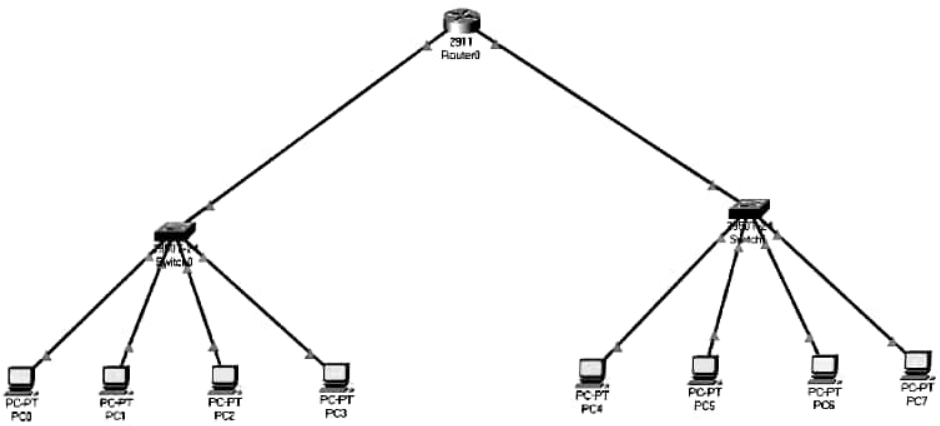












Q2-7 Objective Description → We will Create a Virtual LAN Environment in CISCO Packet Tracer that will Connect 2 user of different departments and Connection will be Established.

Steps to Perform

(a) We will place notes first :-

- 2 organisation named GFU and GEHU
- SOC Departments
- user1 & user2

(b) We will place 2 routers and 2 Switches.
Router 0, Router 1
Switch 0, Switch 1

(c) Connect both routes with serial DTE wire

(d) Connect Switch & routers with normal wire.

(e) Assign IP address to all 4 systems in both departments.

IP of GEU user1 : 192.168.10.2
IP of GFHU user2 : 192.168.20.3

(f) Now again there are 2 ways to verify communication b/w^n 2 users

→ Pinging other user IP
→ sending PDU Packet from user1 to user2.

(g) We can see now user1 & user2 connected. we are able to communicate b/w^n them via various Method.