

Practical - 5

Aim:

To configure and utilize Telnet (teletype network), SSH (Secure Socket Shell) and FTP (File Transfer Protocol) in a network

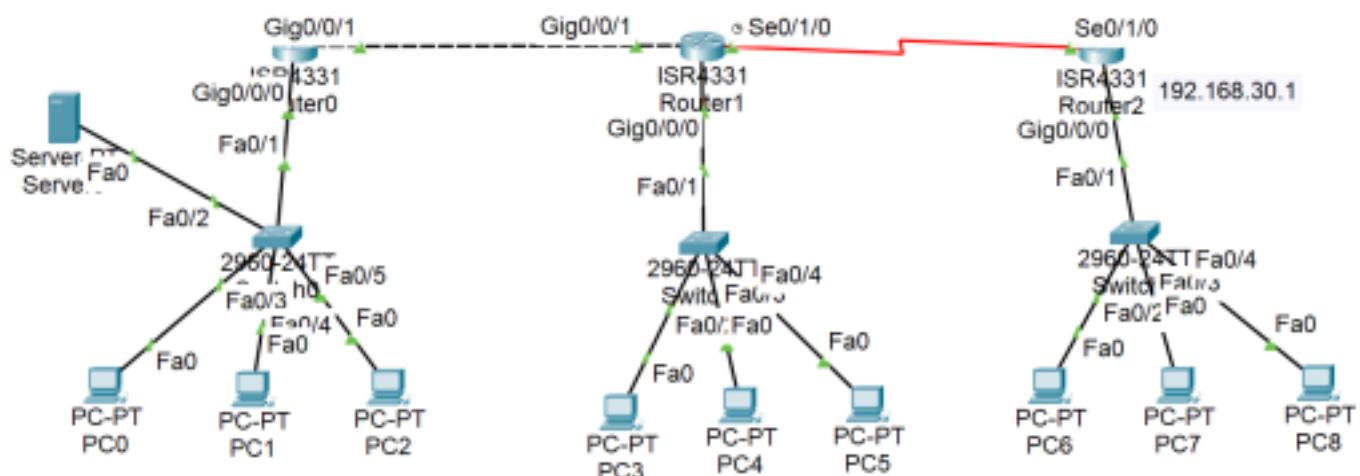
Scenario:

Design the network of an organization having 3 different departments. Make sure the below mentioned requirements must be fulfilled.

- 1) Create 3 users which will be able to get the access of the router using Telnet.
- 2) Create a single password to get the access of the router using Telnet. Configure in such a way at a time 2 users can access router at a time.
- 3) Create 3 users which will be able to get the access of the router using SSH. Configure in such a way at a time 2 users can access router at a time.
- 4) Create FTP server and perform the operation to upload and download a file from one department to other department.

Procedure:

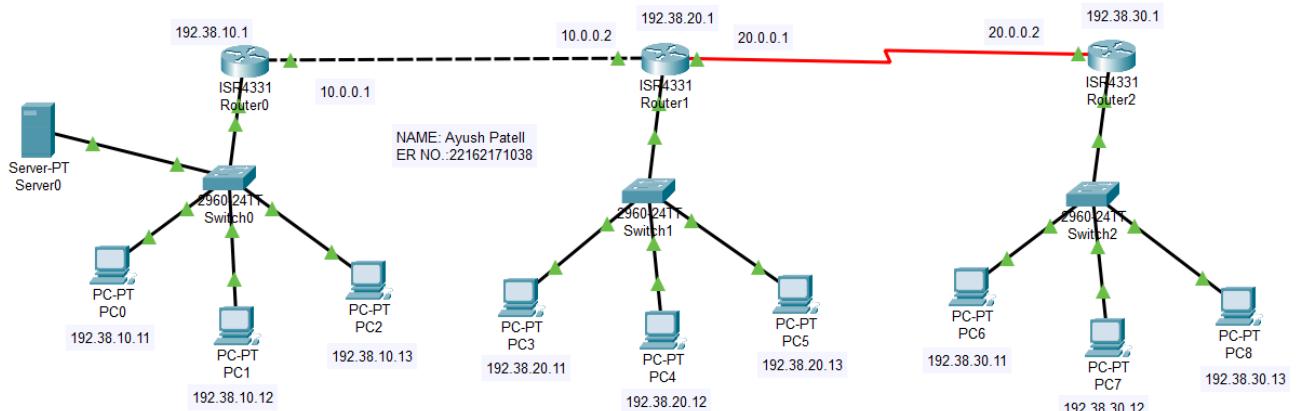
- 1) Create network as given below

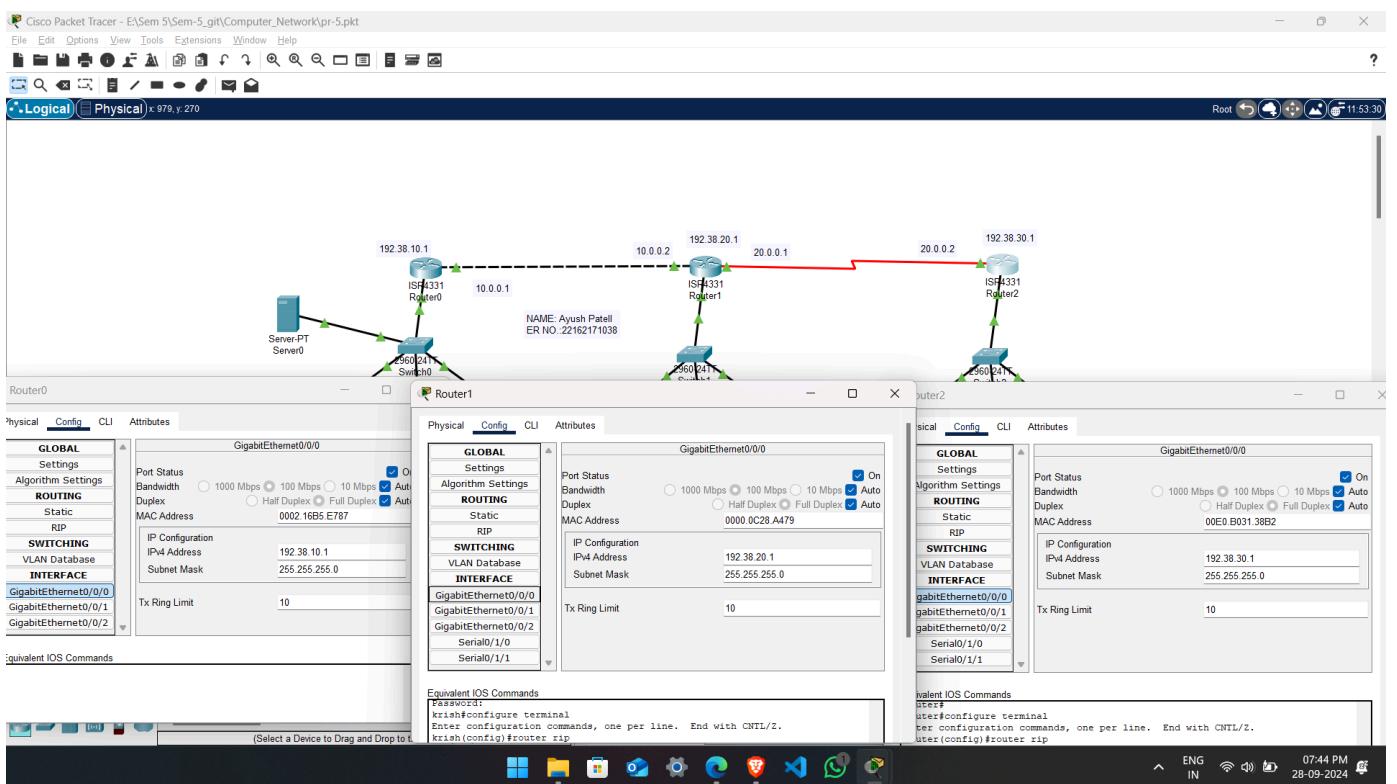
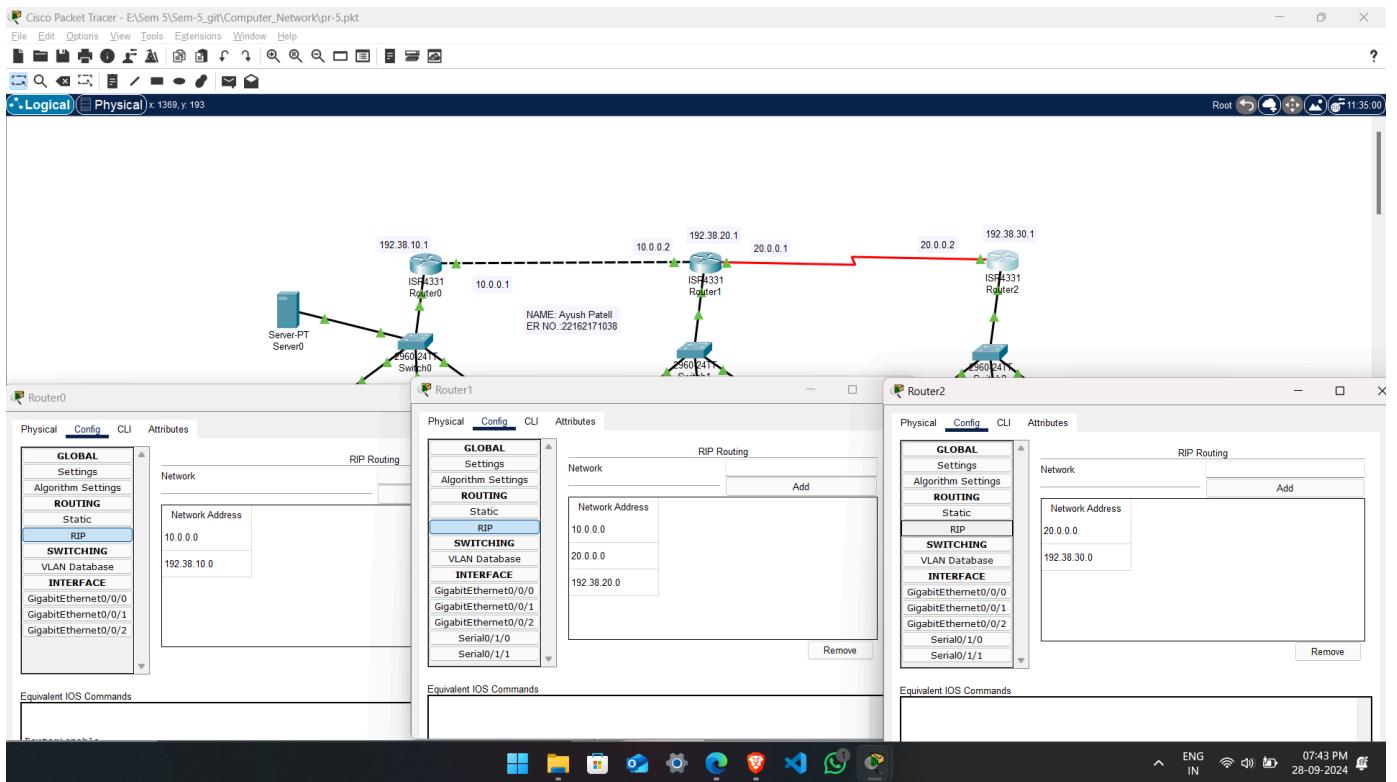


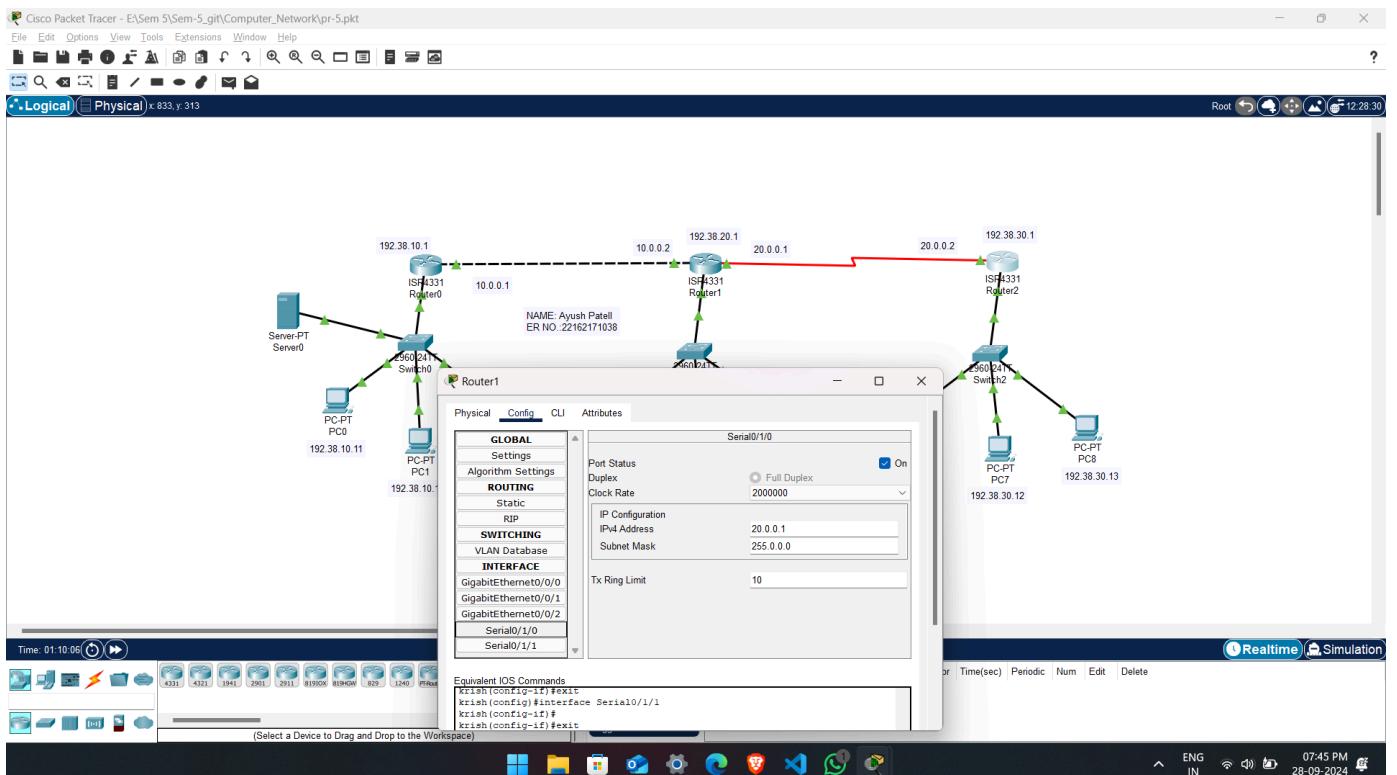
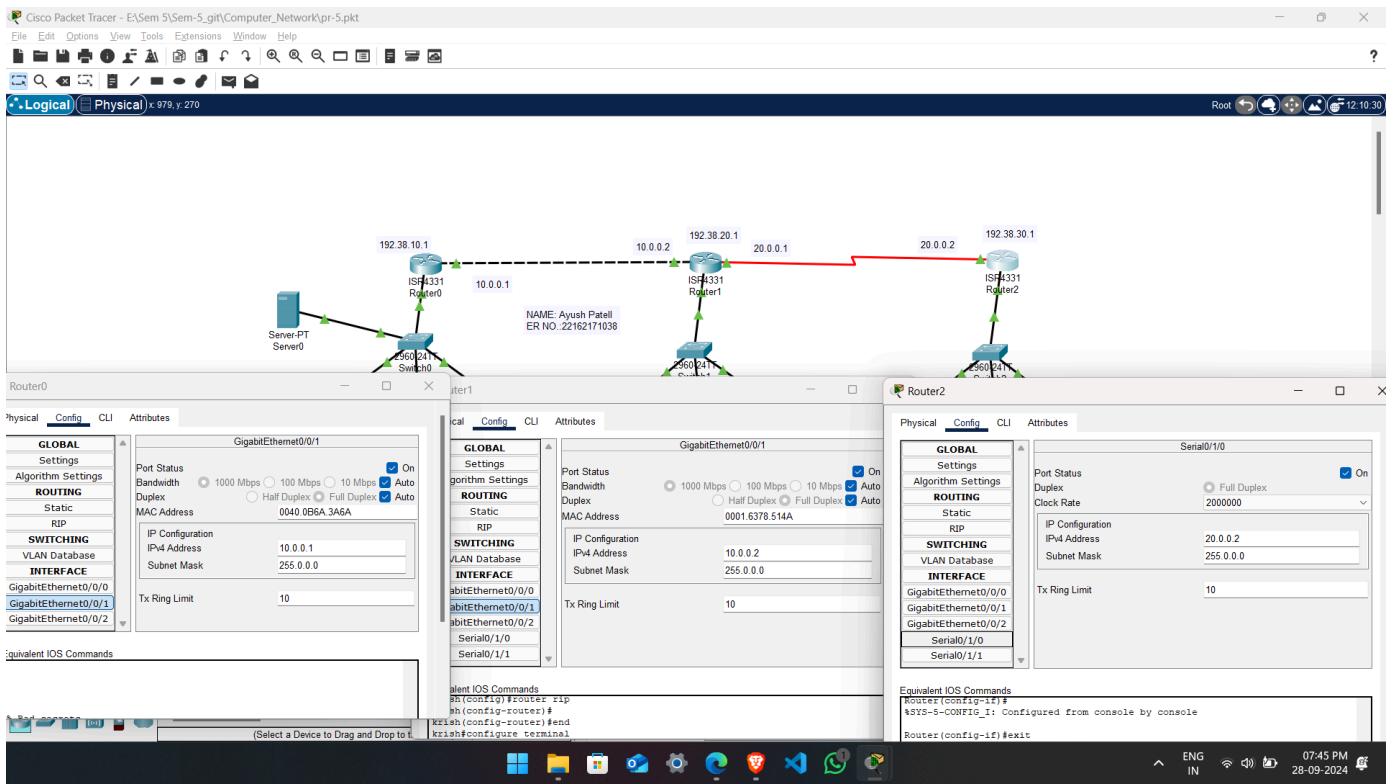
Department	Device	IP Address	Subnet Mask	Default Gateway
Dept. 1	Server	192.38.10.2	255.255.255.0	192.38.10.1
	PC0	192.38.10.11	255.255.255.0	192.38.10.1
	PC1	192.38.10.12	255.255.255.0	192.38.10.1
	PC2	192.38.10.13	255.255.255.0	192.38.10.1
Dept. 2	PC3	192.38.20.11	255.255.255.0	192.38.20.1
	PC4	192.38.20.12	255.255.255.0	192.38.20.1
	PC5	192.38.20.13	255.255.255.0	192.38.20.1
Dept. 3	PC6	192.38.30.11	255.255.255.0	192.38.30.1
	PC7	192.38.30.12	255.255.255.0	192.38.30.1
	PC8	192.38.30.13	255.255.255.0	192.38.30.1

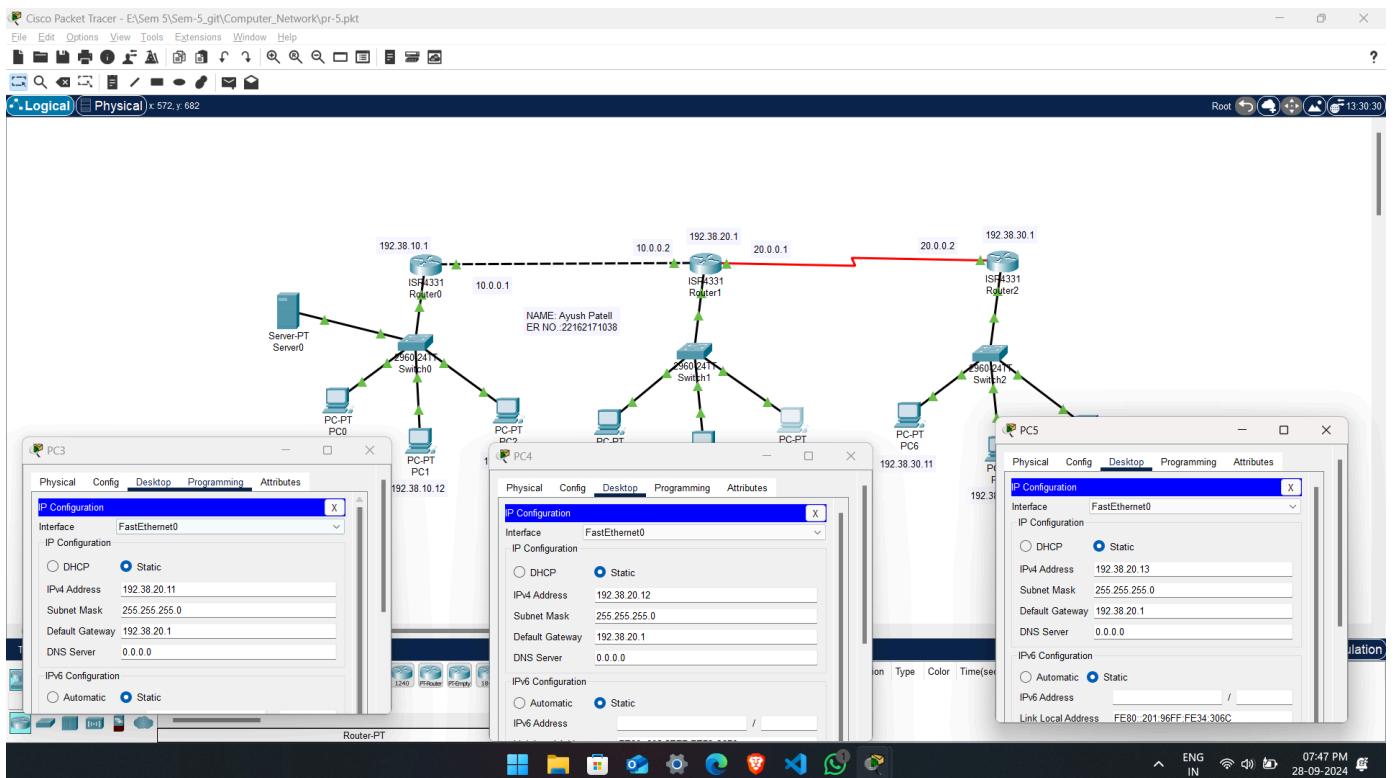
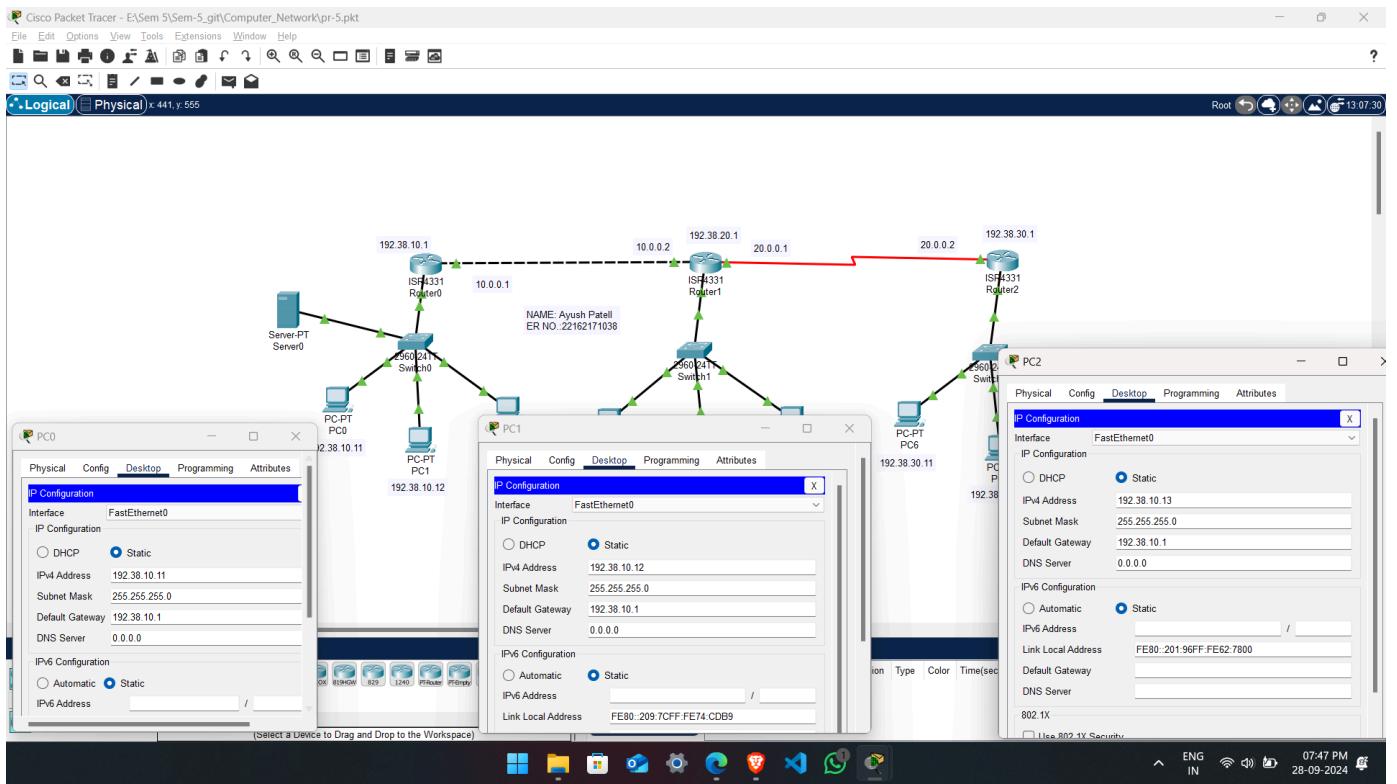
- 2) Configure IP address (All Devices, Routers)
- 3) Configure dynamic routing table (RIP in routers)
- 4) Configure TELNET on Router0
- 5) Configure SSH on Router1
- 6) Configure FTP on Server

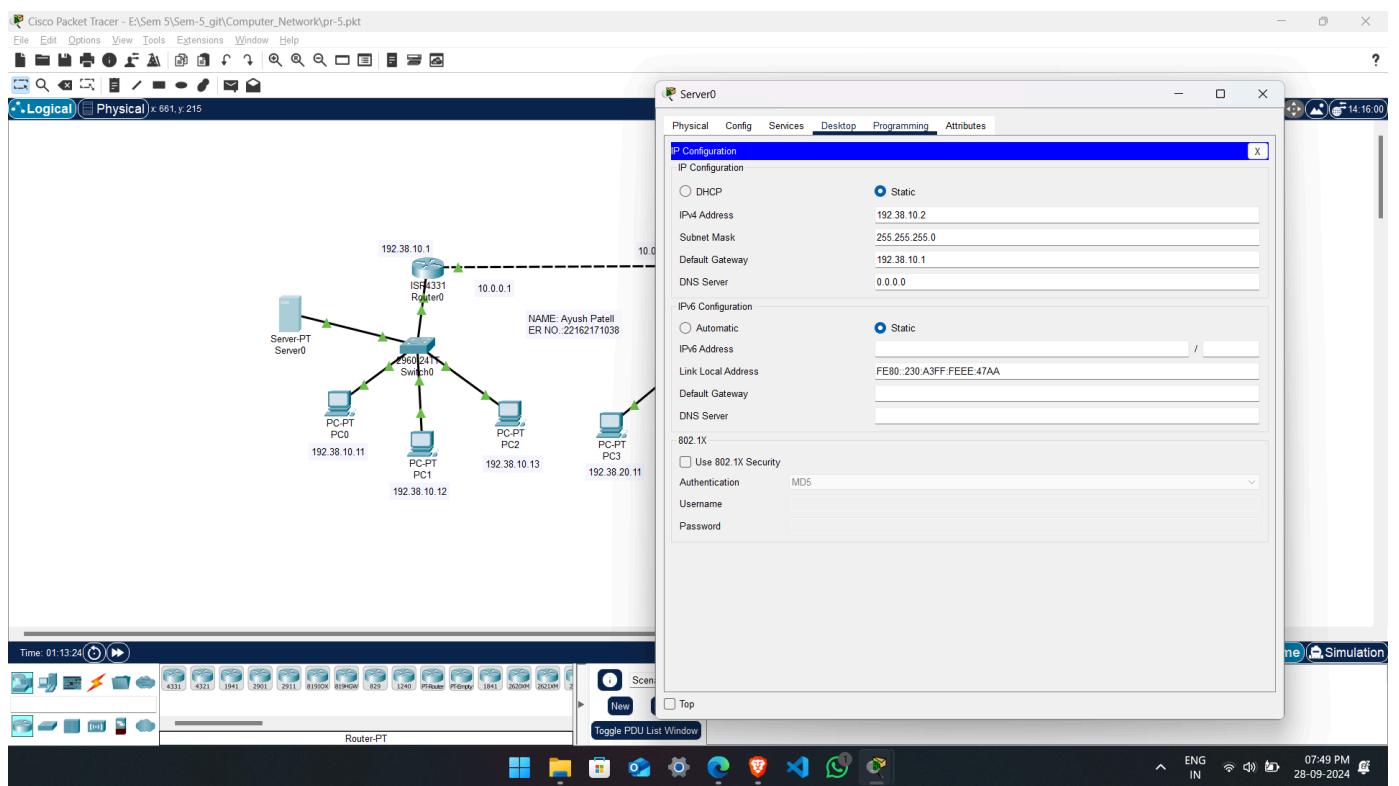
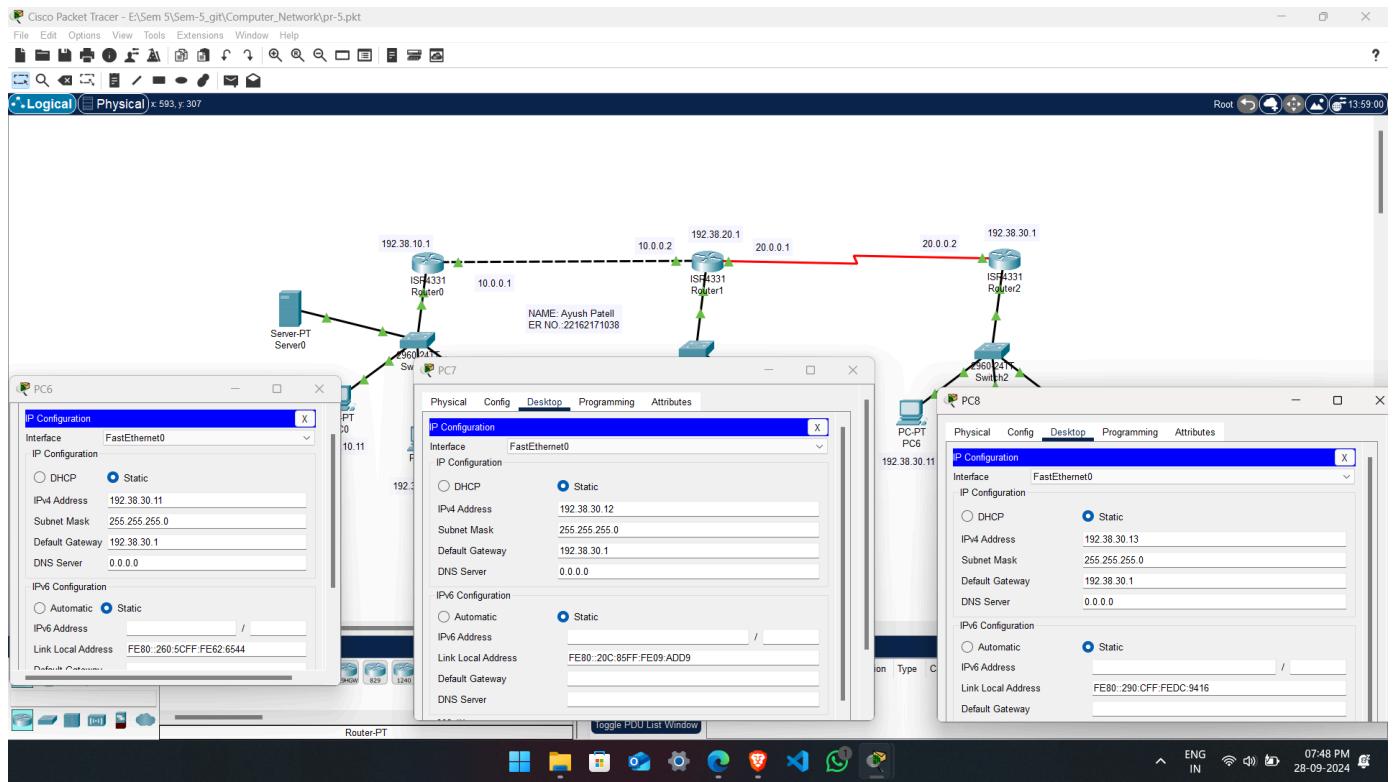
Configuration:



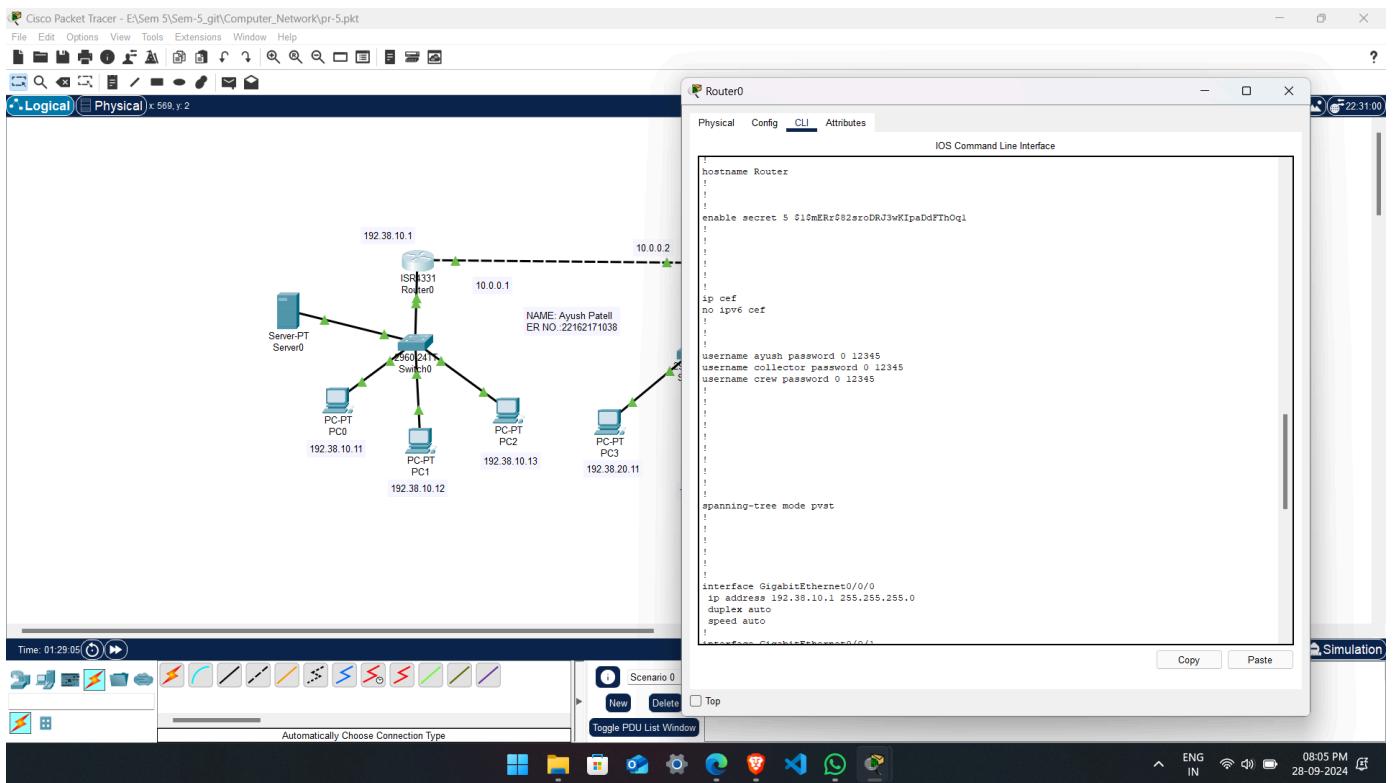
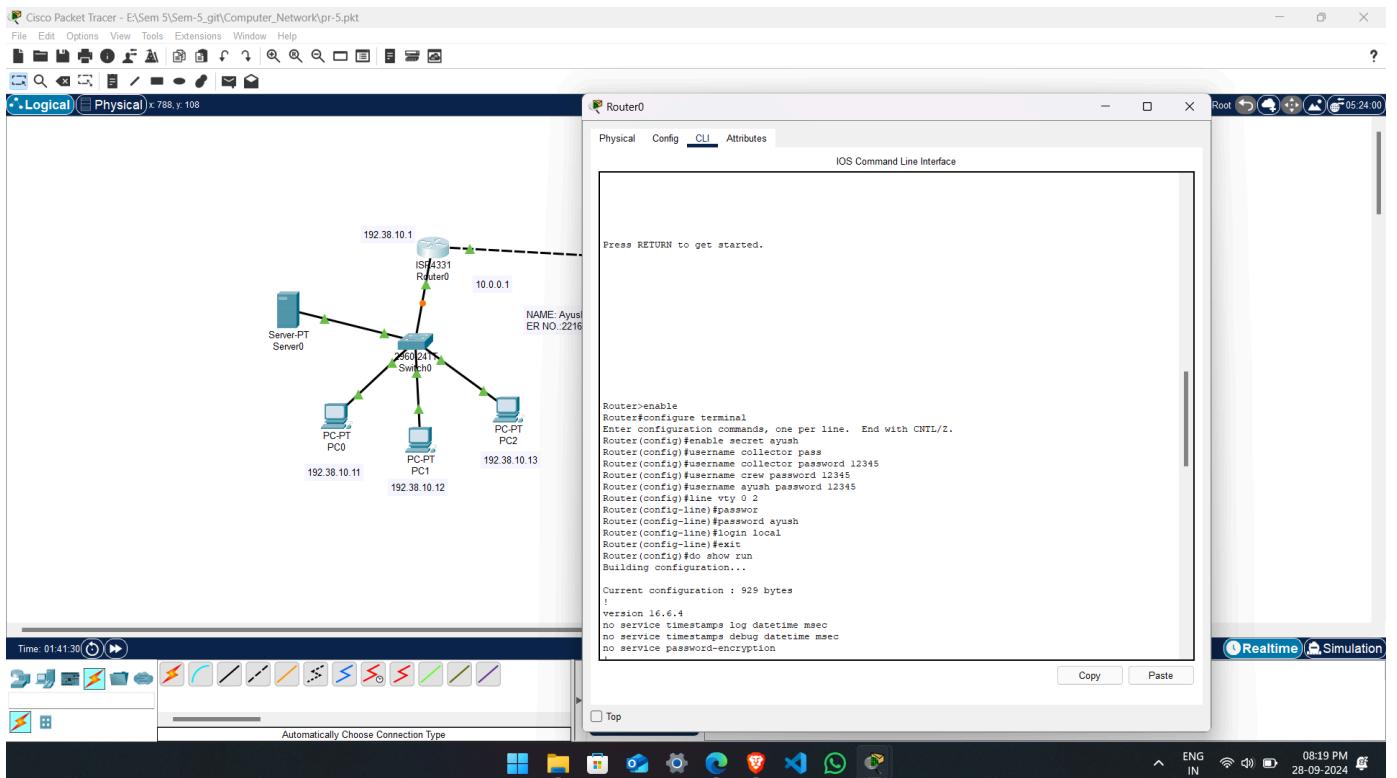


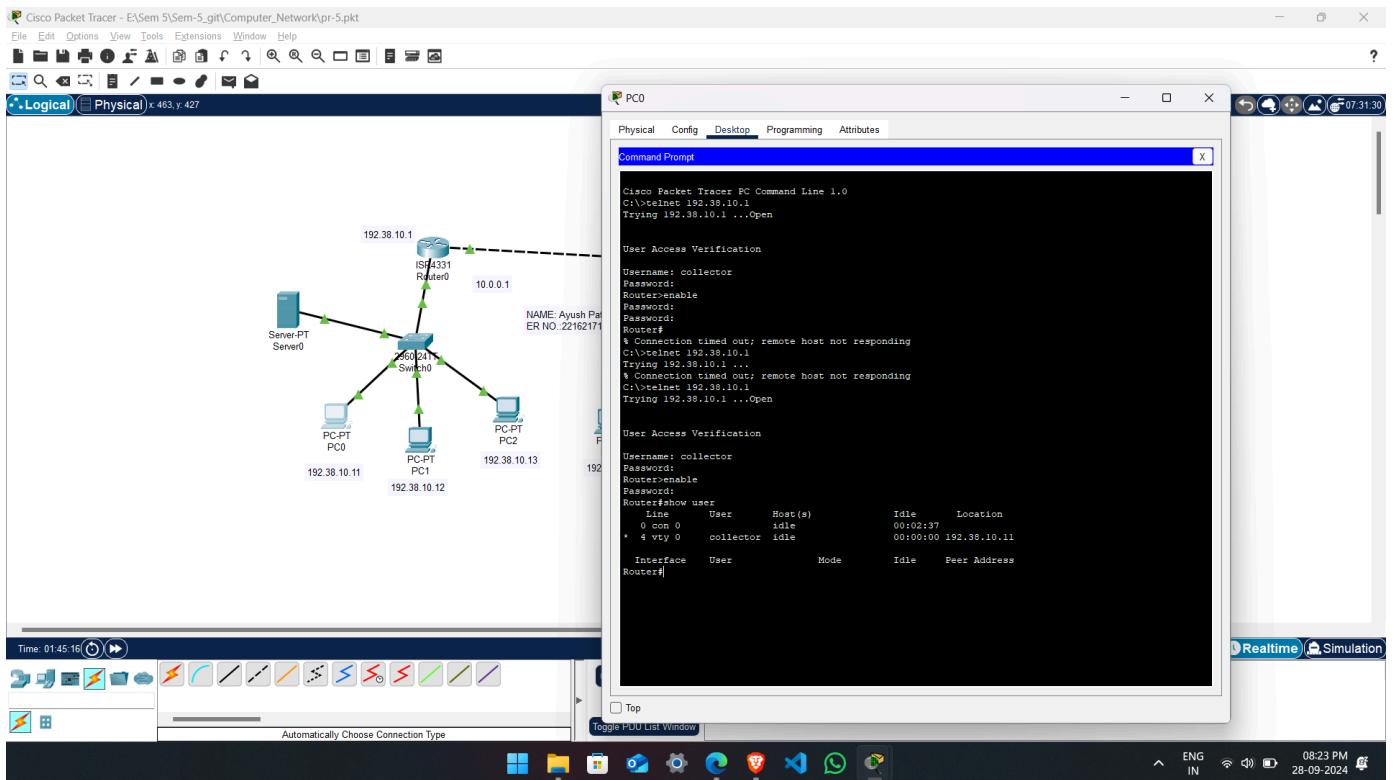




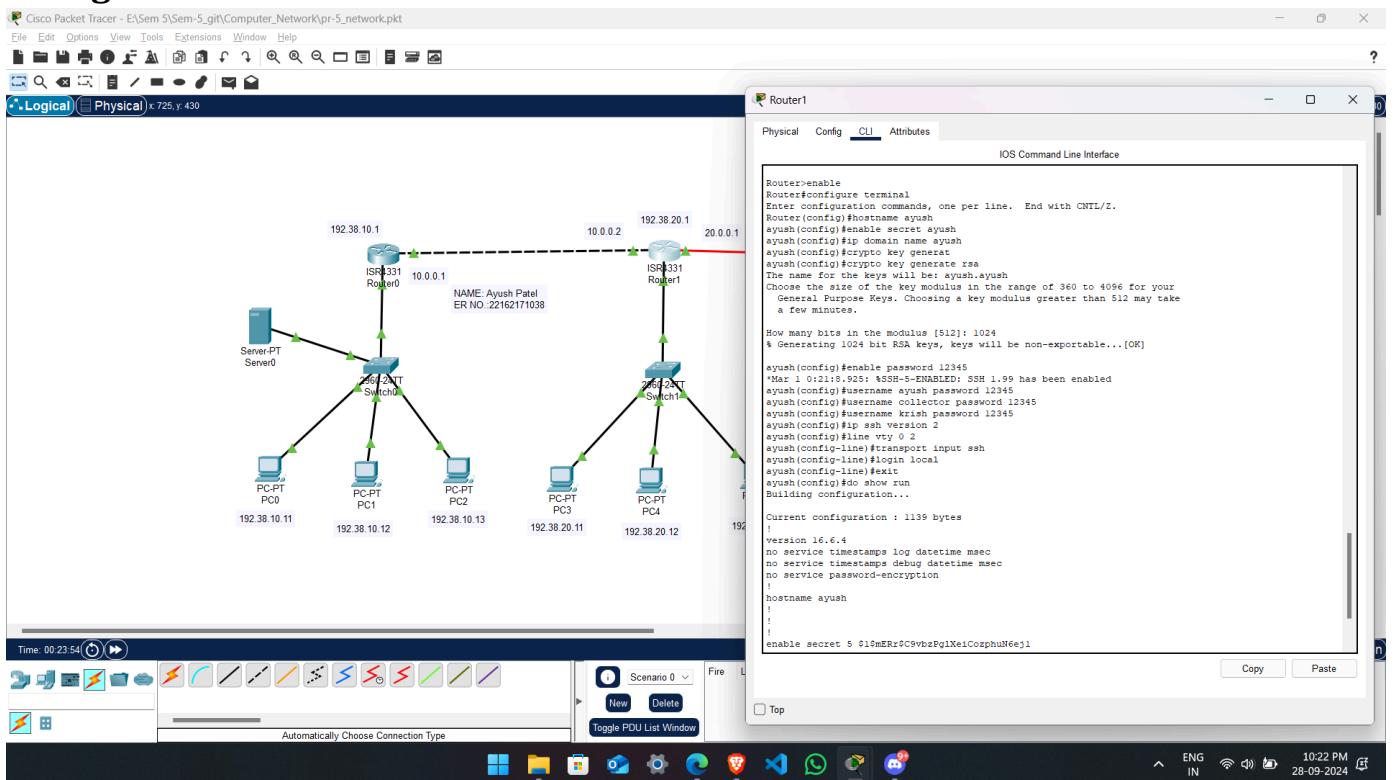


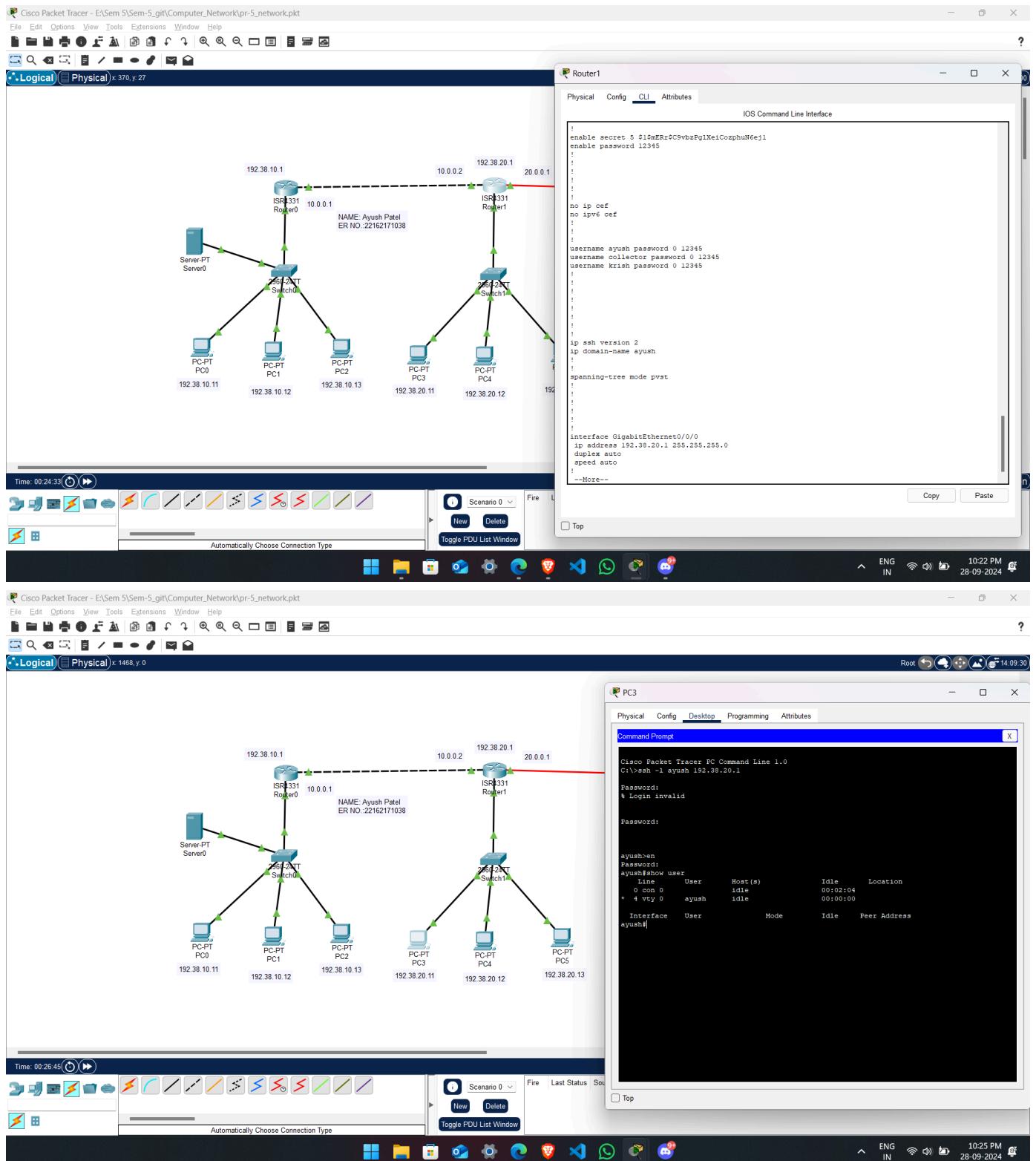
Configure Telnet On router 0:



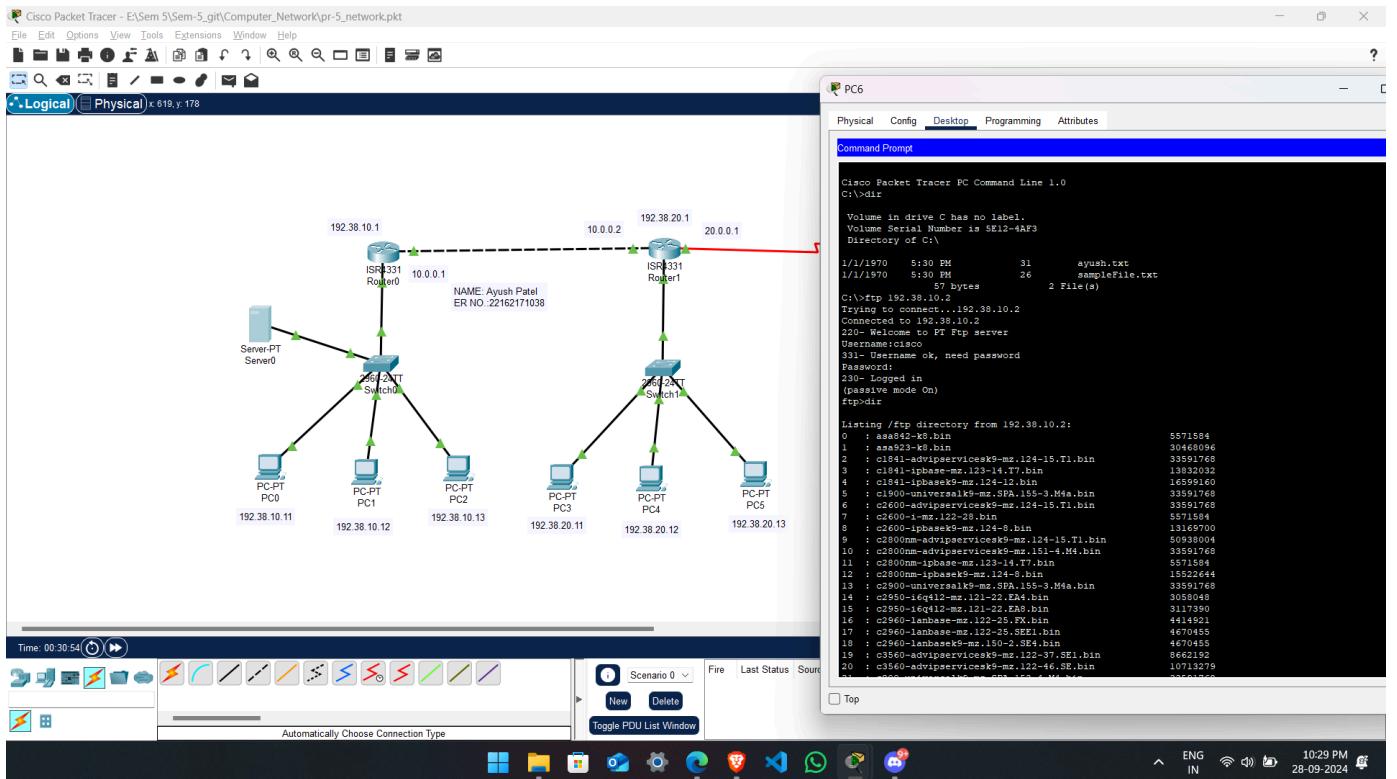
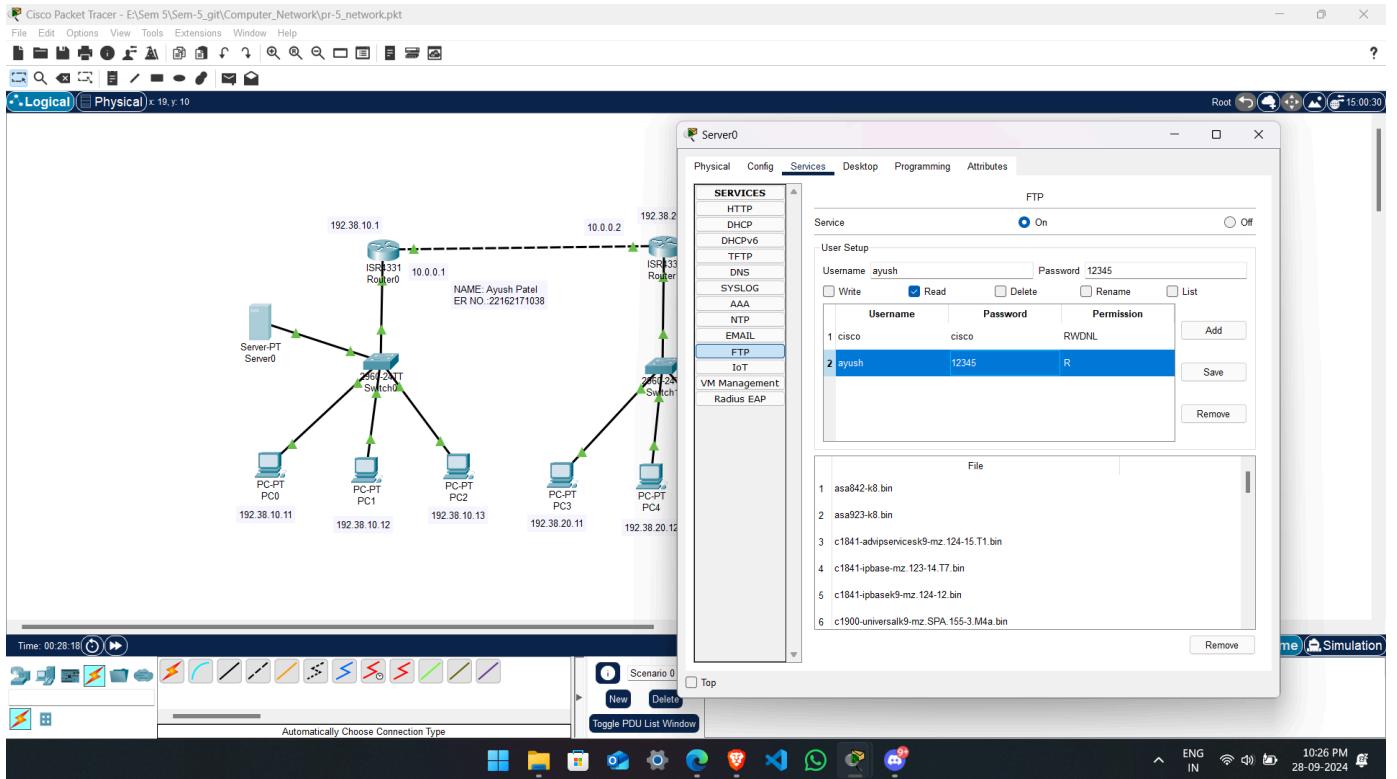


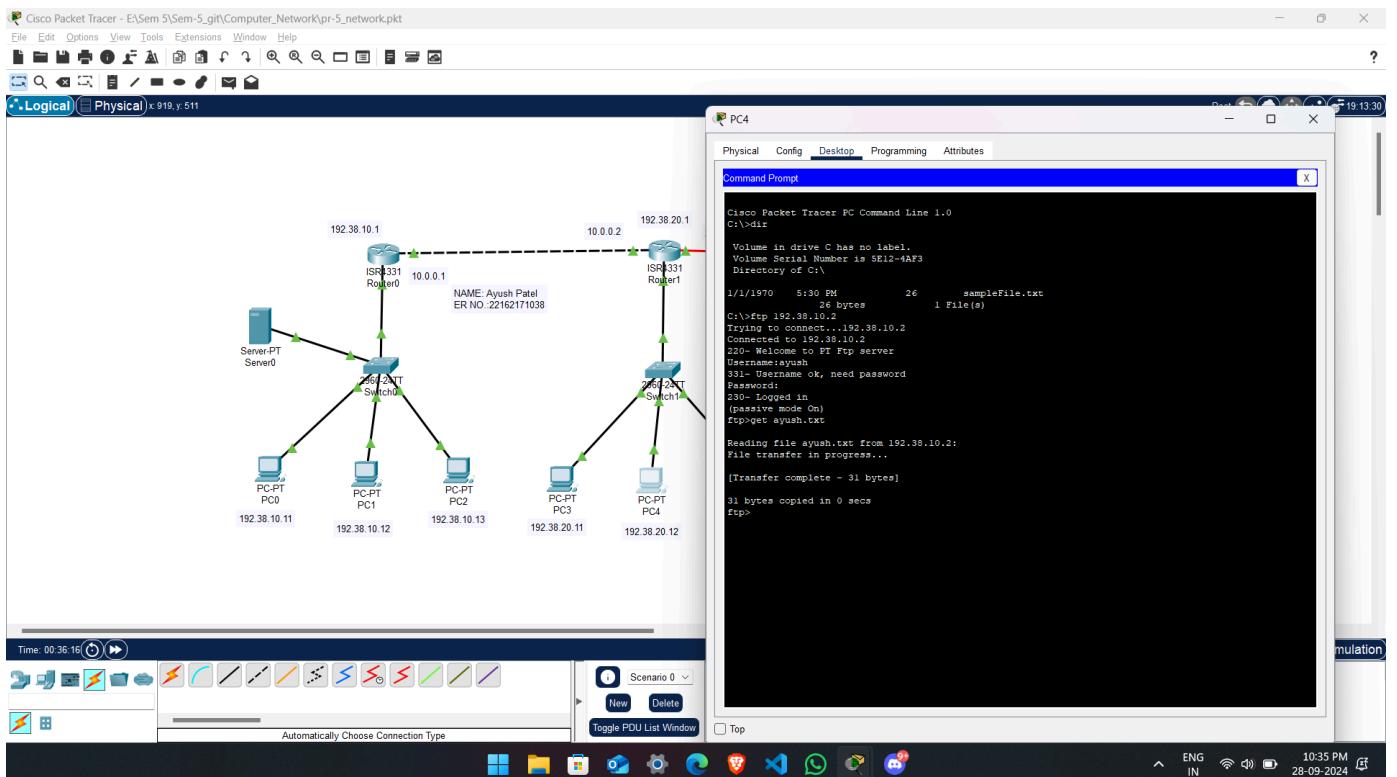
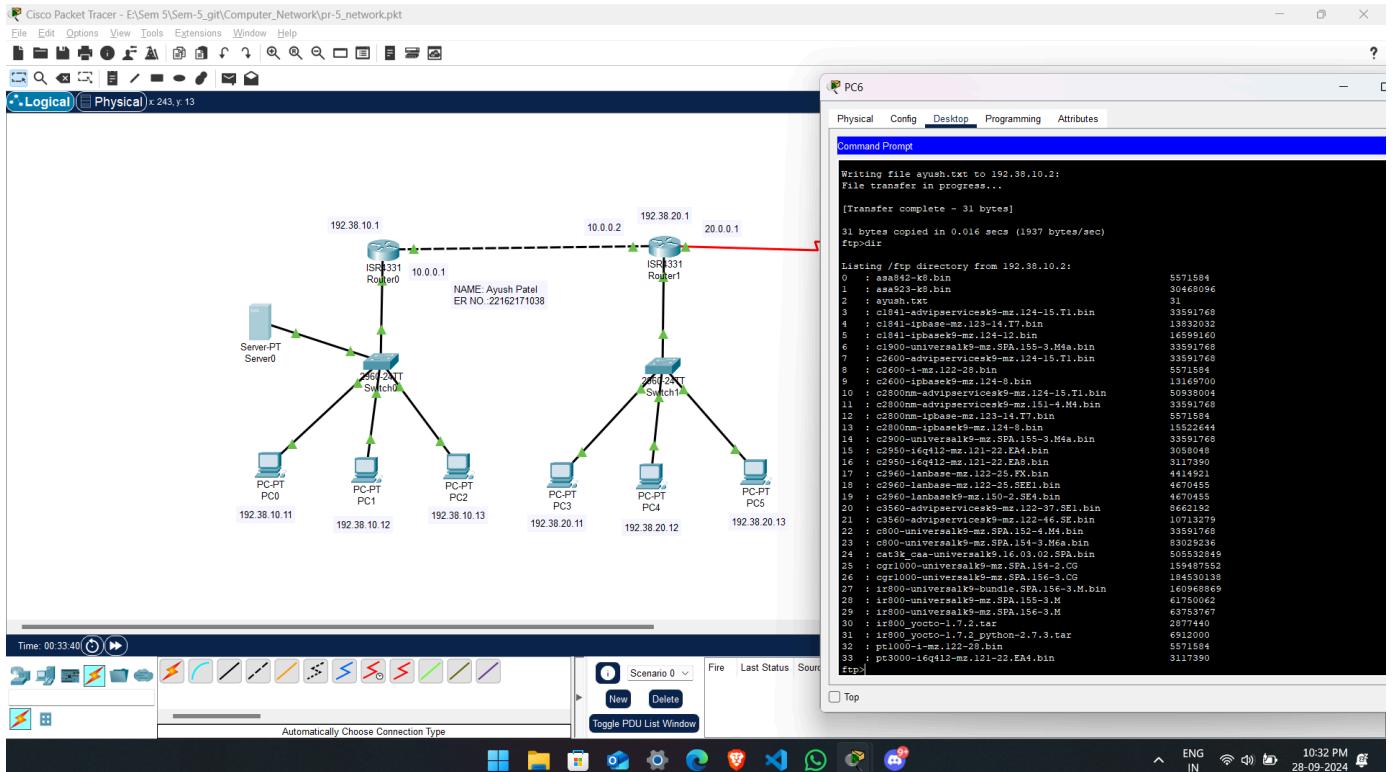
Configure SSH on router 1:

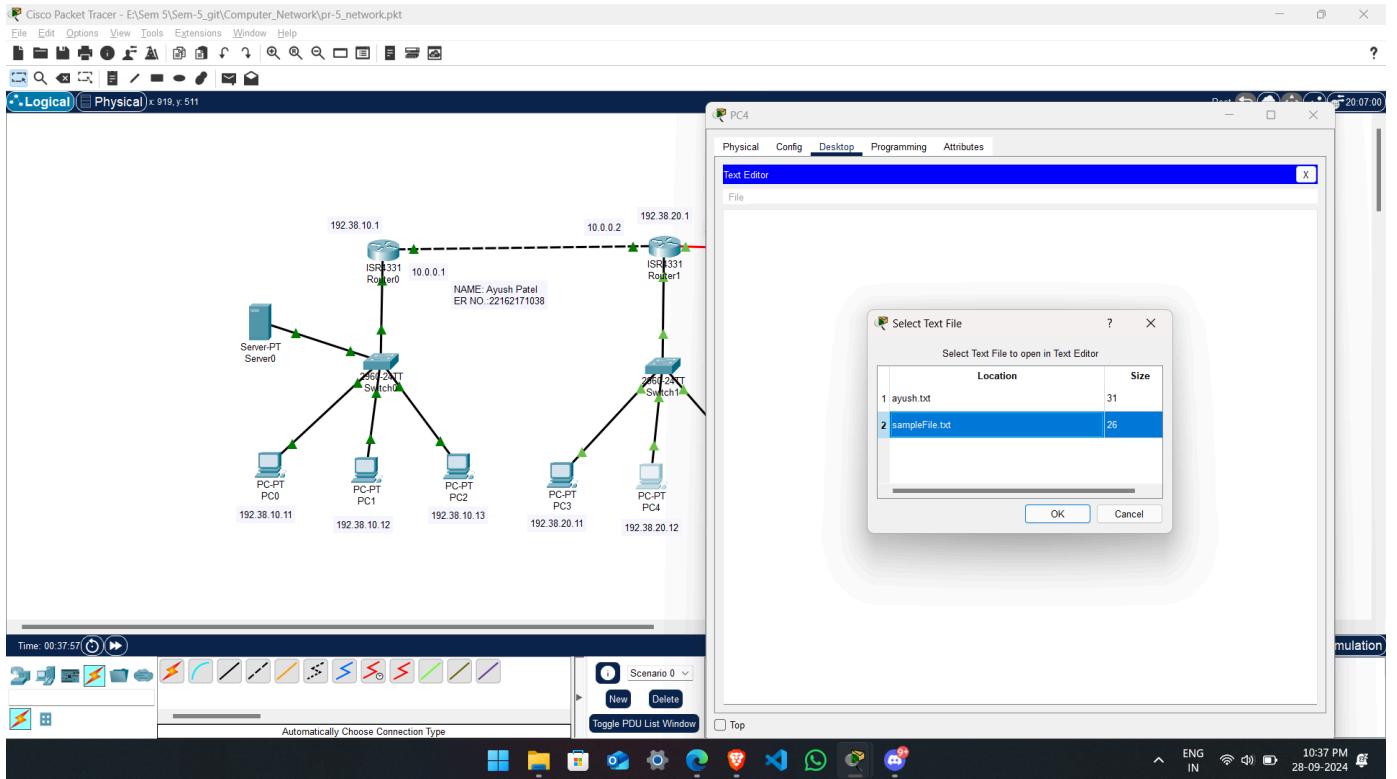




Configure FTP on server:







Conclusion:

We have implemented a network via Telnet, SSH, and FTP to help keep an effective check on access and movement of files between offices. In Telnet, three users were created with a common password but the limit of the concurrent connection users was set to only two and SSH was further secured with the same user limitation. Further, a simple FTP server was set up, which would enable the employees of the different departments to upload and download files. This will help as it will move information from one point to another, still all access to the network devices will be secure and controlled. It enhances the good exchange of information within the organization.