PAK AUSTRIA FACHHOCHSCHULE: INSTITUTE OF APPLIED SCIENCES AND TECHNOLOGY
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEEING

Computer Networks

COMP-352L

LAB MANUAL 5

School of Computing Sciences

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SMTP and Email configuration

Overview:

SMTP protocol:

The Simple Mail Transfer Protocol (SMTP) is a technical standard for transmitting electronic mail (email) over a network.
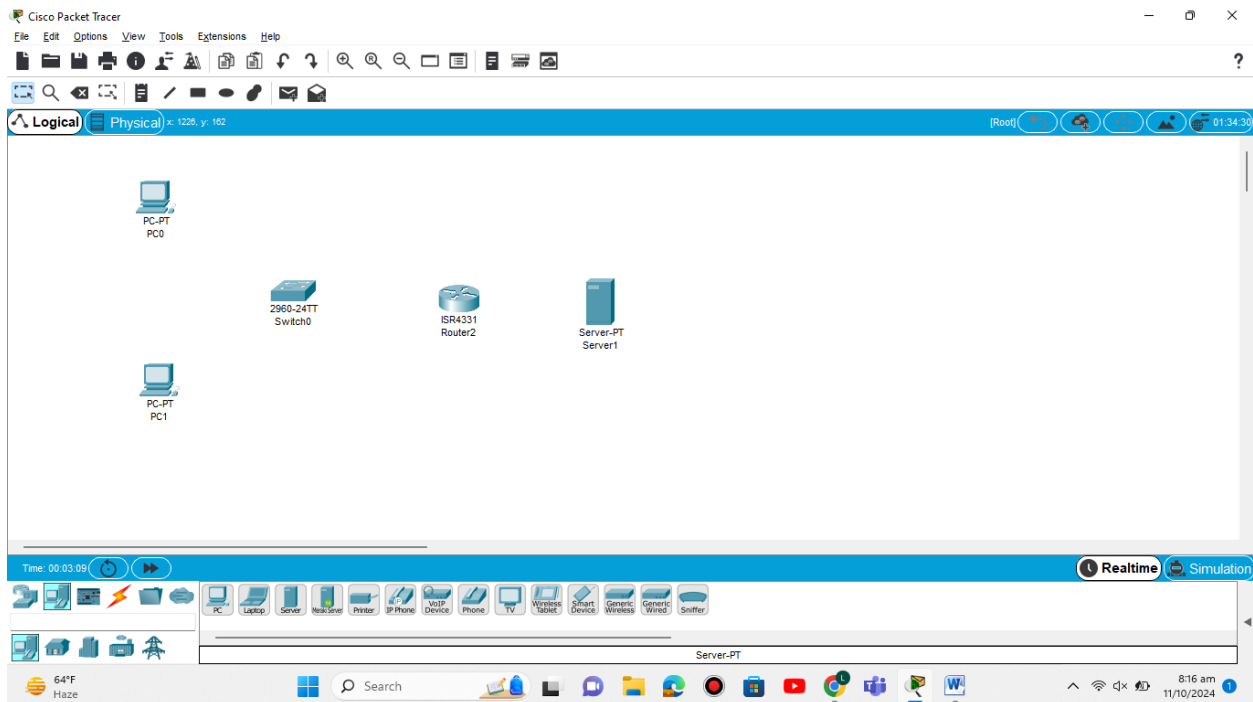
Email Server Configuration:

An email server such as Gmail stores and sends email messages to email clients on request. We often send and receive emails on our mobile devices or computers .Have you ever imagined how it happens? Well, whenever you compose and send email to another person, the message first goes to mail server. Its mail server that then sends messages when it is requested from email client of recipient's device.
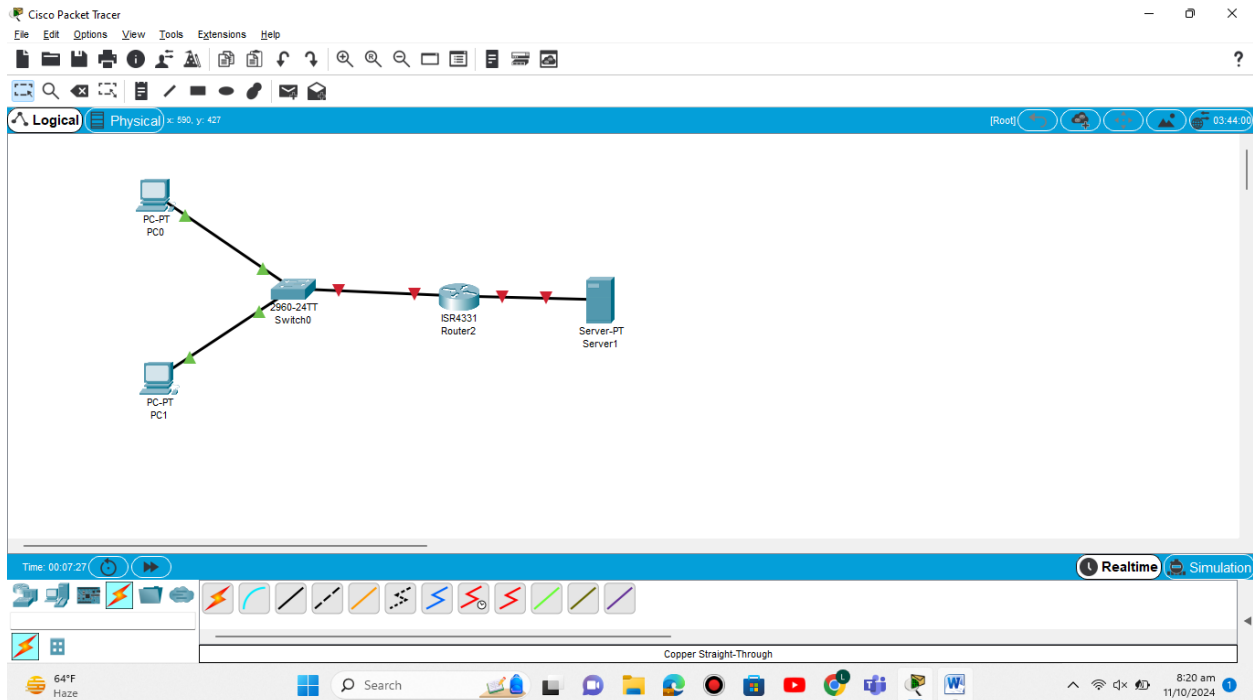
Steps:

Following are the steps to configure email server:

1. Create a topology like given below having following devices:
   a. 2 PC's
   b. A router
   c. A switch
   d. A server

2. Now create connects between the devices as:
     i.   Connect both PC's to the switch using Straight through cable.
     ii. Connect router to switch and server through straight through cable.

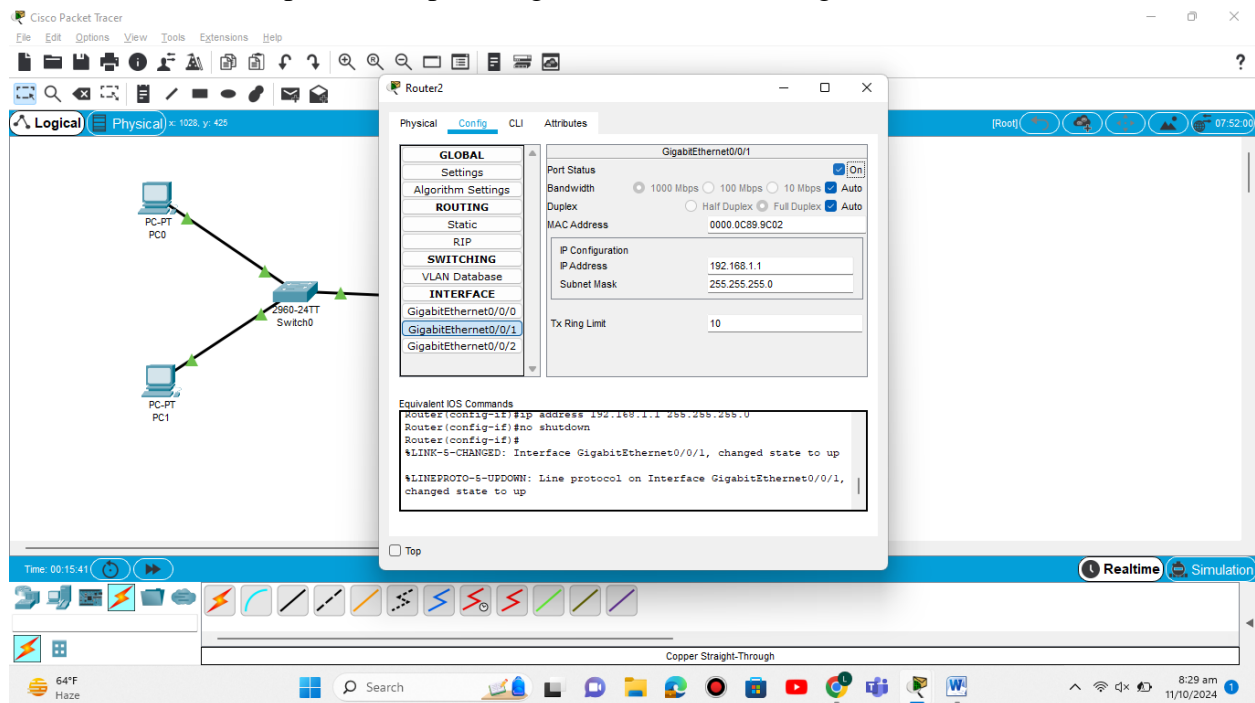
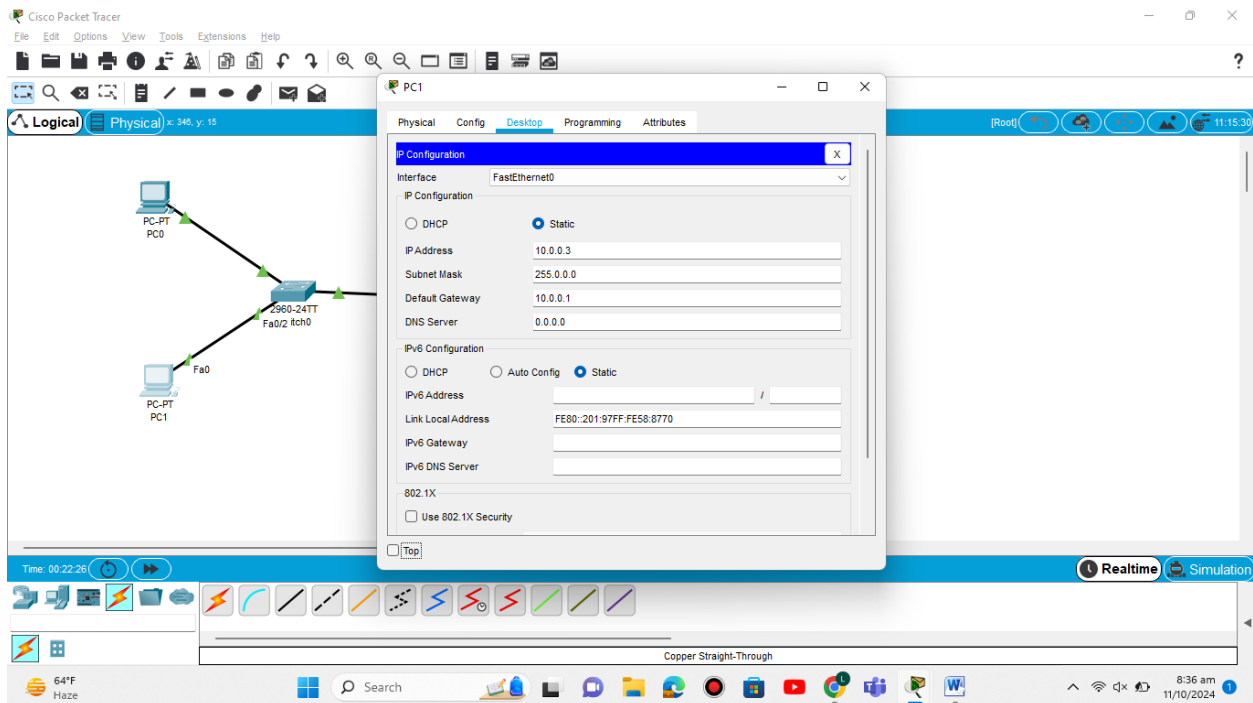3. Now before configuring email server, assign the IP addresses to all the devices.
     i.   Starting from the router, click on router then open config tab and then click on GigabitEthernet0/0 or GigabitEthernet0/0/0 and turn the port status ON.
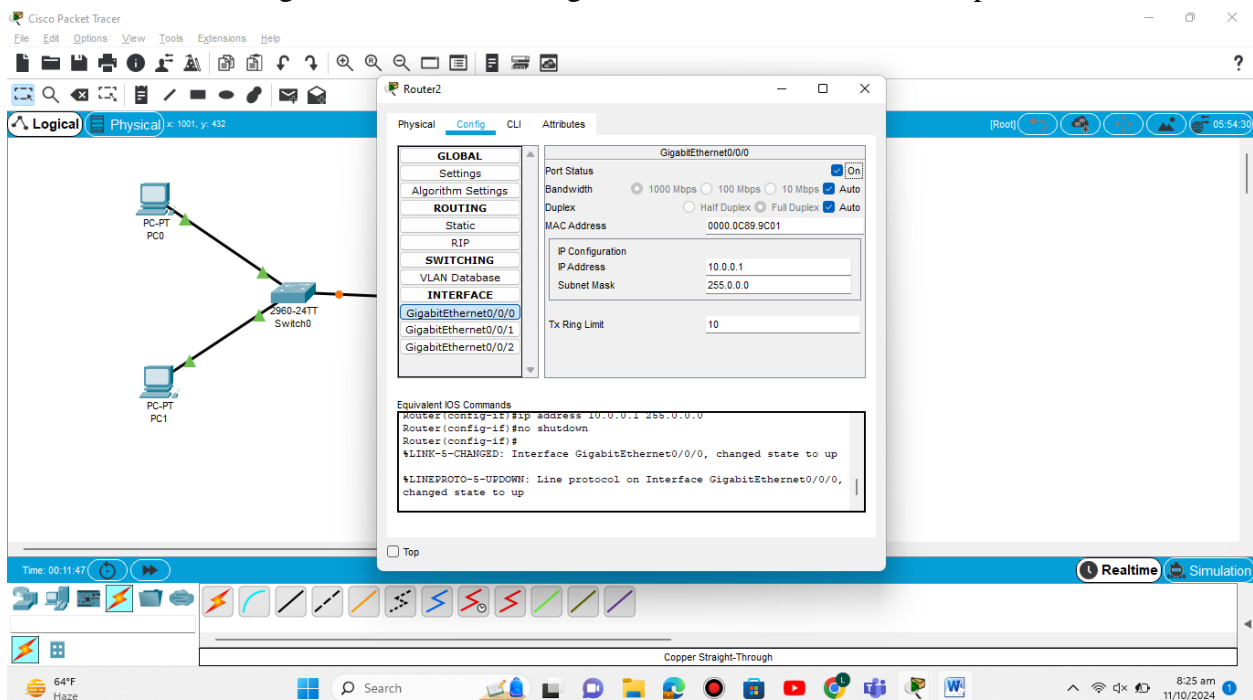
Repeat the step for GigabitEthernet0/1 or GigabitEthernet0/0/1 as below.

ii.   Now assign IP addresses to PC's as:

For PC1:

Click on it and open desktop tab and then click on IP configuration and assign

IP address: 10.0.0.2

Subnet mask: 255.0.0.0 (class A)

Default gateway: 10.0.0.1 (router's IP address)

For PC2:

Repeat the above step and assign

IP address: 10.0.0.3

Subnet Mask: 255.0.0.0 (class A)
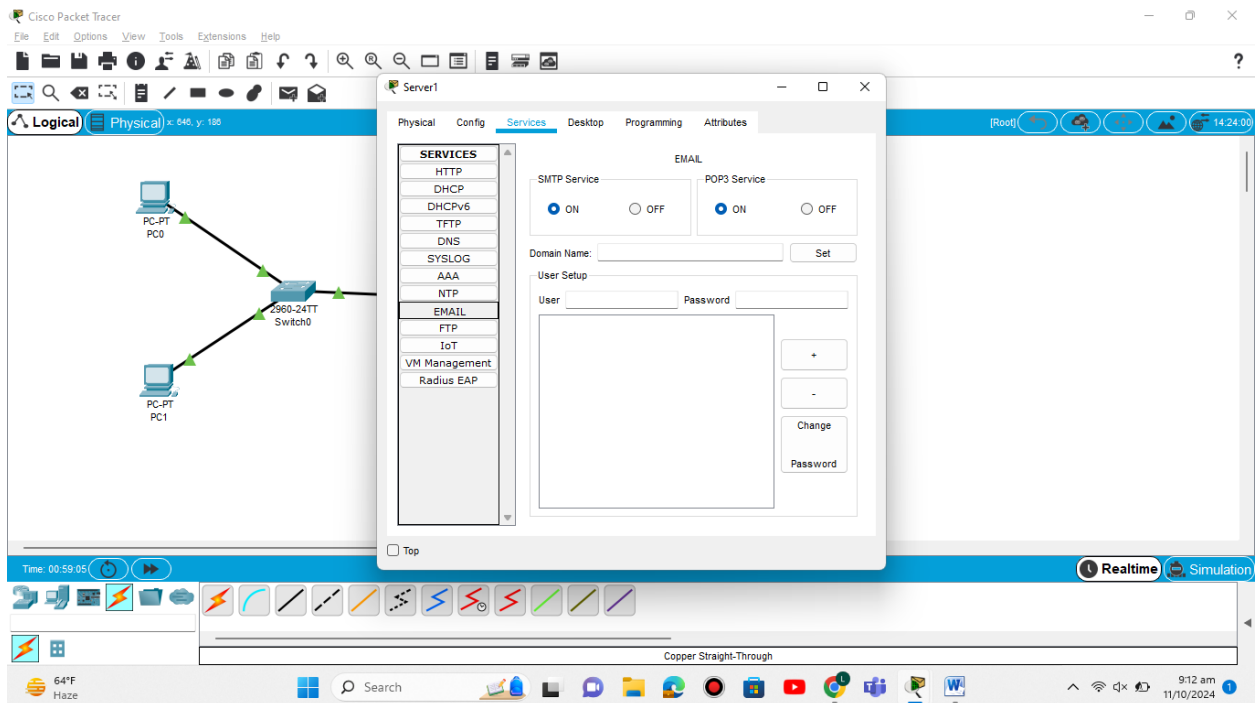
Default gateway: 10.0.0.1

iii. Now assign the IP address to server as:
Go to server and open desktop tab and click on IP configuration and assign:
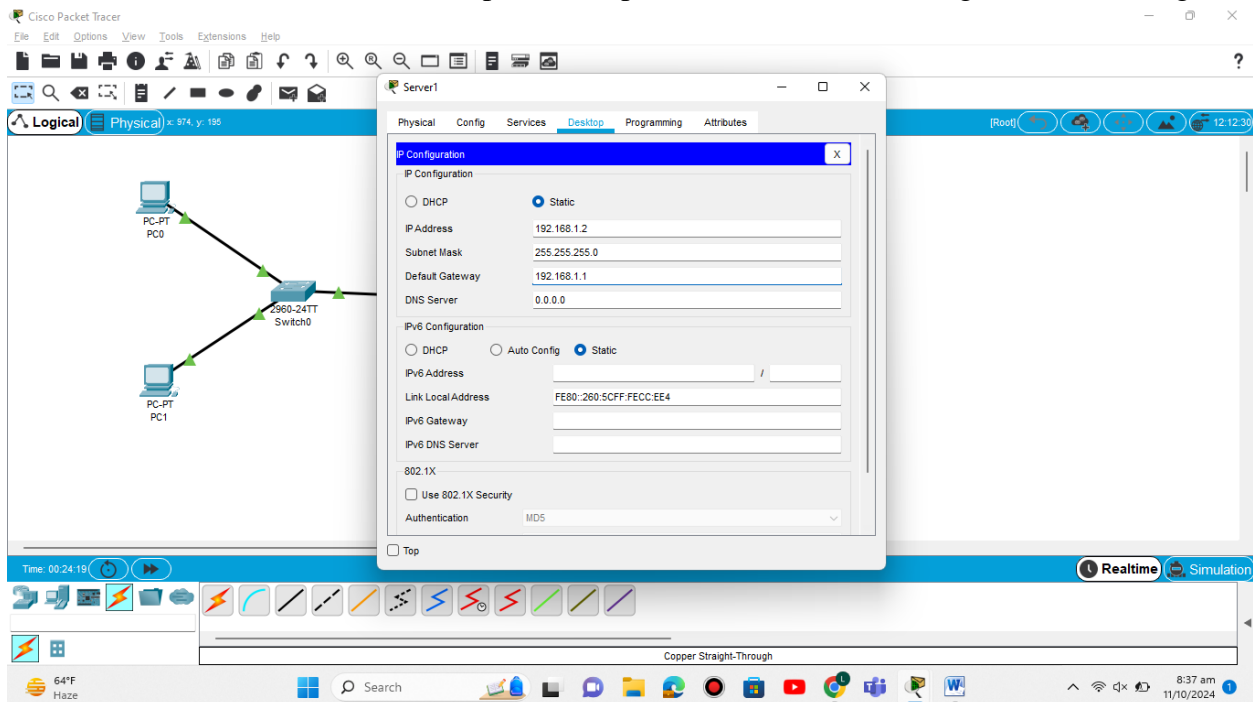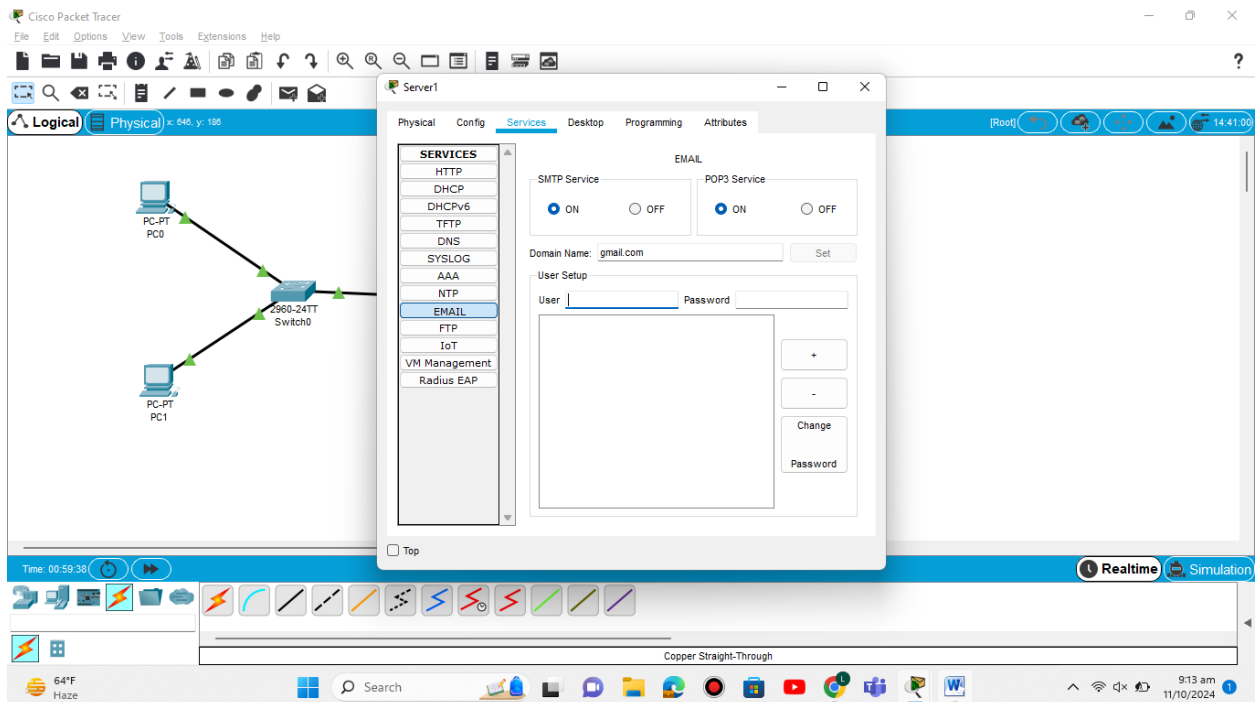

4. Now start configuring email server:
Click on Server and Go to services then Select Email from left menu.
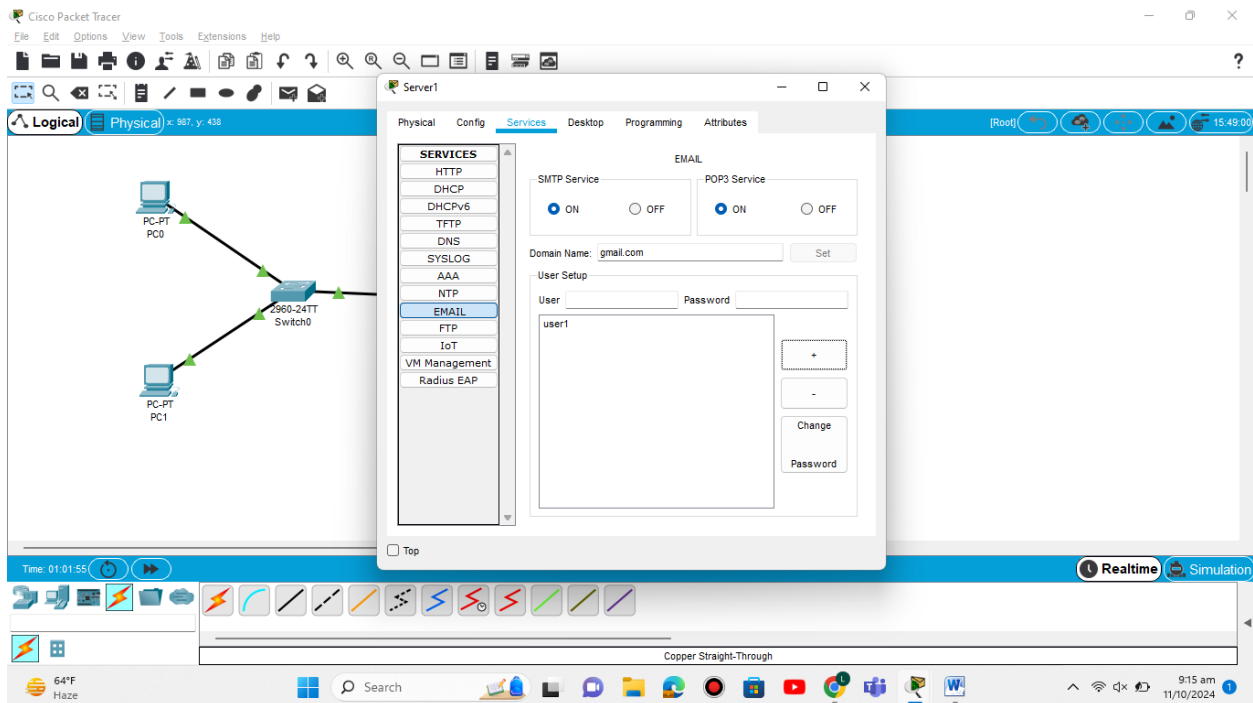
Give domain name e.g gmail.com (can be any) and click on set button and it gets saved

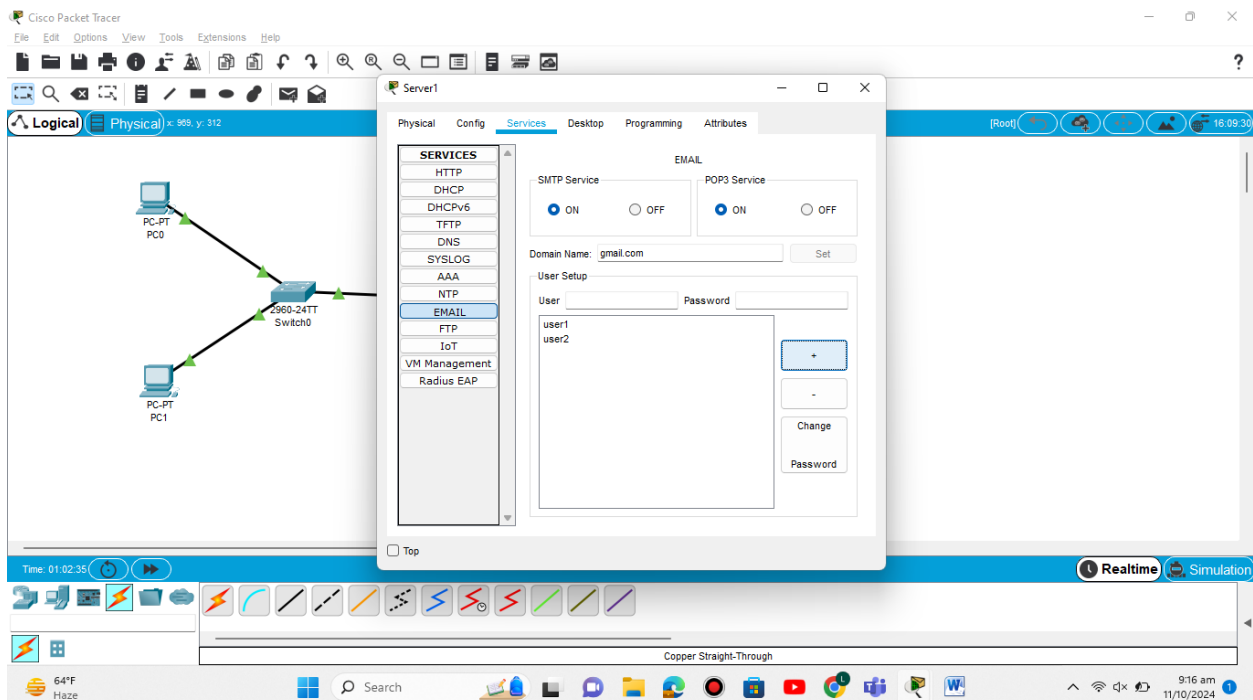

Now create two different users as:

user: User1

Password: 123

Using + button you can add users as much you want
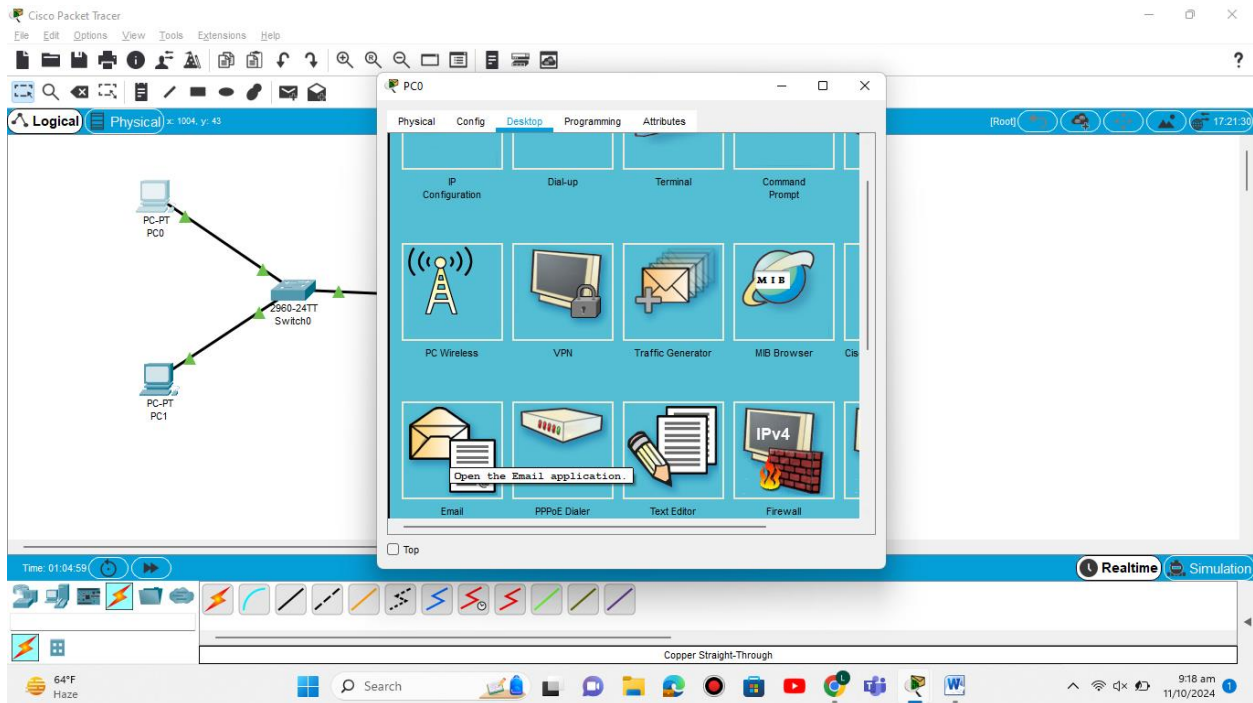
Again, user: User2

Password: 123

Make sure both SMTP and POP3 services are set on.

As both services play a great role in sending and receiving email messages between two devices.
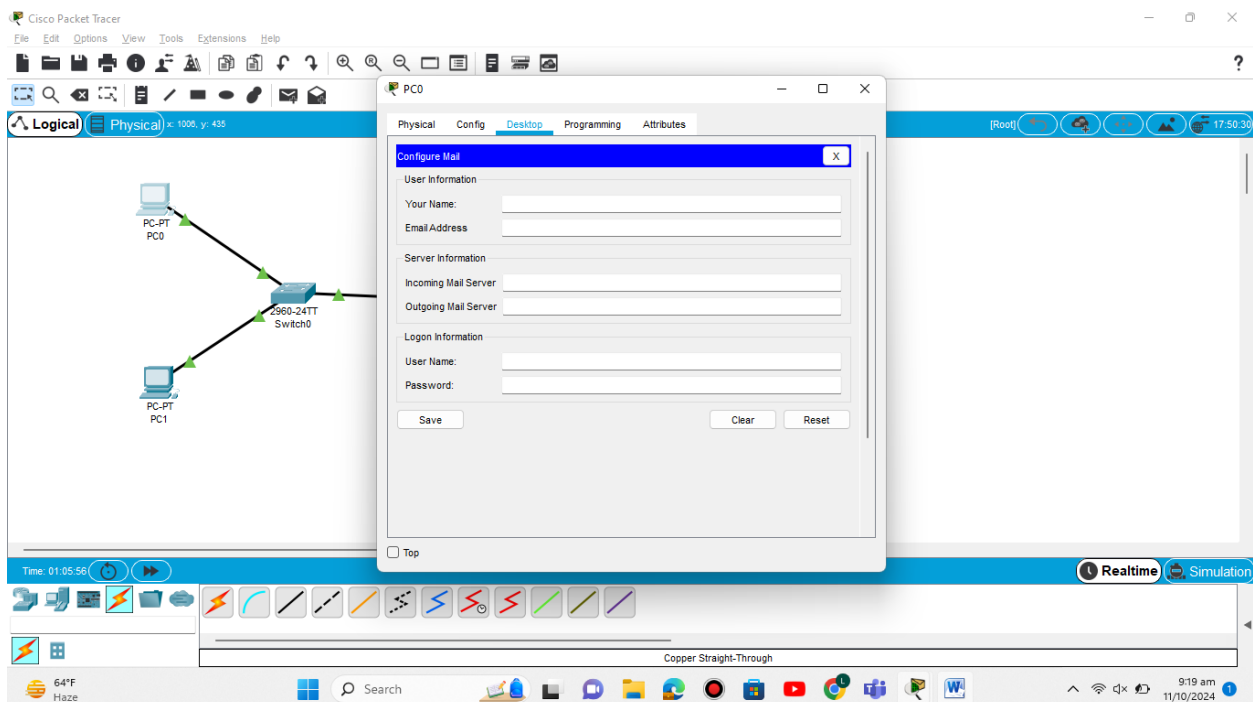
After doing this, configuration at server side is completed.

5. Now do the configuration at PC's side or client side
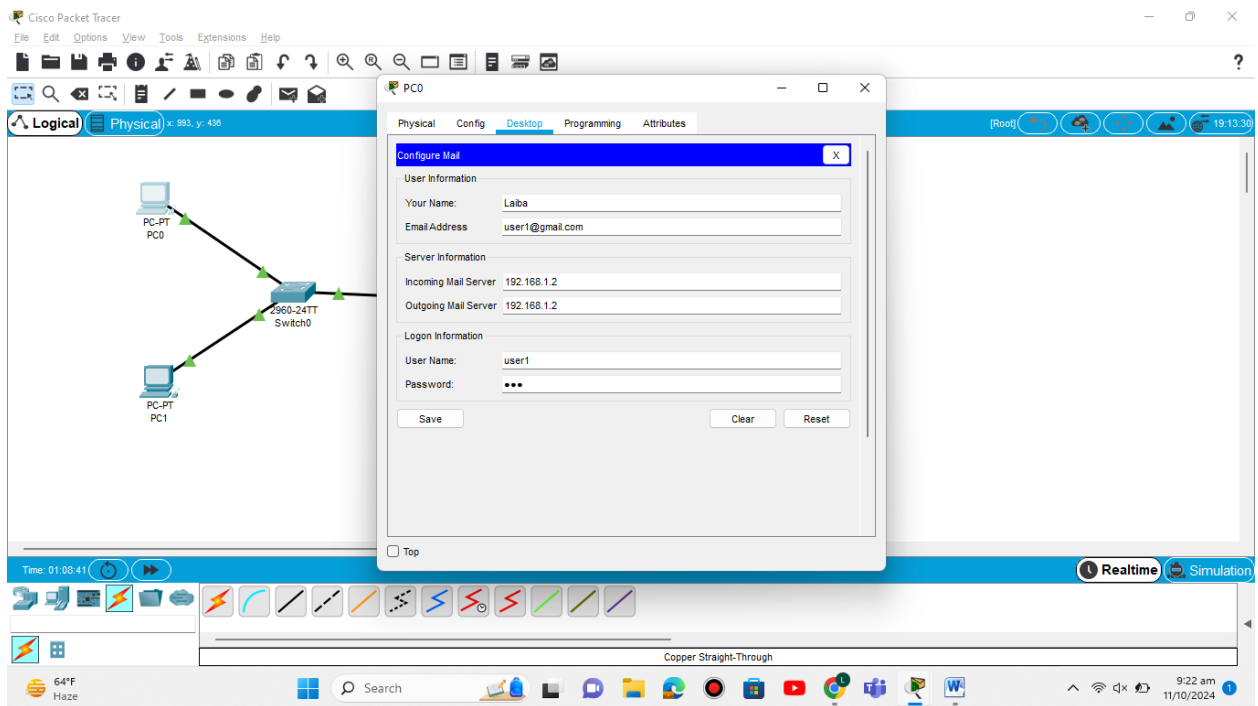   Click on PC1, go to desktop and click email

So now three types of information is required

      i.   User information

     ii.   Server information
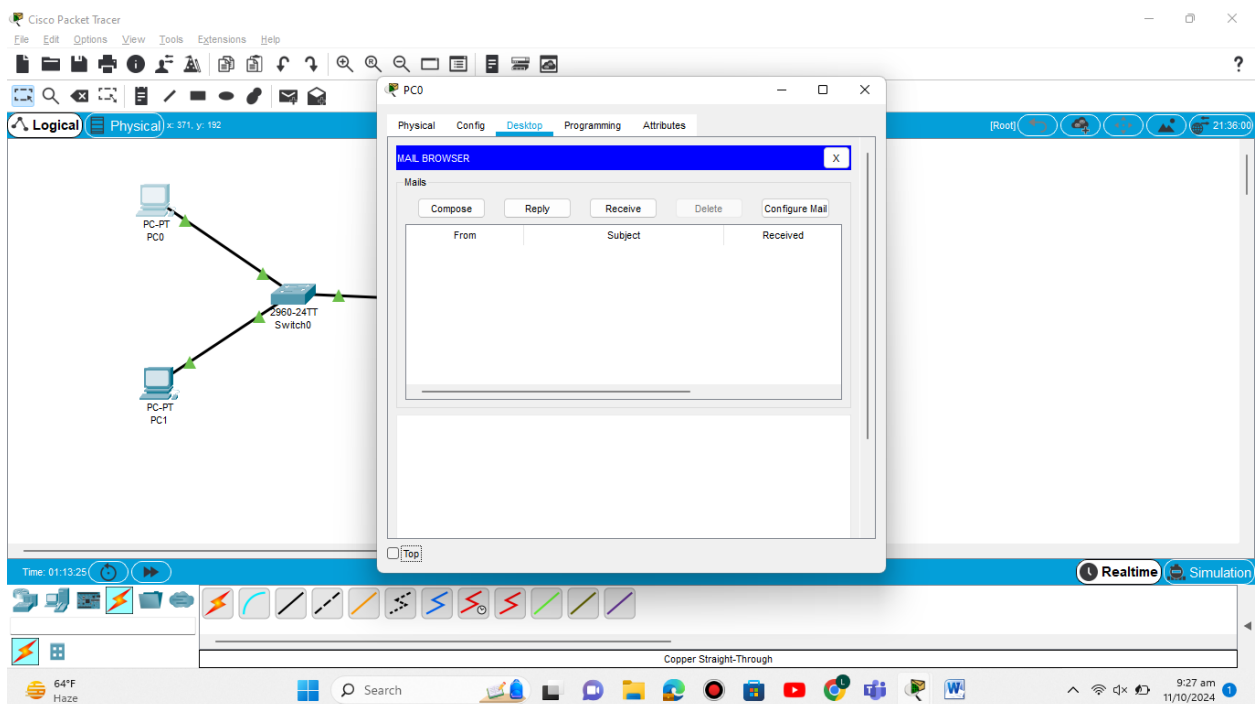
    iii.   Logon information

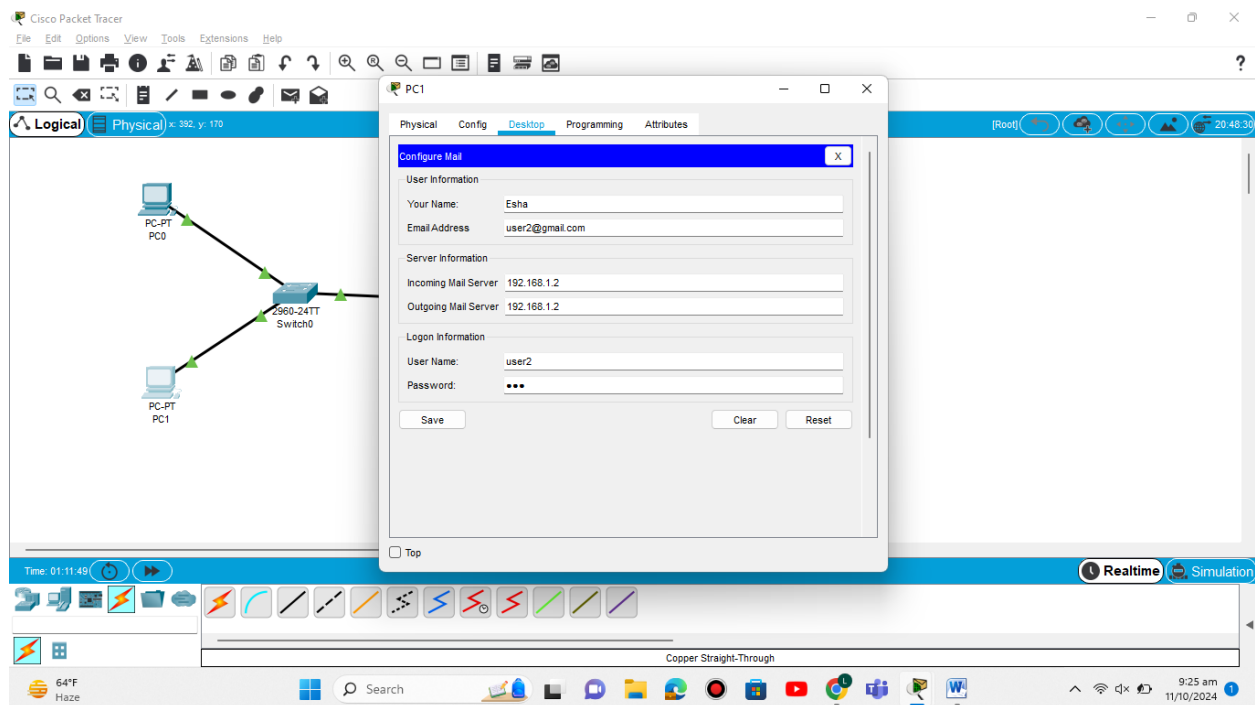Give the following information as shown:

Username and password will be same as mentioned at server side.
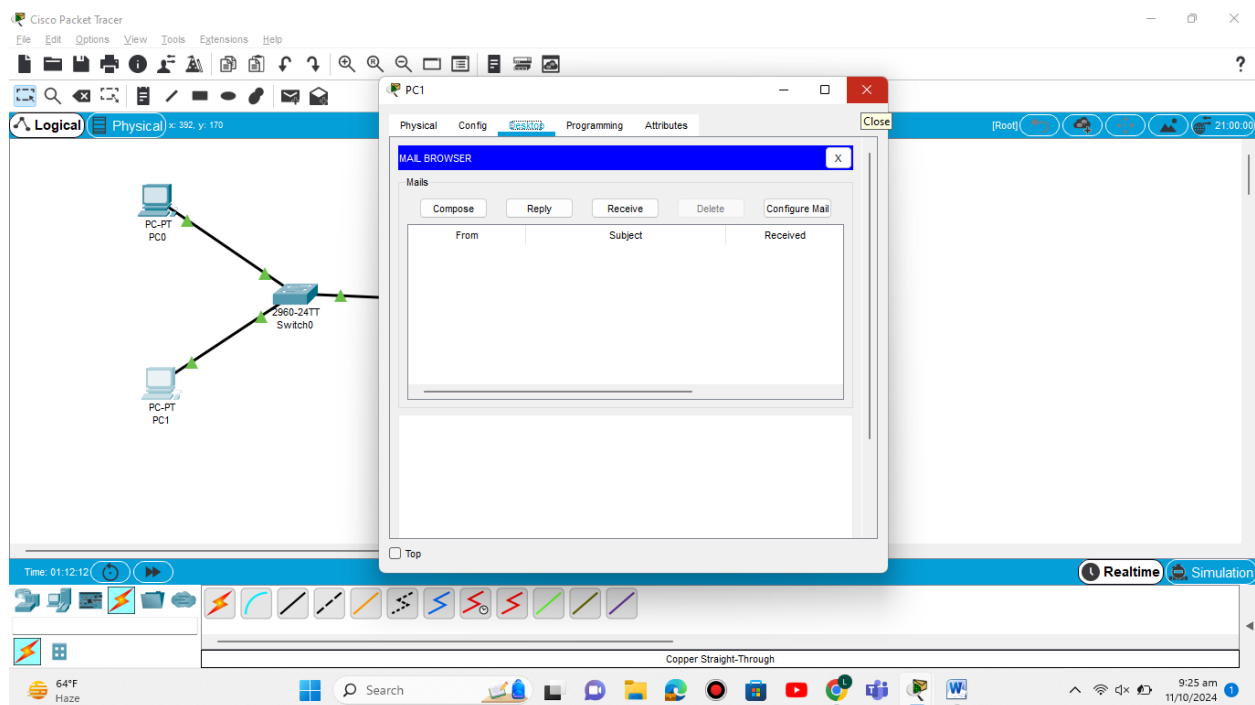
After clicking SAVE button, this interface is shown:
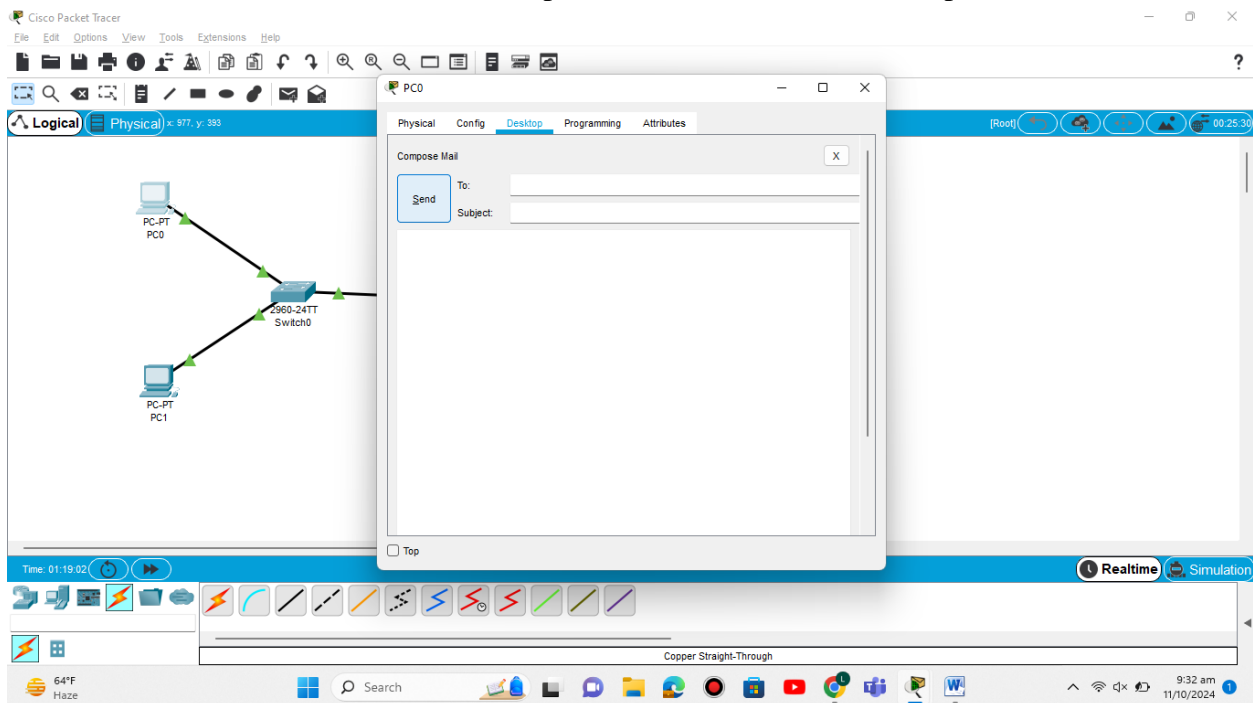

Repeat above steps for PC 2.

After clicking SAVE button, this interface is shown:

Now both PC's are configured as well.

6. Now to check whether configuration is working or not, follow the steps:
    Send an email from one PC to another and check whether it is received on other PC or not

i.   Go to PC1, click on desktop, click on email and click compose

ii. Fill the following credentials as:
     To: email address of PC 2 in this case
     Subject: test mail
     Message: can be any message e.g Hi! How are you?
   Then click on send button and the mail has been sent.
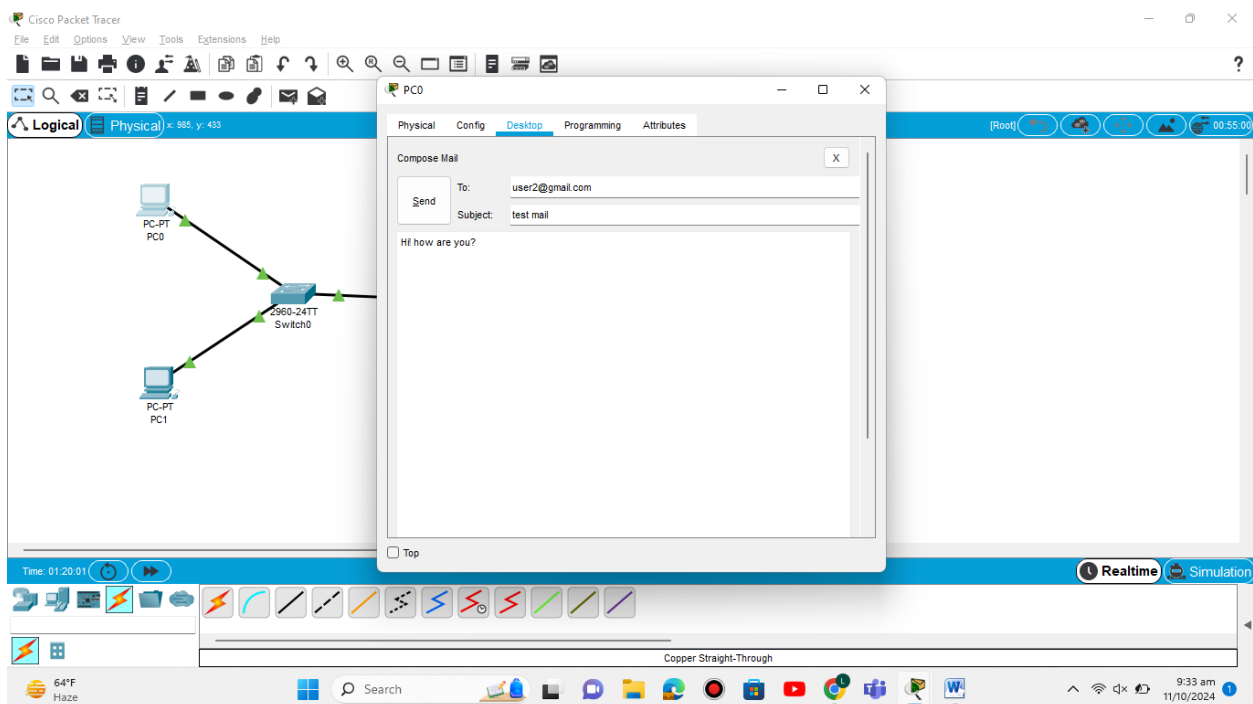
Now go to PC2 click on desktop, click on email and then click on receive button to check whether mail is received or not. Then click on that specific mail and its message will be appeared below.
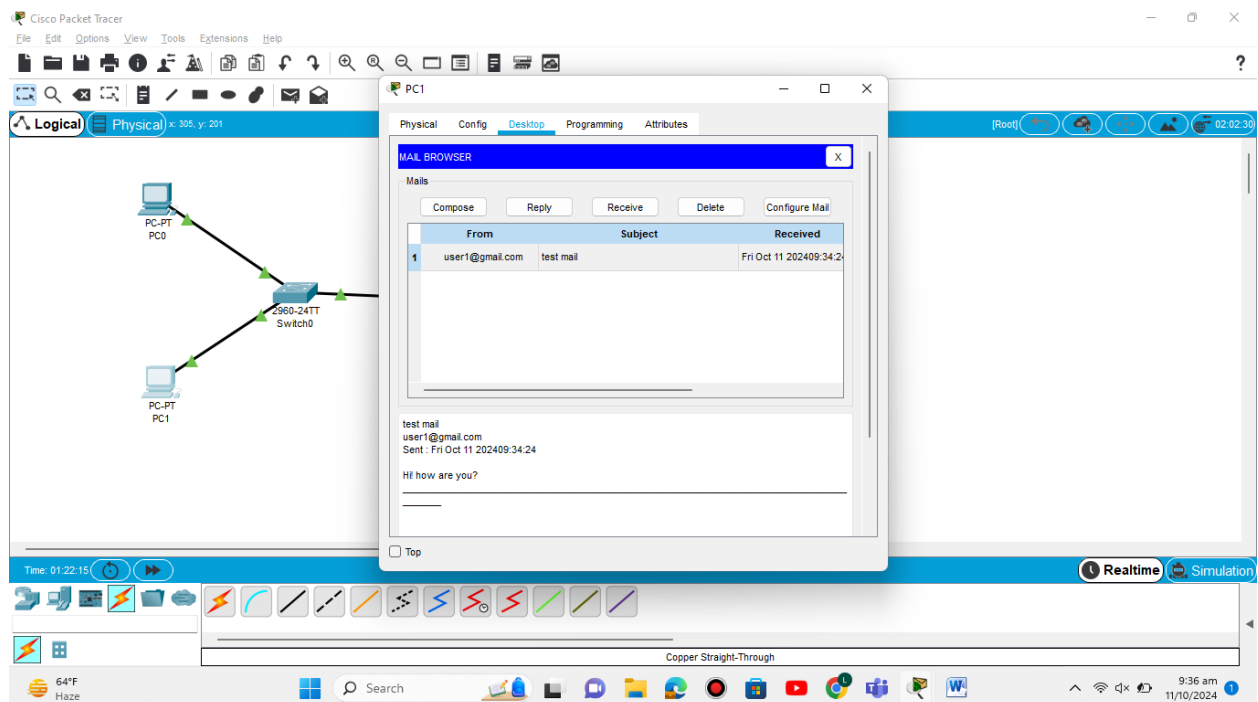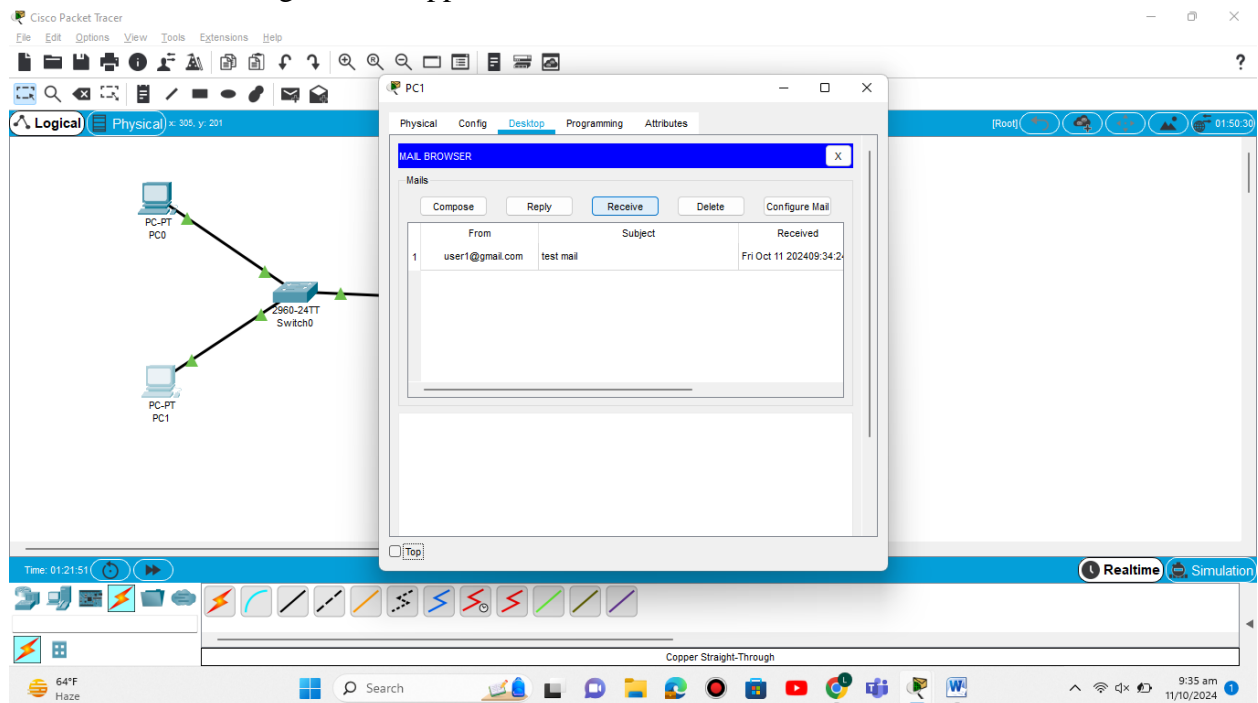
Now, to reply the message, click on reply button and write the reply and click on send button and then check on PC1.
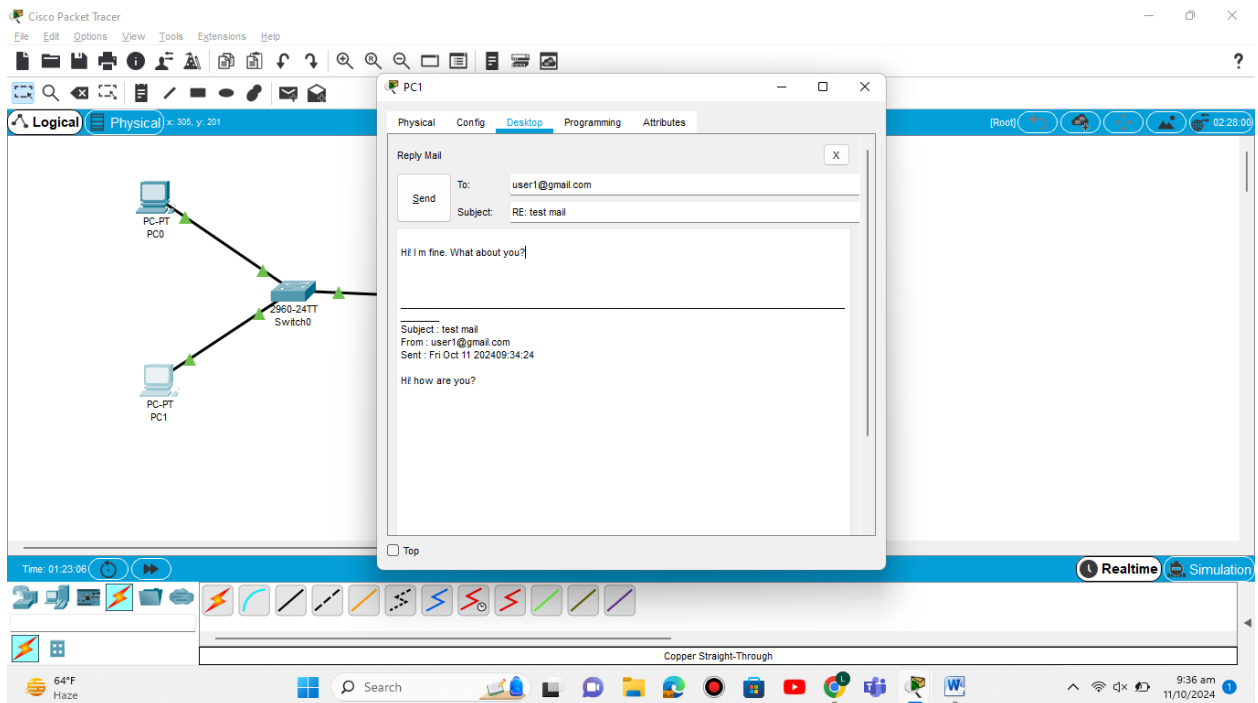
Then click PC1 to check the reply by following the steps mentioned above:
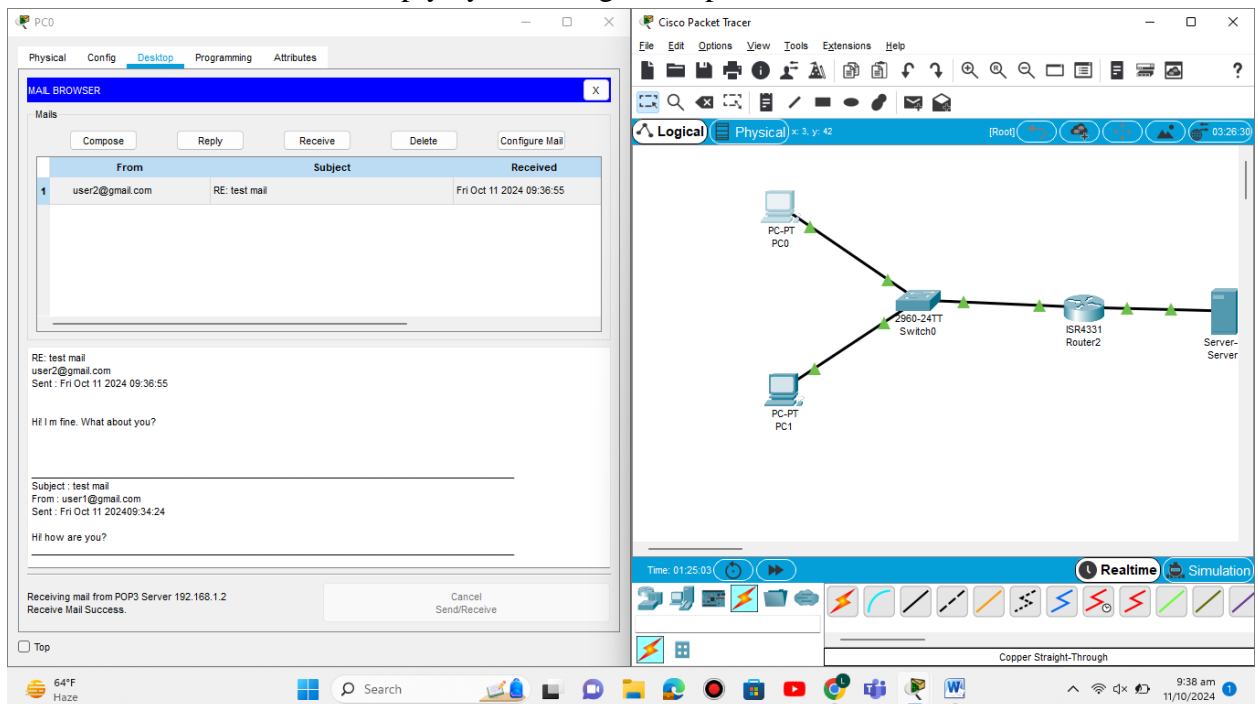
So this is how emails are transferred from one user to other.

TASK:
Perform the following task using multiple PC's and attach screenshots. Also give complete steps that are followed.