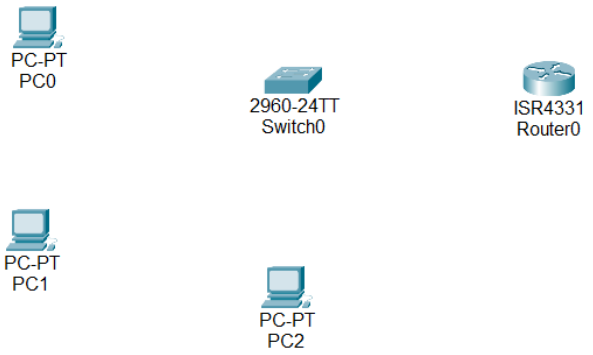
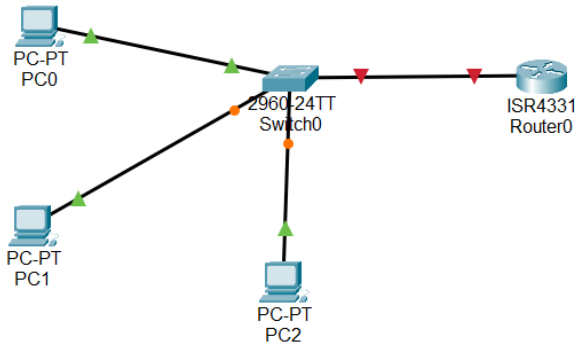
Marwadi University Marwadi Chandarana Group	**Marwadi University** **Faculty of Engineering and Technology** **Department of Information and Communication Technology**	
Subject: Computer Networks (01CT0503)	**Aim: Configure the router to secure the port and Telnet from unauthorized users. Analyze enable secret and password login commands in detail.**	
Experiment No: 04	**Date: 14-08-2023**	**Enrolment No: 92200133021**

Aim: Configure the router to secure the port and Telnet from unauthorized users. Analyze enable secret and password login commands in detail.

Step – 1: Take PC , Switch and Router.



Step – 2 : Connect all the PCs to the switch and switch to the Router via cable.



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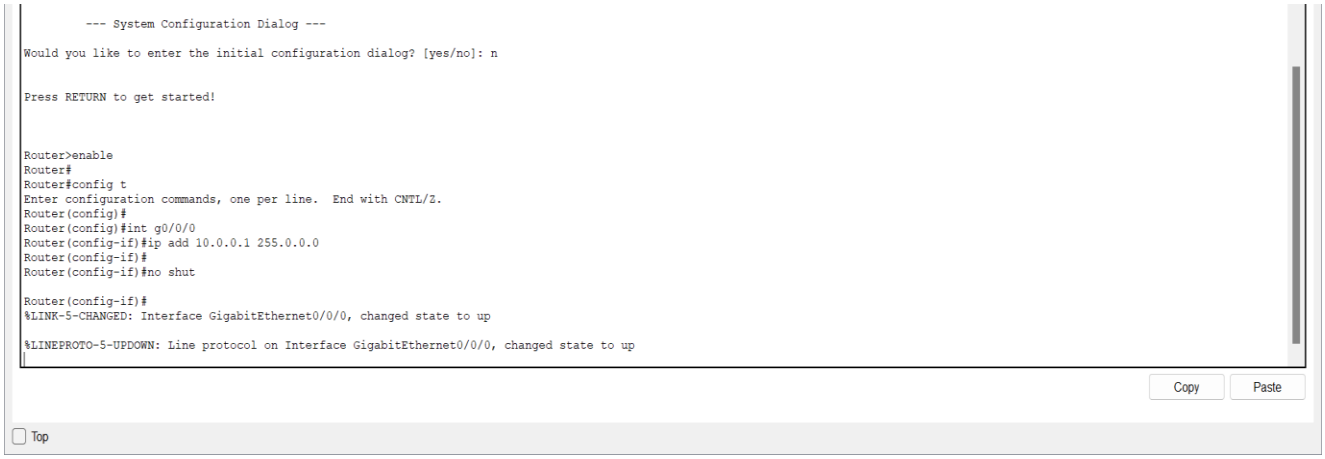
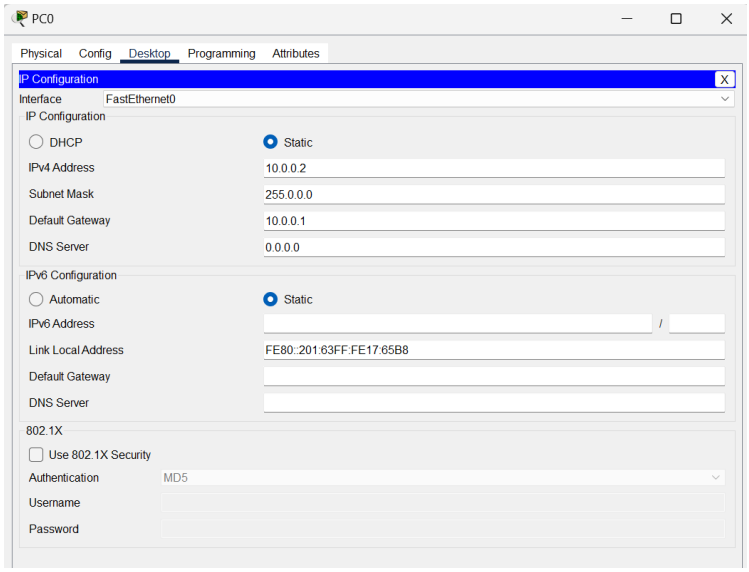
Step – 3 : Give the IP add to the router.

Use the command `ip addr add <IP_address>/<subnet_mask> dev <interface_name>` to assign an IP address to a router's network interface.



Step – 4 : Give the IP address to all PCs.



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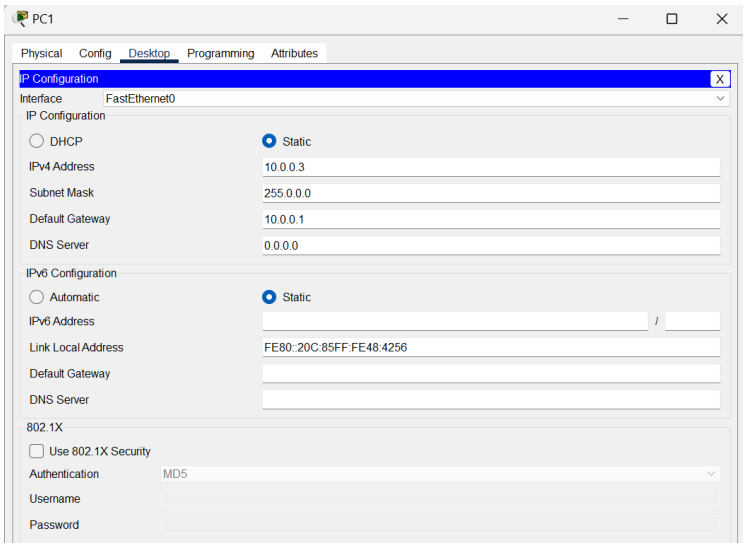

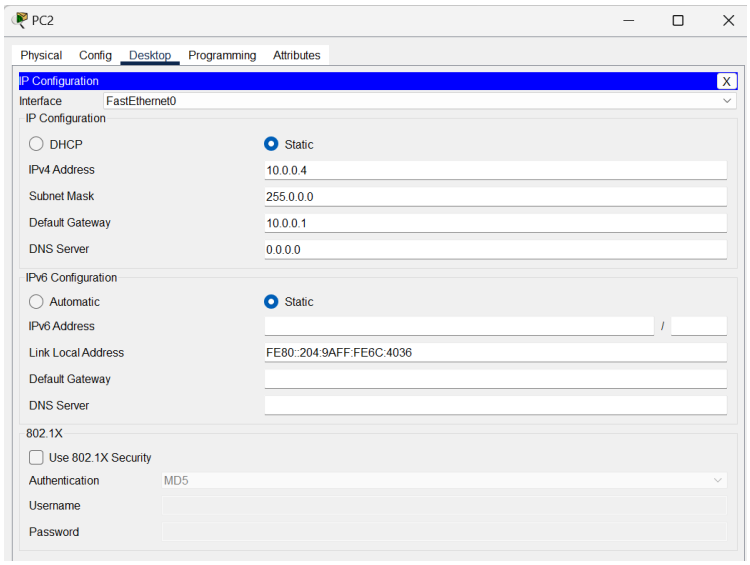

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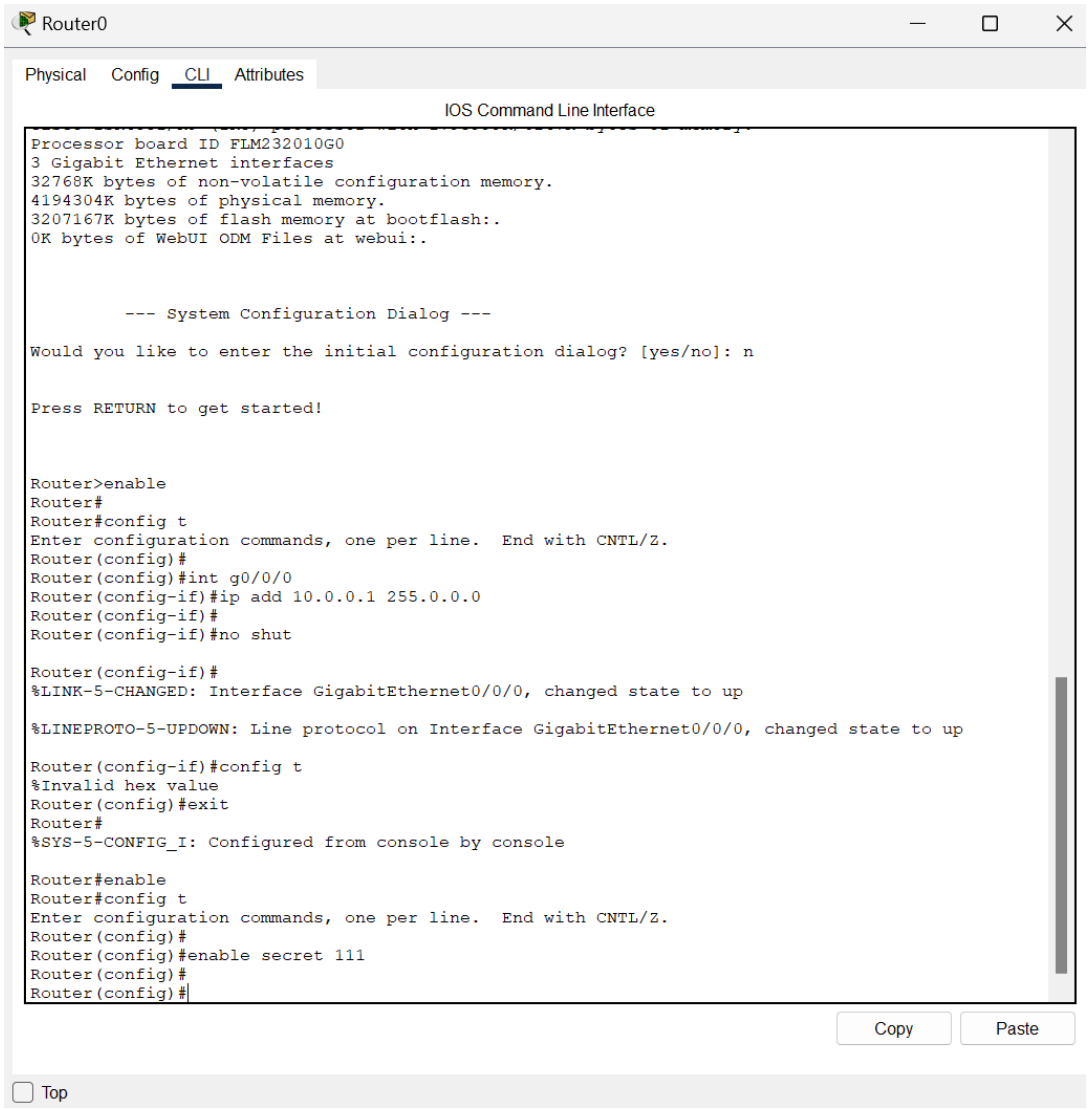
Step-5: Set the permissions or visibility of the command to restrict access
for this use enable secret <password> command



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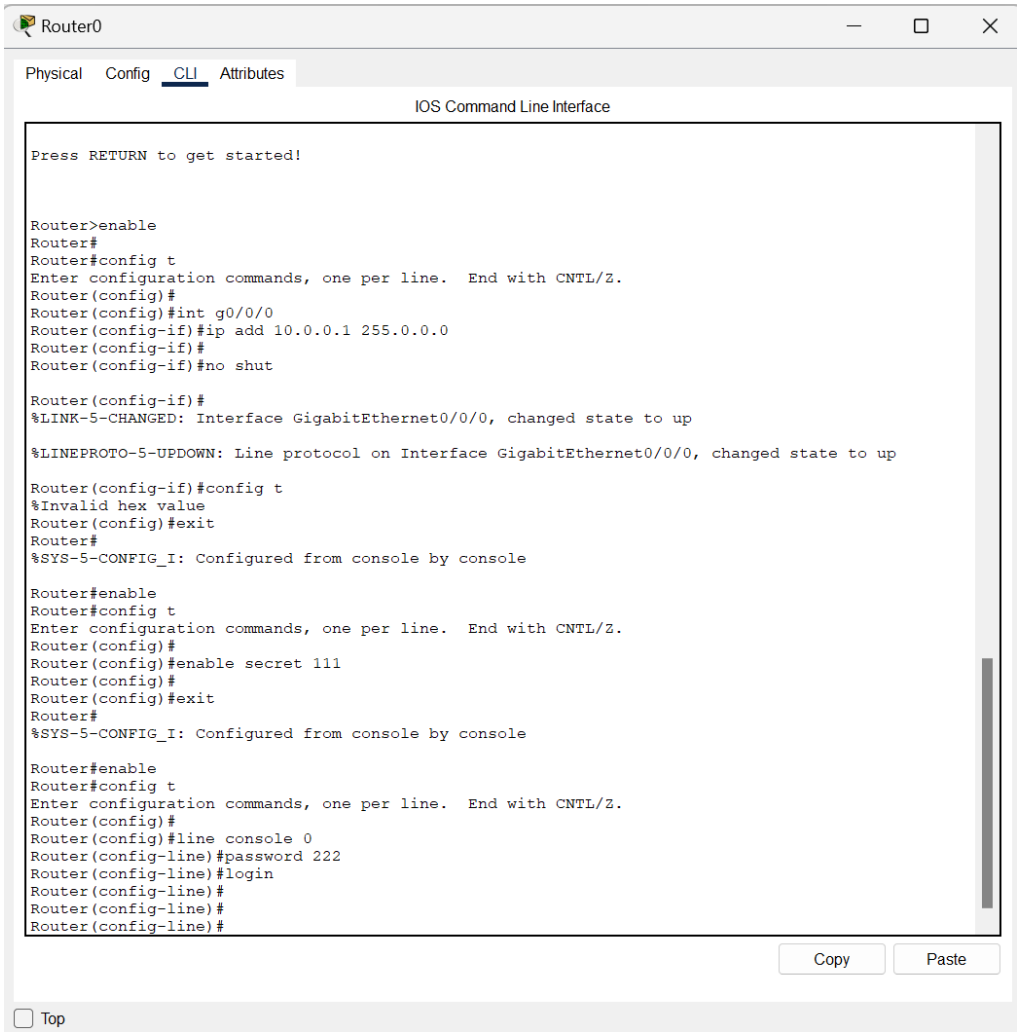
Step-6: Now we give the another command to set the password

line console 0

Password <password>

login

It don't able to go at the user mode also if we try to go it will immediately ask for password



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Step-7: To make virtual line control give following command

line vty 0 4

Password <password>

Login

By giving this up to 5 user can control the device virtually

```
Router#enable
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#
Router(config)#line console 0
Router(config-line)#password 222
Router(config-line)#login
Router(config-line)#
Router(config-line)#
Router(config-line)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#telnet
Host: vidya
Translating "vidya"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer address

Router#enable
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#line vty 0 4
Router(config-line)#password 333
Router(config-line)#login
Router(config-line)#
Router(config-line)#exit
Router(config)#
Router(config)#
```

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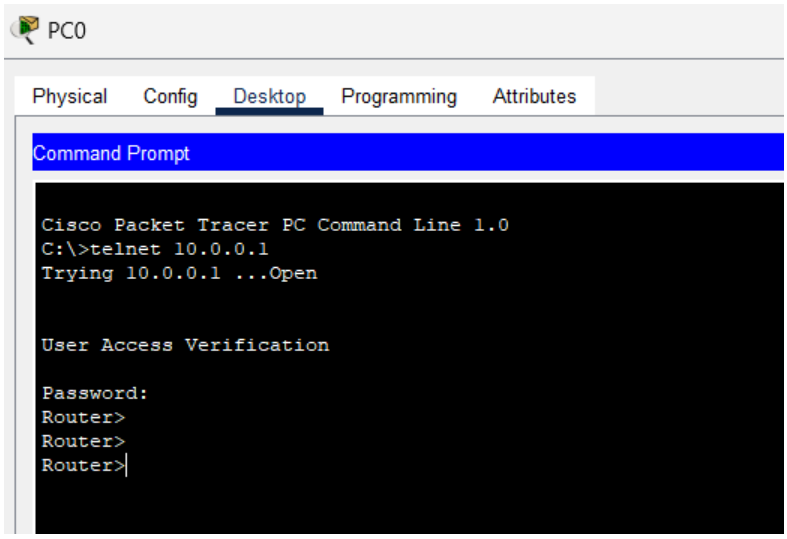
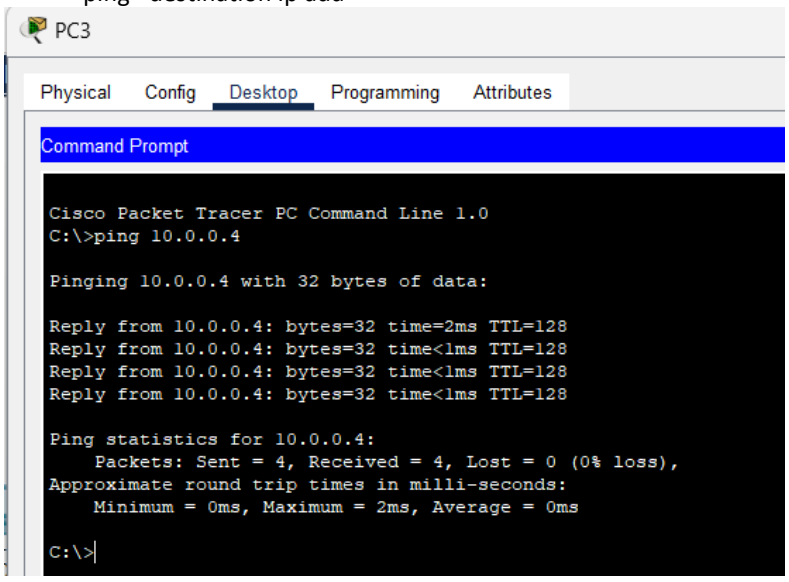
Step-8: For checking the telnet protocol use following command
telnet <destination Ip add>



Step-9: Now after this we check for the connectivity between divices
For this we use following command
ping <destination Ip add>



Conclusion: In this experiment, we configuring the router with the enable secret command secures privileged (administrator) access by using an encrypted password, while the password login command protects remote access, such as Telnet, by requiring users to enter a password before they can interact with the router. These measures help prevent unauthorized access and enhance overall router security.

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