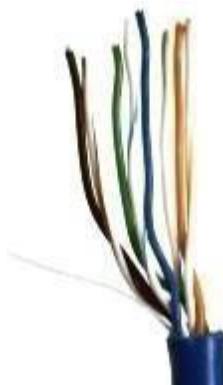


Program 1

Objective: Demonstrate flat cable crimping using T-568 A Combination.

1. **Strip your cable.** Use your cable strippers at about 1-2 inches from the end of the cable to remove the outer jacket.



2. **Untwist the twisted pair wires all the way back to the jacket.** This can be done just like a regular twist-tie on a loaf of bread, but with four of them of different colors.



3. **Align the untwisted wires in the order necessary for your needs.**

Arrange the wires based on the wiring specifications you are following. There are two methods set by the TIA, 568A and 568B. Which one you use will depend on what is being connected. A straight-through cable is used to connect two different-layer devices (e.g. a hub and a PC). Two like devices normally require a cross-over cable. The difference between the two is that a straight-through (Flat Cable) cable has both ends wired identically with T568A or T568B, while a cross-over cable has one end wired 568A and the other end wired 568B.



Flat (T568-A) - from left to right:

TIA/EIA 568A Wiring		
White-green	1	White and Green
Green	2	Green
White-orange	3	White and Orange
Blue	4	Blue
White-blue	5	White and Blue
Orange	6	Orange
White-brown	7	White and Brown
Brown	8	Brown

For our demonstration, we will use T568-A combination.

4. Cut the extra wire. Once you've untwisted the wires, you'll have a superfluous amount of copper wiring left; we don't need this much, but it's good to have it in the previous step to help in aligning the colors properly. Use the wire-cutting scissors to cut these off.

5. Push the remaining wires into the RJ45 head. Be careful not to bend the wires while pushing them in or you run the risk of creating a bad cable. You also don't want too little or too much wire left in the head; there's no definite length necessary, but it's pretty obvious to tell if there's too much cable or not enough. A short length of the jacket should be up the RJ45 head.

6. Double-check that the wires are all the way up into the gold pins of the head and made it up in the proper order.

7. Push the head into the open space of the crimping tool and squeeze it closed, hard. If you don't crimp the cable all the way, the head may come off.

8. Open the crimping tool and remove your newly-crimped Ethernet connector.

9. Repeat the crimping process on the other side of the cable if you're making a completely new cable. If you're repairing one end, this won't apply to you, so move on.

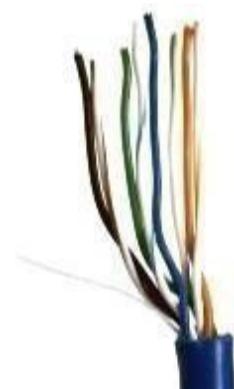
- 1. Plug one end of the cable into the tan, two-port end of the cable tester, and the other end into the other part of the tester with the led display.** Turn it on and check if corresponding light glow sequentially then cable is correct otherwise some part of the cable is messed up and needs repairing. Depending on the error, the cable may or may not still be usable.

10. Plug your Ethernet cable in. now this flat cable can be used to connect two different devices.

PROGRAM 2

Objective: Demonstrate cross cable crimping using T-568 B Combination.

2. Strip your cable. Use your cable strippers at about 1-2 inches from the end of the cable to remove the outer jacket.



3. Untwist the twisted pair wires all the way back to the jacket. This can be done just like a regular twist-tie on a loaf of bread, but with four of them of different colors.



4. Align the untwisted wires in the order necessary for your needs.

Arrange the wires based on the wiring specifications you are following. There are two methods set by the TIA, 568A and 568B. Which one you use will depend on what is being connected. A straight-through cable is used to connect two different-layer devices (e.g. a hub and a PC). Two like devices normally require a cross-over cable. The difference between the two is that a straight-through (Flat Cable) cable has both ends wired identically with T568A or T568B, while a cross-over cable has one end wired 568A and the other end wired 568B.



Flat (T568-B) - from left to right:

White – Orange
Orange
White-Green
Blue
White-Blue
Green
White Brown
Brown



For our demonstration, we will use T568-B combination to make flat cable.

5. Cut the extra wire. Once you've untwisted the wires, you'll have a superfluous amount of copper wiring left; we don't need this much, but it's good to have it in the previous step to help in aligning the colours properly. Use the wire-cutting scissors to cut these off.

6. Push the remaining wires into the RJ45 head. Be careful not to bend the wires while pushing them in or you run the risk of creating a bad cable. You also don't want too little or too much wire left in the head; there's no definite length necessary, but it's pretty obvious to tell if there's too much cable or not enough. A short length of the jacket should be up the RJ45 head.

7. Double-check that the wires are all the way up into the gold pins of the head and made it up in the proper order.

8. Push the head into the open space of the crimping tool and squeeze it closed, hard. If you don't crimp the cable all the way, the head may come off.

9. Open the crimping tool and remove your newly-crimped Ethernet connector.

10. Repeat the crimping process on the other side of the cable if you're making a completely new cable. If you're repairing one end, this won't apply to you, so move on.

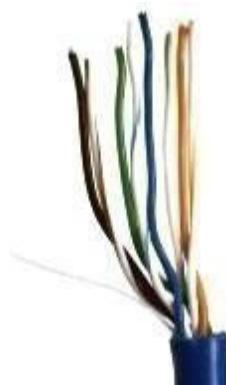
11. Plug one end of the cable into the tan, two-port end of the cable tester, and the other end into the other part of the tester with the led display. Turn it on and check if corresponding light glow sequentially then cable is correct otherwise some part of the cable is messed up and needs repairing. Depending on the error, the cable may or may not still be usable.

12. Plug your Ethernet cable in. now this flat cable can be used to connect two different devices.

Program 3

Objective: Demonstrate cross over cable crimping using T-568 Aand T – 568 B Combination.

- 1. Strip your cable.** Use your cable strippers at about 1-2 inches from the end of the cable to remove the outer jacket.



- 2. Untwist the twisted pair wires all the way back to the jacket.** This can be done just like a regular twist-tie on a loaf of bread, but with four of them of different colors.



- 3. Align the untwisted wires in the order necessary for your needs.** For this scenario, you'll be making a cross over cable, which has both ends of the cable with the different alignment of wires.



Arrange the wires based on the wiring specifications you are following. There are two methods set by the TIA, 568A and 568B. Which one you use will depend on what is being connected. A straight-through cable is used to connect two different- layer devices (e.g. a hub and a PC). Two like devices normally require a cross- over cable. The difference between the two is that a straight-through (Flat Cable) has both ends wired identically with T568A or T568B, while a cross-over cable has one end wired T568A and the other end wired T568B.

Flat (T568-A) - from left to right:

White-green

Green

White-orange

Blue

White-blue

Orange

White-brown

Brown

TIA/EIA 568A Wiring

1	White and Green
2	Green
3	White and Orange
4	Blue
5	White and Blue
6	Orange
7	White and Brown
8	Brown

Flat (T568-B) - from left to right:

White – Orange

Orange

White-Green

Blue

White-Blue

Green

White Brown

Brown

TIA/EIA 568B Wiring

1	White and Orange
2	Orange
3	White and Green
4	Blue
5	White and Blue
6	Green
7	White and Brown
8	Brown

To make cross over cable, we will use T568-A combination for one end and T568- B combination for other end.

4. Cut the extra wire. Once you've untwisted the wires, you'll have a superfluous amount of copper wiring left; we don't need this much, but it's good to have it in the previous step to help in aligning the colors properly. Use the wire-cutting scissors to cut these off.

5. Push the remaining wires into the RJ45 head. Be careful not to bend the wires while pushing them in or you run the risk of creating a bad cable. You also don't want too little or too much wire left in the head; there's no definite length necessary, but it's pretty obvious to tell if there's too much cable or not enough. A short length of the jacket should be up the RJ45 head.

6. Double-check that the wires are all the way up into the gold pins of the headand made it up in the proper order.

7. Push the head into the open space of the crimping tool and squeeze it closed, hard. If you don't crimp the cable all the way, the head may come off.

8. Open the crimping tool and remove your newly-crimped Ethernet connector.

9. Repeat the crimping process on the other side of the cable if you're making a completely new cable. If you're repairing one end, this won't apply to you, so move on.

13. Plug one end of the cable into the tan, two-port end of the cable tester, and the other end into the other part of the tester with the led display. Turn it on and check if corresponding light glow sequentially then cable is correct otherwise some part of the cable is messed up and needs repairing. Depending on the error, the cable may or may not still be usable.

Program 4

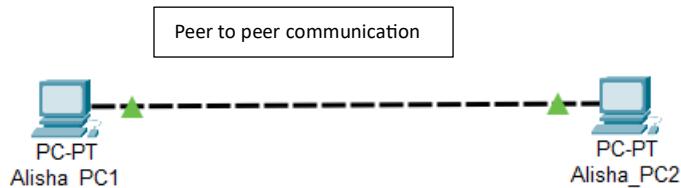
Objective: Demonstrate peer to peer connection between the two computers.

Step 1: Open Cisco Packet Tracer.

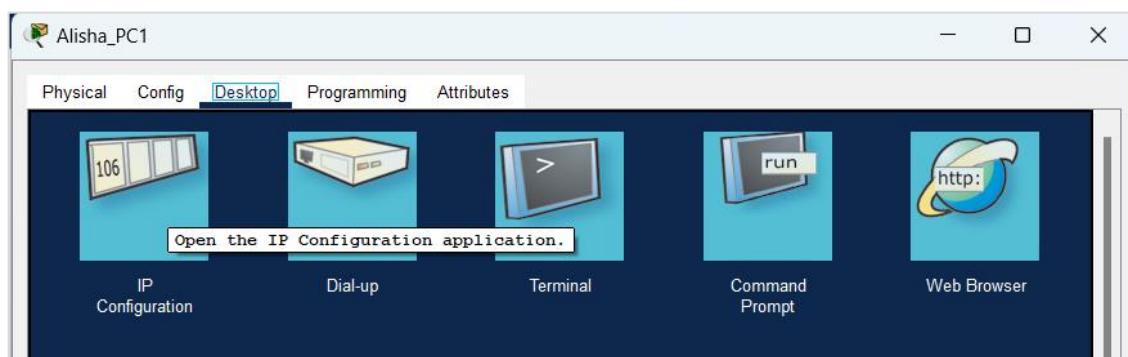
Step 2: Create two nodes with the help of 2 generic PC.



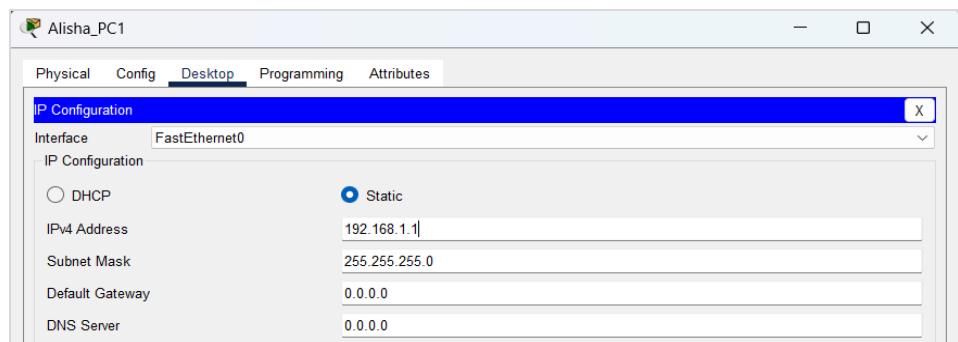
Step 3: Connect the Alisha_PC1 to Alisha_PC2 using cross cable.



Step 4: Set the IP address configuration on Alisha_PC1 and Alisha_PC2, by clicking on Alisha_PC1 then a dialog box appears.



Step 5: Now go to the IP configuration and set the IP4 addresses and click on the subnet mask.



Set the IP4 addresses for Alisha_PC1 and Alisha_PC2

Alisha_PC1: 192.168.1.1
Alisha_PC2: 192.168.1.2

Repeat the same steps for Alisha_PC2.

Step 6: Use the command prompt by selecting Alisha_PC2 and Alisha_PC1 to ping the device.

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.1

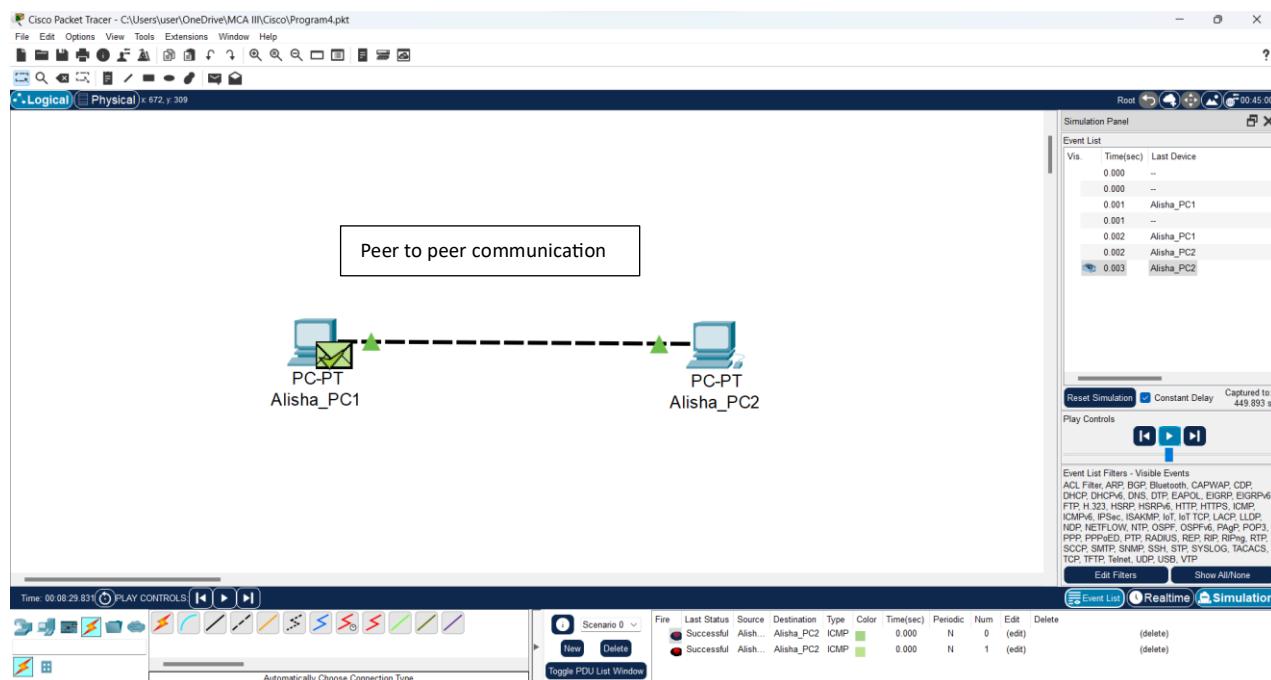
Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=9ms TTL=128
Reply from 192.168.1.1: bytes=32 time<1ms TTL=128
Reply from 192.168.1.1: bytes=32 time<1ms TTL=128
Reply from 192.168.1.1: bytes=32 time<1ms TTL=128

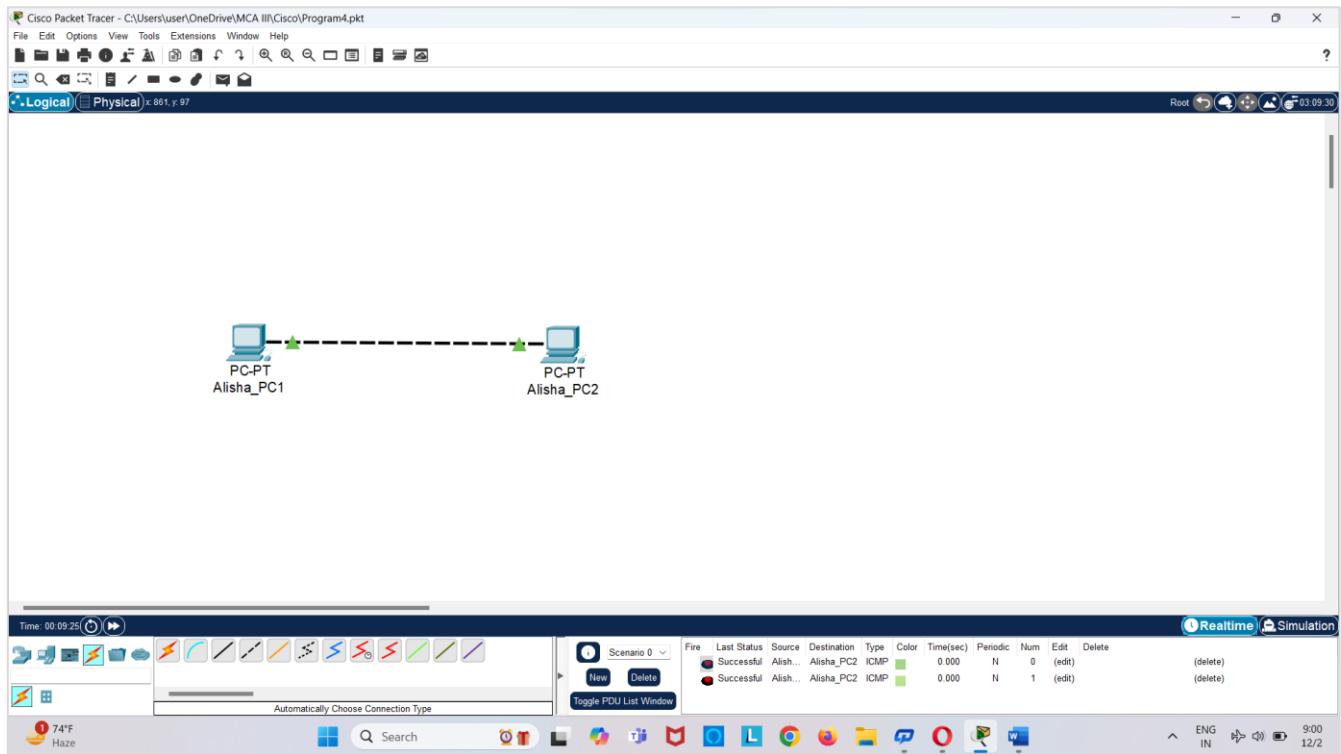
Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 9ms, Average = 2ms

C:\>
```

Step 7: Select the Add Simple PDU tool and click simulation option to show simulation.
Program under simulation:



Program after successful:



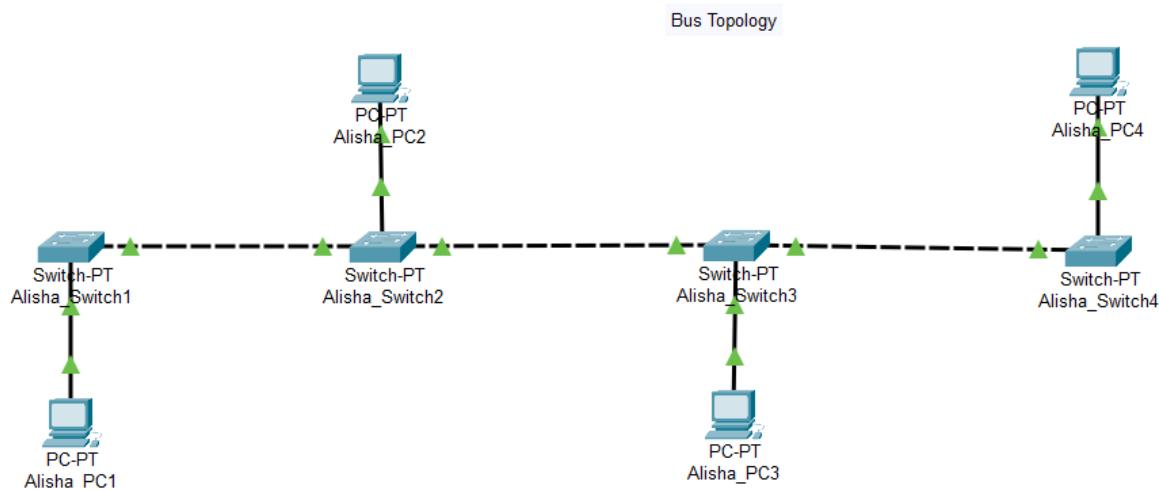
Program 5

Objective: Demonstrate the various topologies.

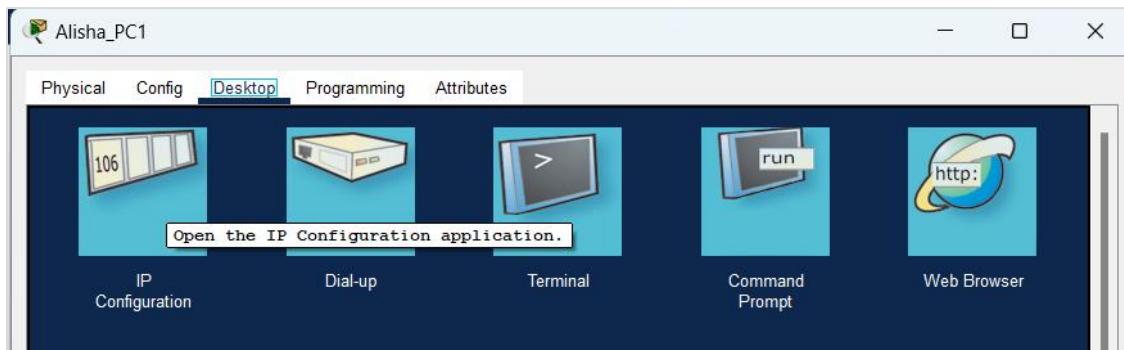
1. Bus topology

Step 1: Open Cisco Packet Tracer.

Step 2: Take 4 generic PC and 4 generic Switch, connect them using cross cable like this:

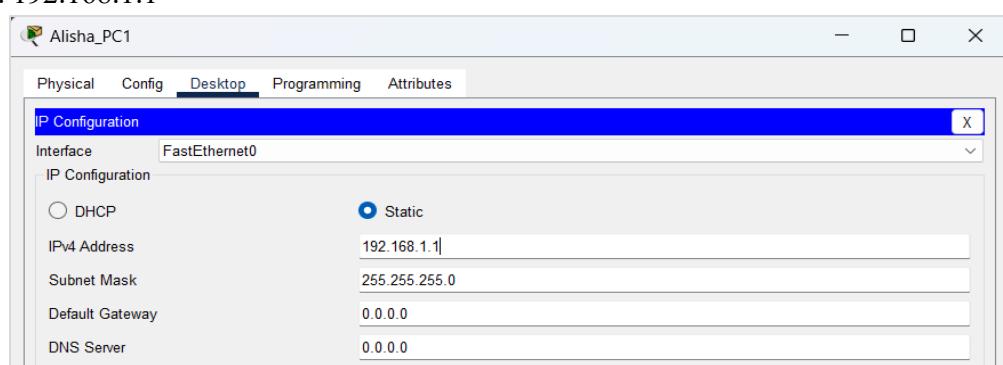


Step 3: Click on Alisha_PC1 and go to Desktop then a dialog box appears.



Step 4: Now go to the IP configuration and set the IP4 addresses and click on the subnetmask.

Alisha_PC1: 192.168.1.1

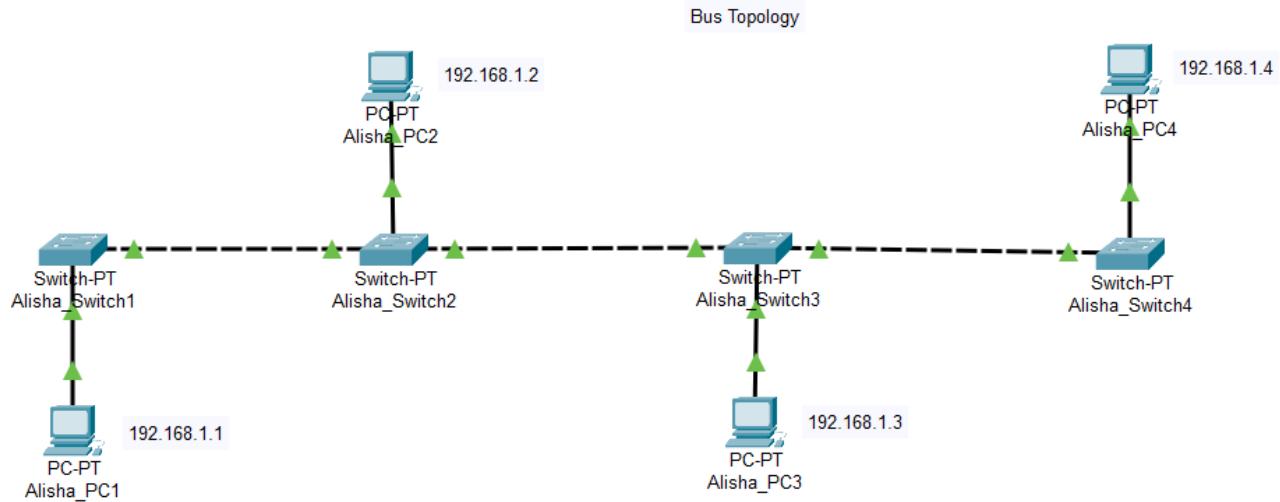


Similarly set the IP address for all PC's

Alisha_PC2: 192.168.1.2

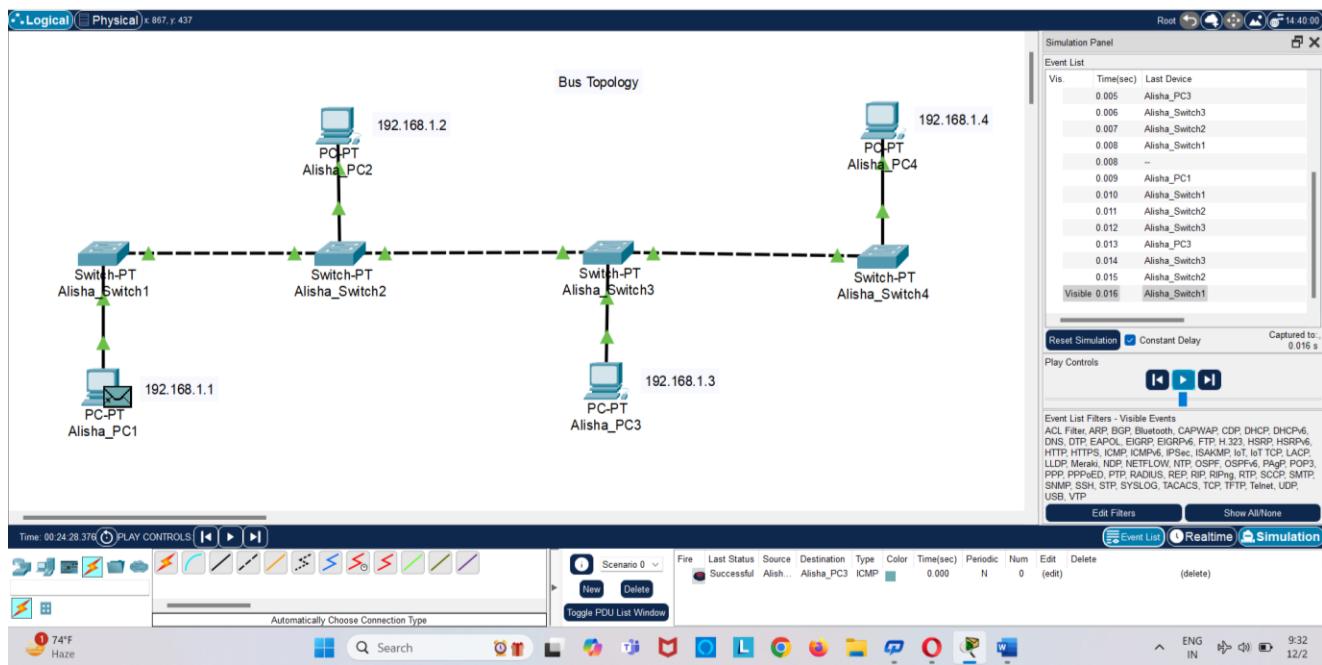
Alisha_PC3: 192.168.1.3

Alisha_PC4: 192.168.1.4

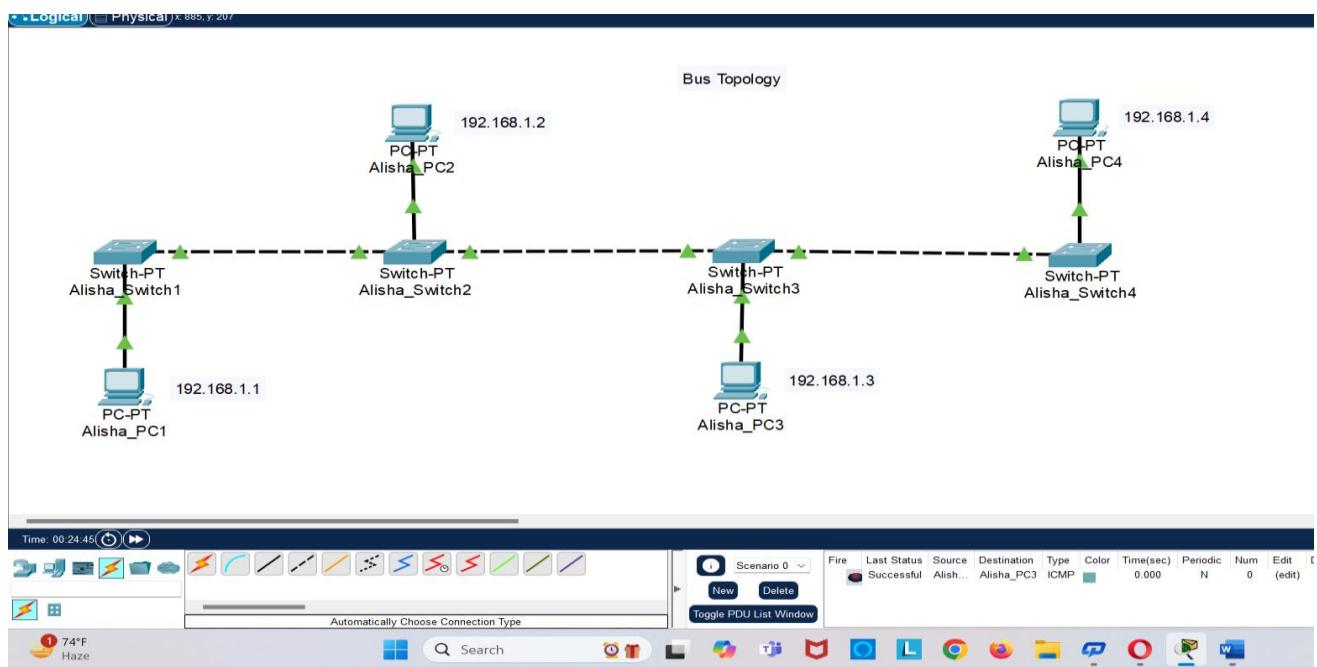


Step 5: After setting IP address select add simple PDU to ping the devices. After configuring all PCs all the connectivity will become green like this.

Scenario under Simulation:



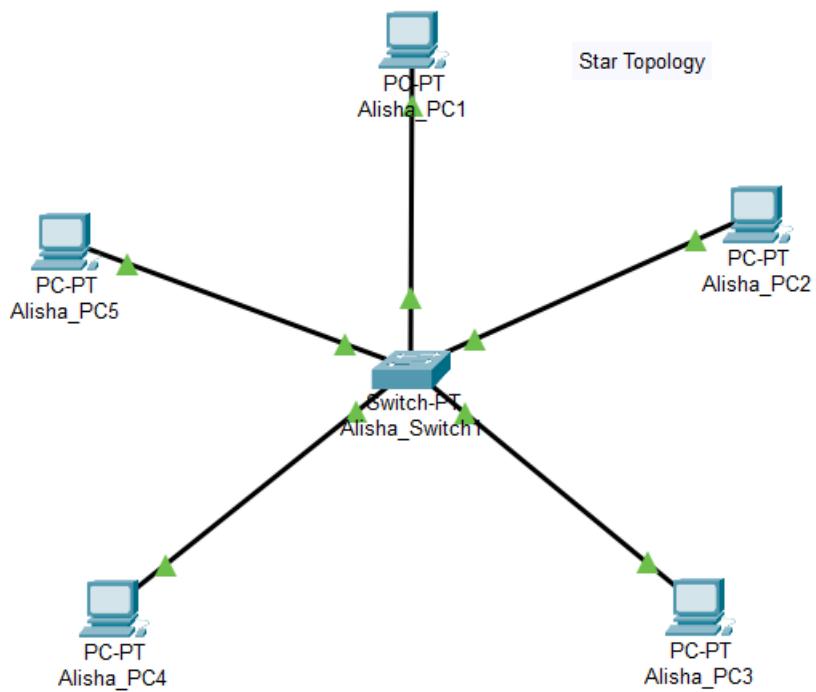
Scenario after success:



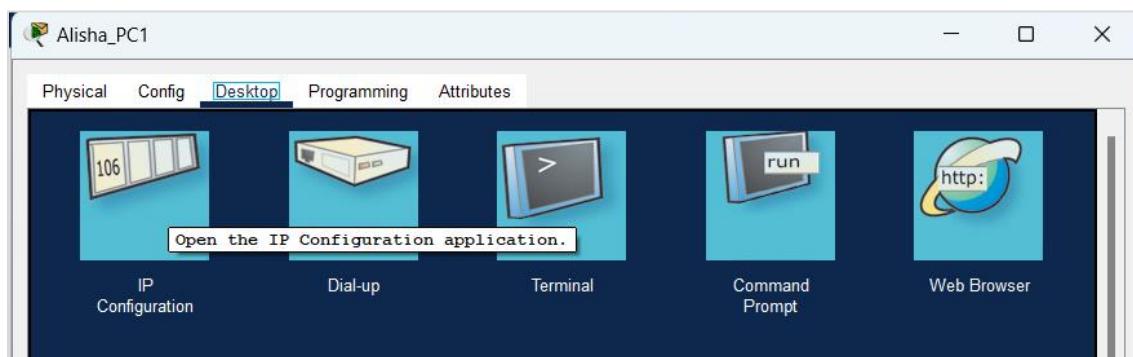
2. Star topology

Step 1: Open Cisco Packet Tracer.

Step 2: Take 4 generic PC and 1 PT Switch, connect all 4 PC to switch using default connection.

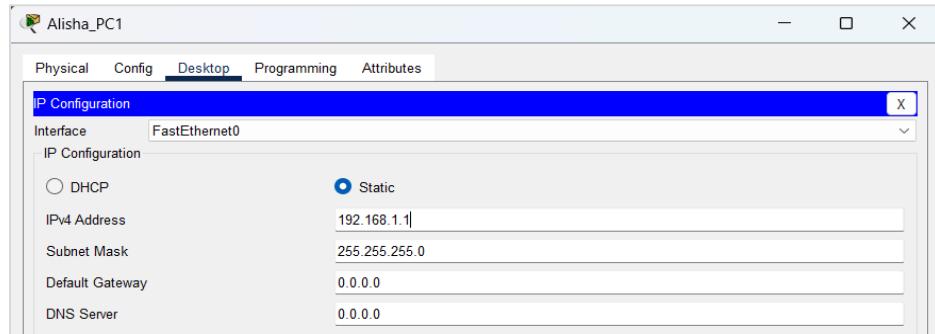


Step 3: Click on Alisha_PC1 and go to Desktop then a dialog box appears.



Step 4: Now go to the IP configuration and set the IP4 addresses and click on the subnet mask.

Alisha_PC1: 192.168.1.1



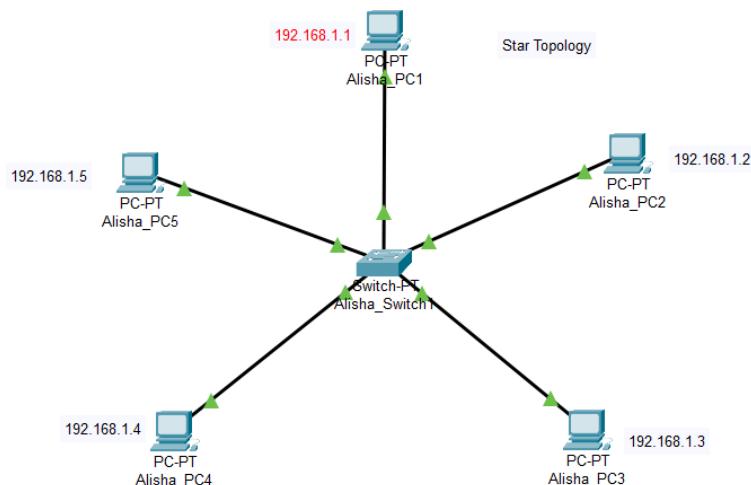
Similarly set the IP address for all PC's

Alisha_PC2: 192.168.1.2

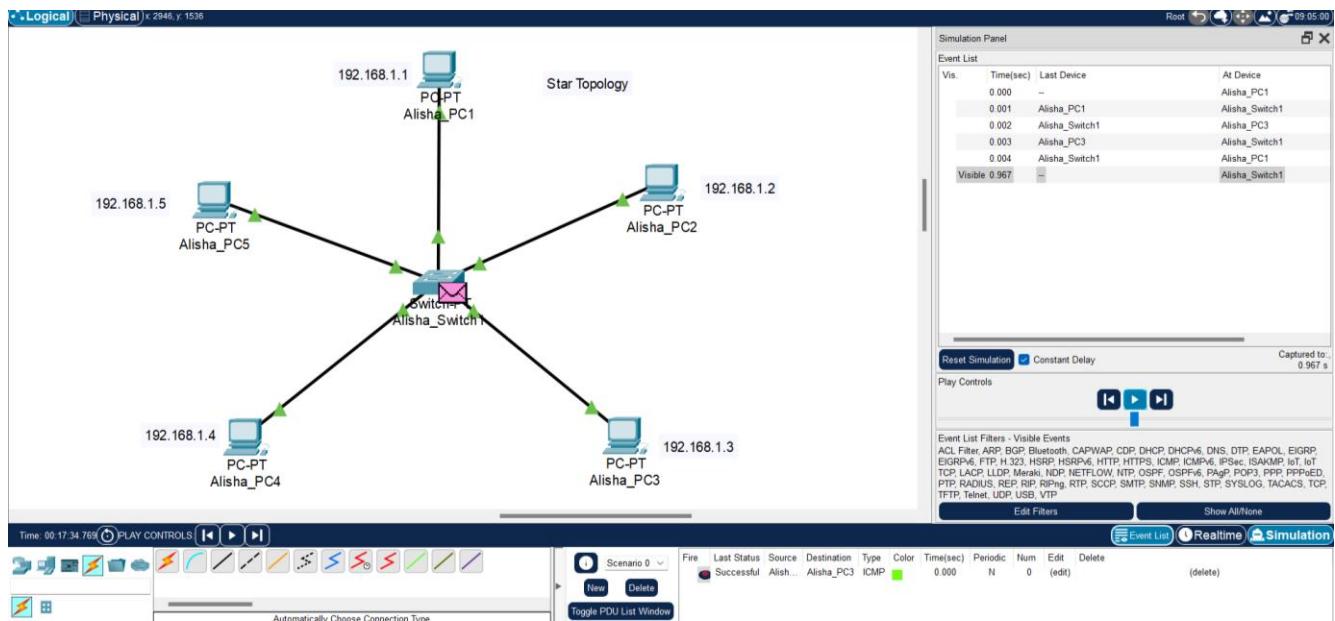
Alisha_PC3: 192.168.1.3

Alisha_PC4: 192.168.1.4

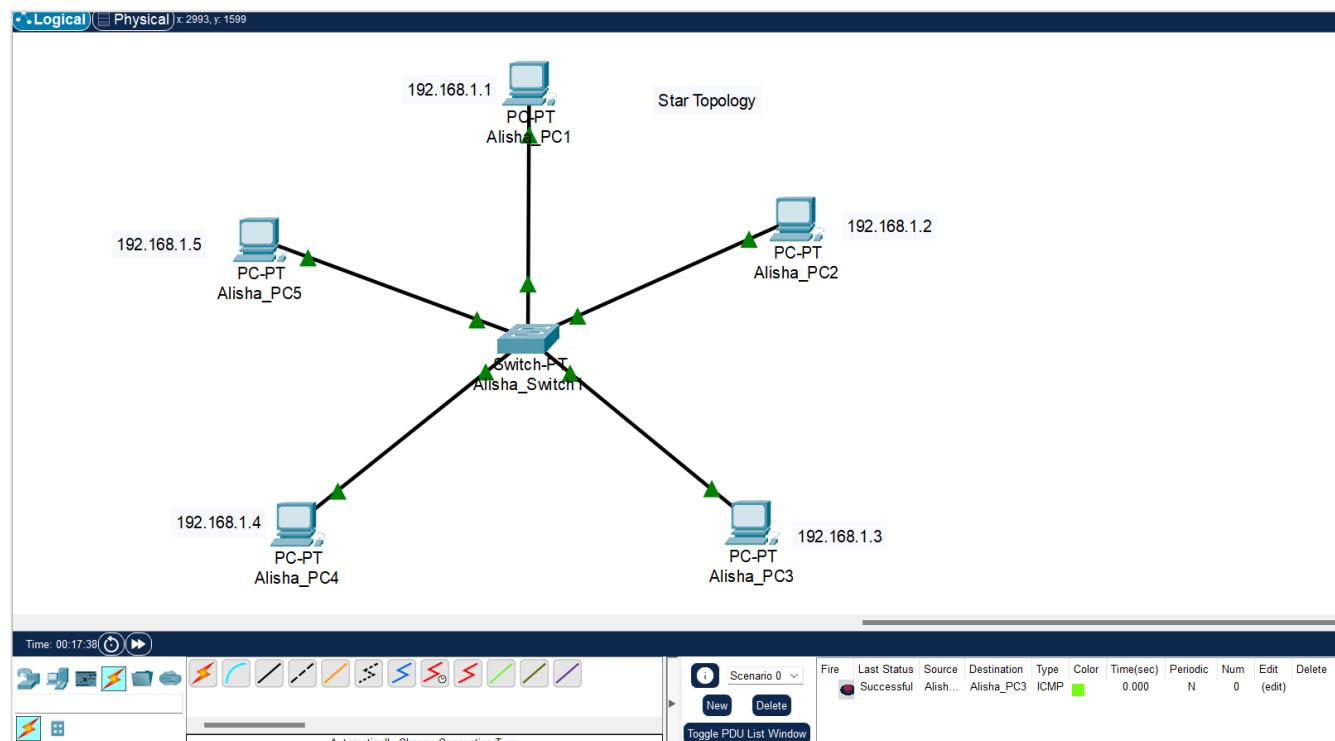
Alisha_PC5: 192.168.1.5



Step 5: Select the Add Simple PDU tool and click simulation option to show simulation. Scenario in process:



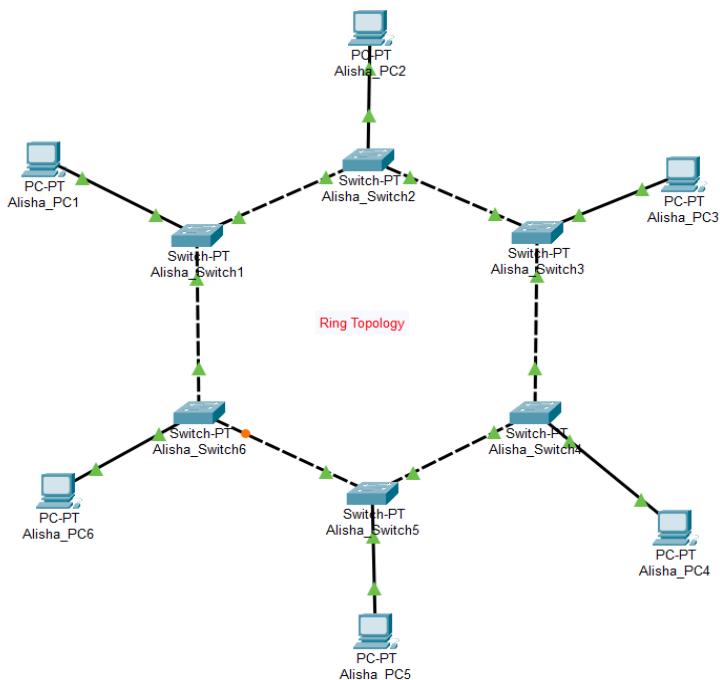
Scenario After successful



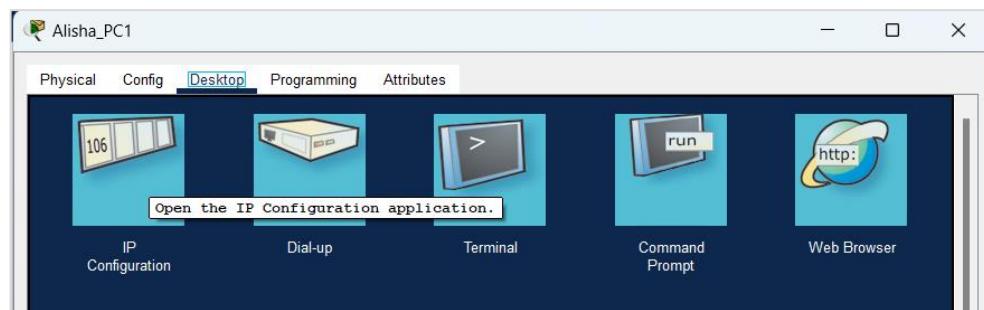
3. Ring topology

Step 1: Open Cisco Packet Tracer.

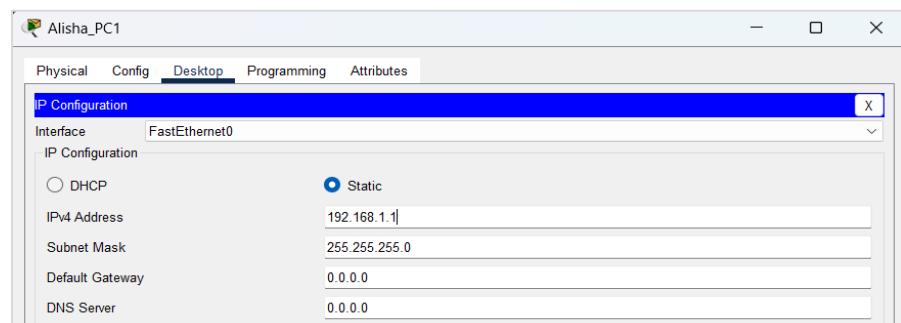
Step 2: Take 4 generic PC and 4 PT Switch, connect all one PC to one switch using default connection and also connect switches like this.



Step 3: Click on Alisha_PC1 and go to Desktop then a dialog box appears.



Step 4: Now go to the IP configuration and set the IP4 addresses and click on the subnet mask.
Alisha_PC1: 192.168.1.1



Similarly set the IP address for all PC's

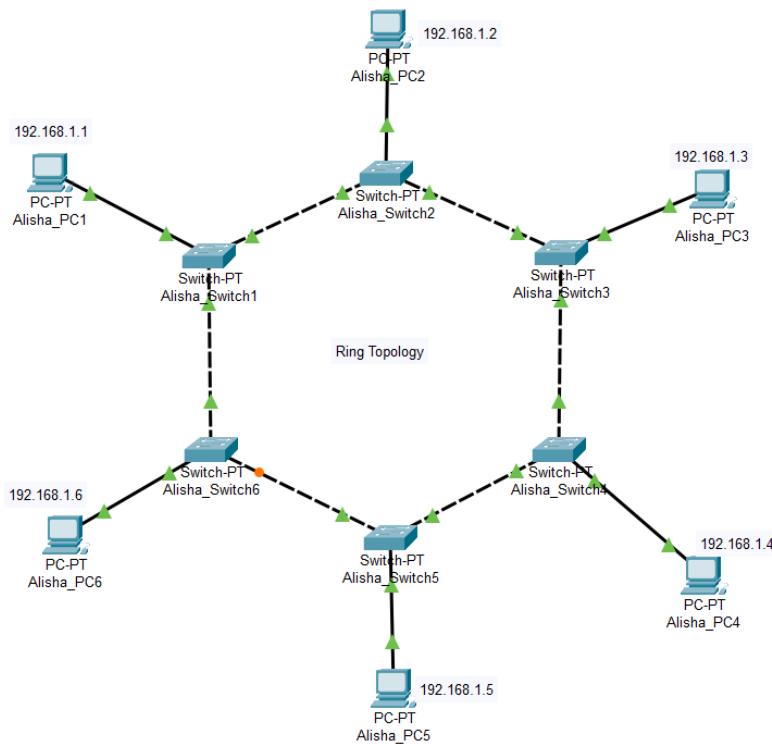
Alisha_PC2: 192.168.1.2

Alisha_PC3: 192.168.1.3

Alisha_PC4: 192.168.1.4

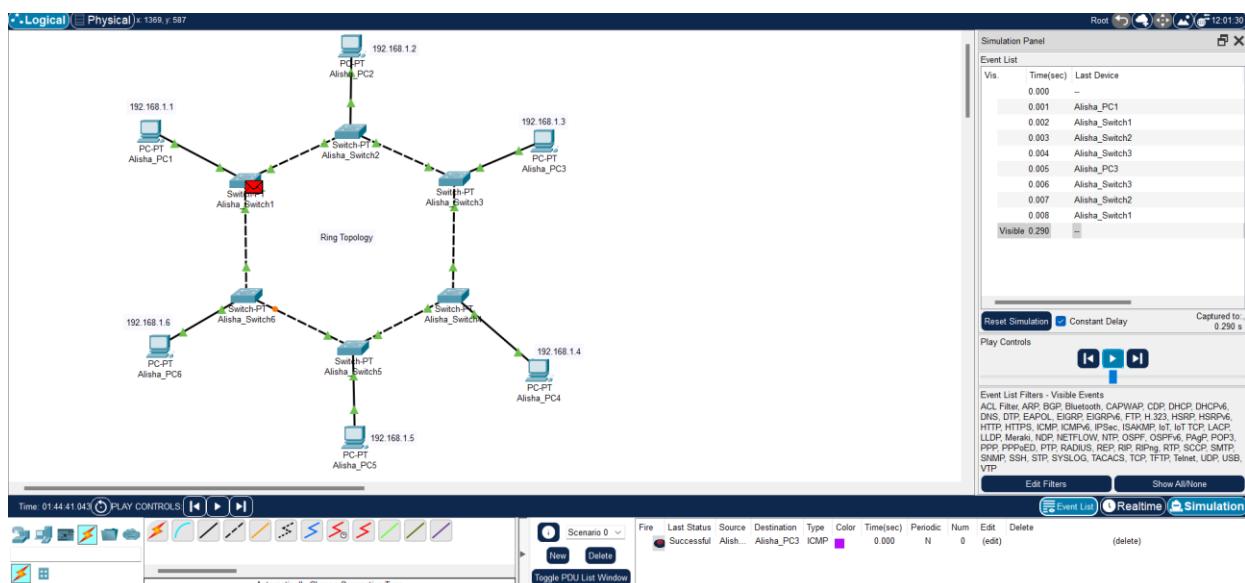
Alisha_PC5: 192.168.1.5

Alisha_PC6: 192.168.1.6

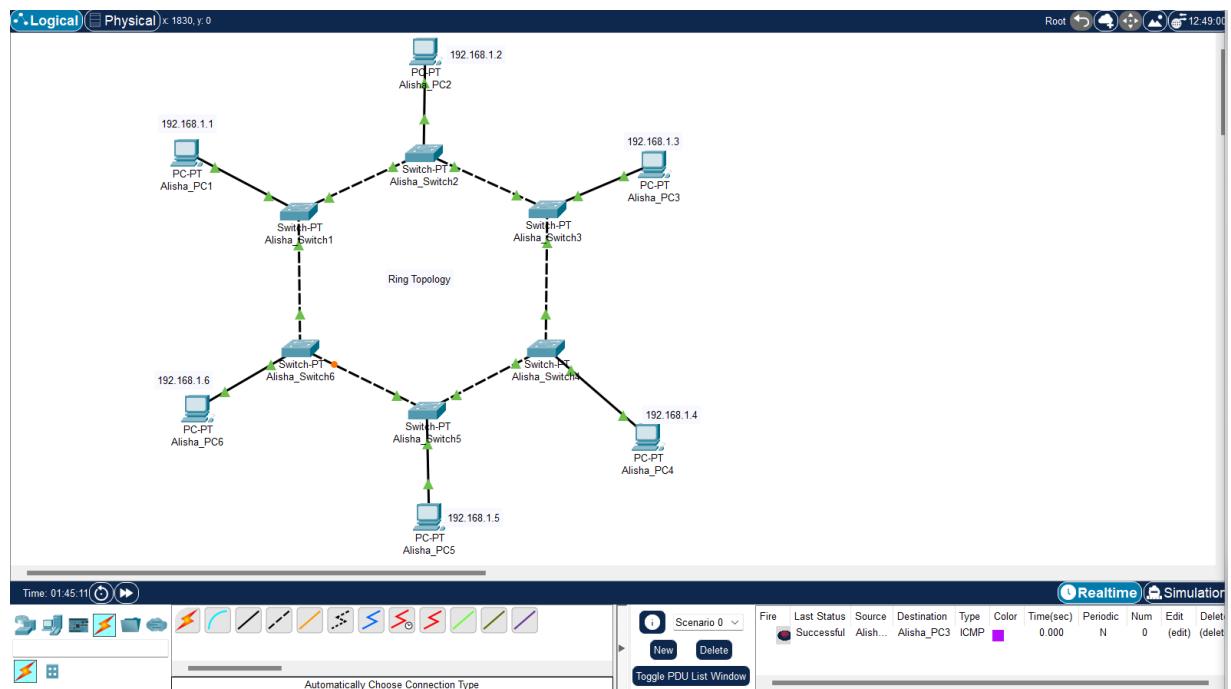


Step 5: Select the Add Simple PDU tool and click simulation option to show simulation.

Scenario in progress:



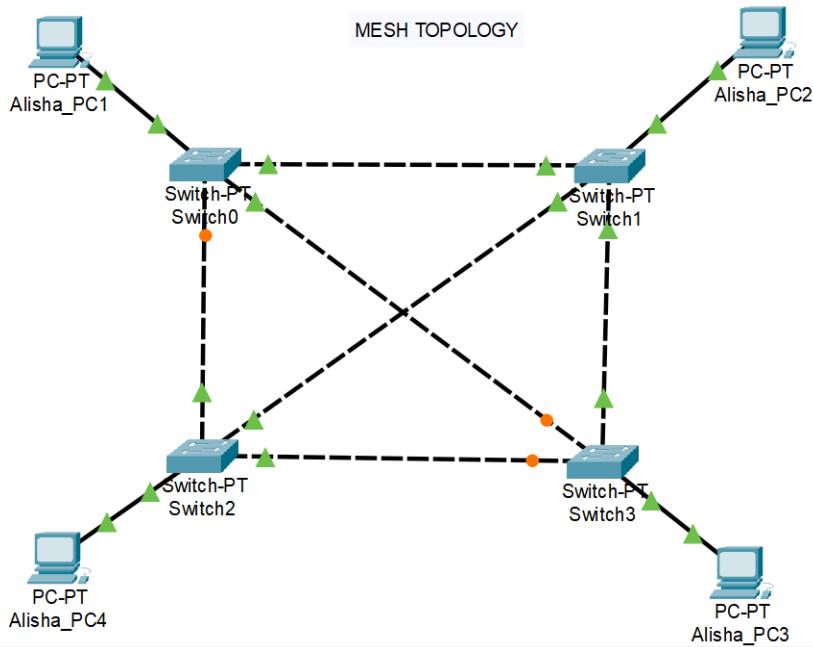
Scenario After successful:



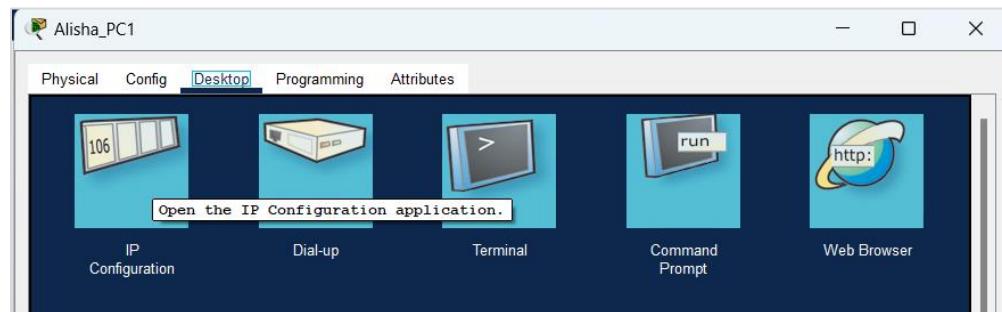
4. Mesh topology

Step 1: Open Cisco Packet Tracer.

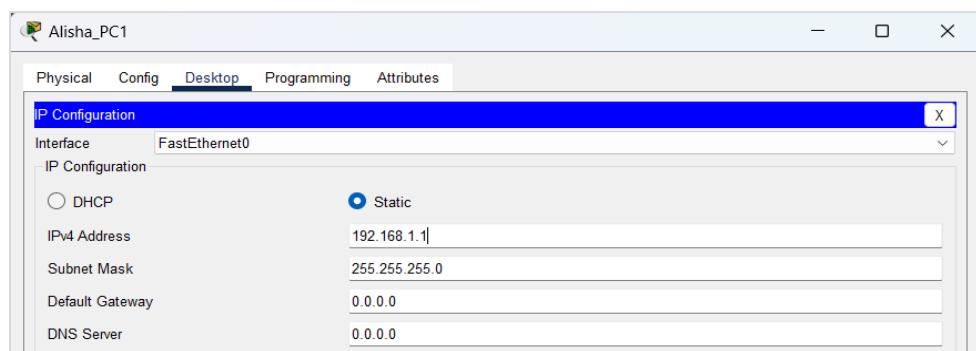
Step 2: Take 4 generic PC and 4 PT Switch, connect every PC to one switch using default connection. Also connect switches like this:



Step 3: Click on Alisha_PC1 and go to Desktop then a dialog box appears.



Step 4: Now go to the IP configuration and set the IP4 addresses and click on the subnet mask.
Alisha_PC1: 192.168.1.1

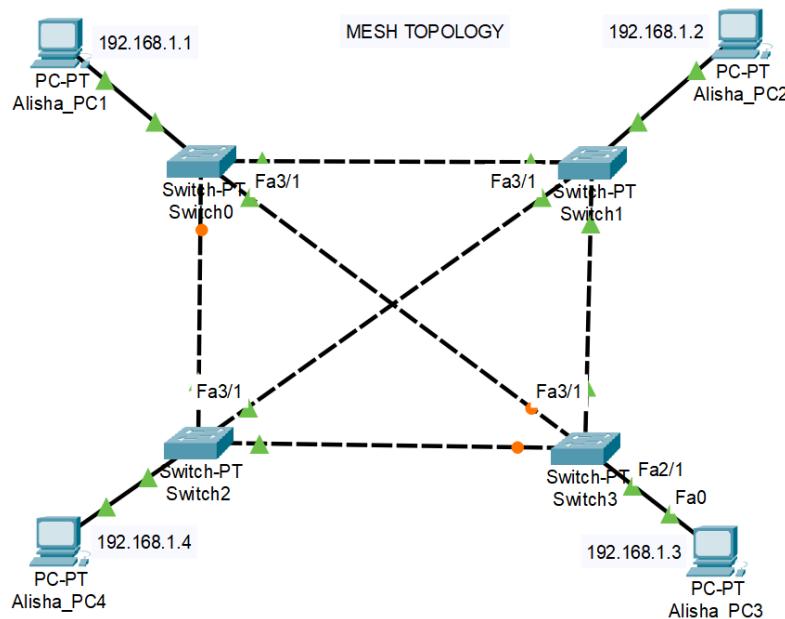


Similarly set the IP address for all PC's

Alisha_PC2: 192.168.1.2

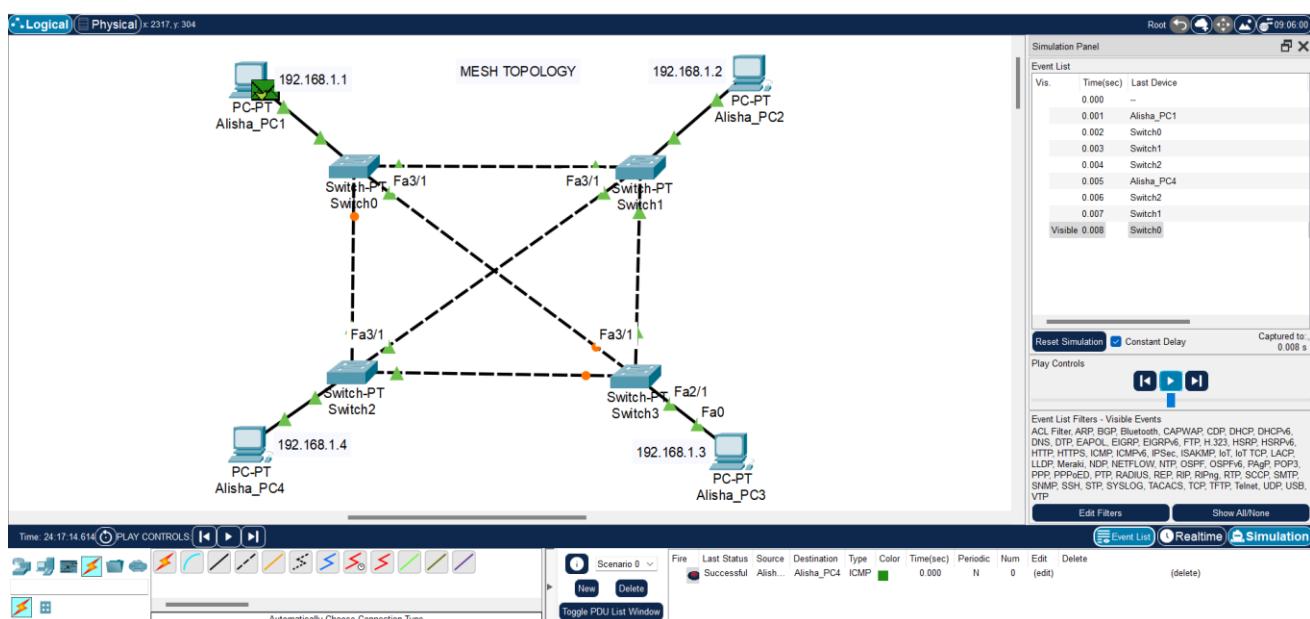
Alisha_PC3: 192.168.1.3

Alisha_PC4: 192.168.1.4

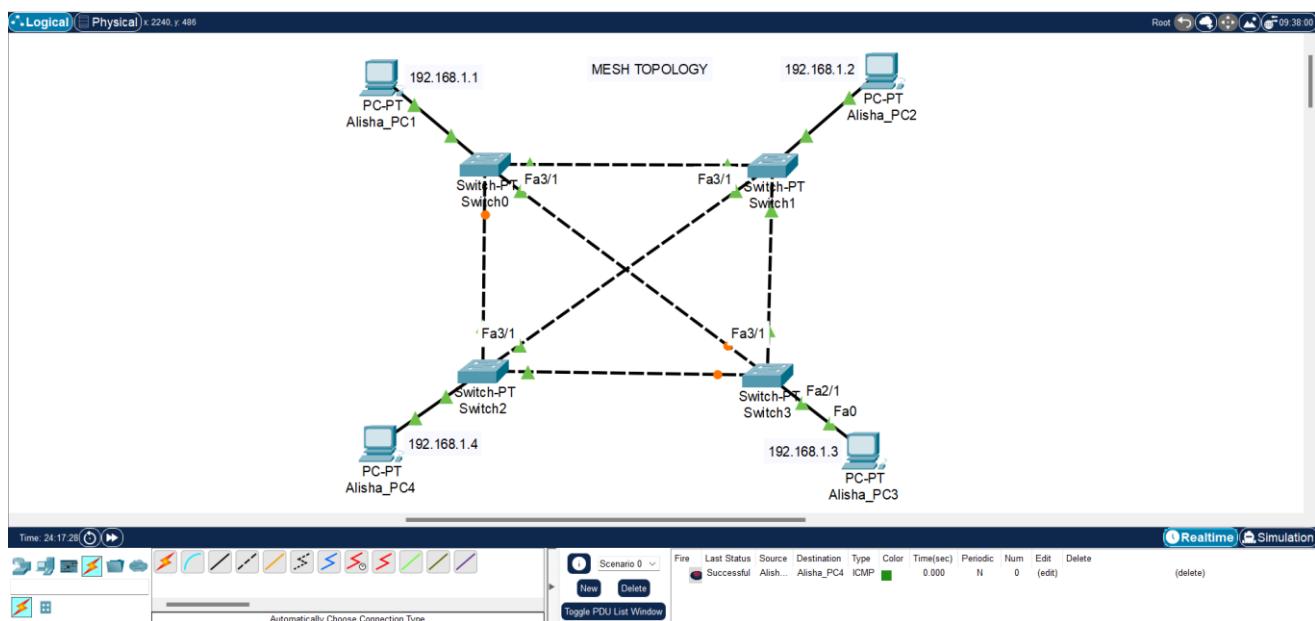


Step 5: Select the Add Simple PDU tool and click simulation option to show simulation.

Scenario in progress:



Scenario After successful:



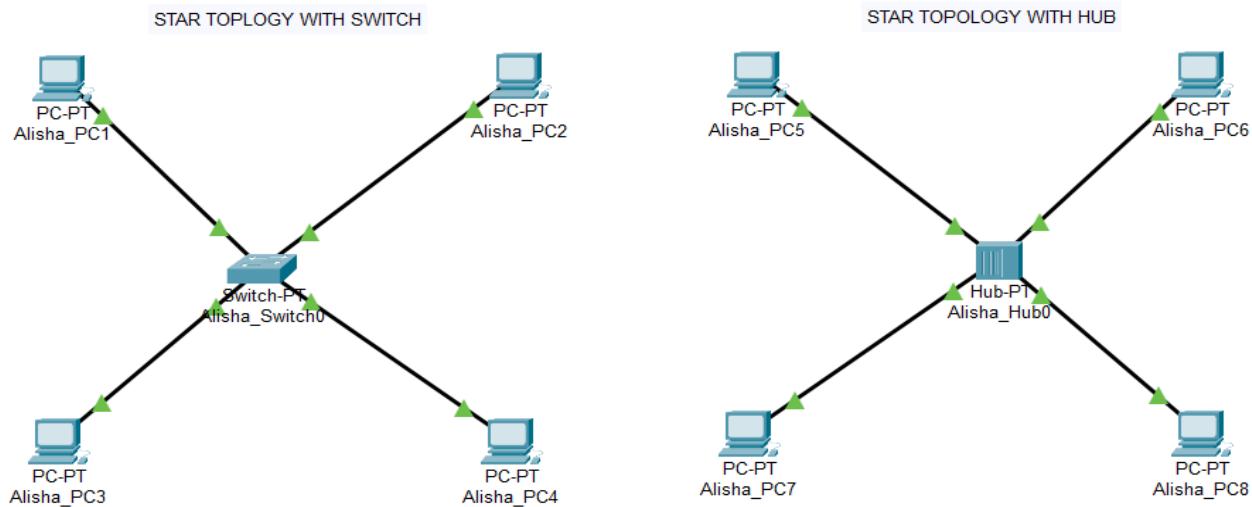
Program 6

Objective: Differentiate between star topology using switch and start Topology using hub.

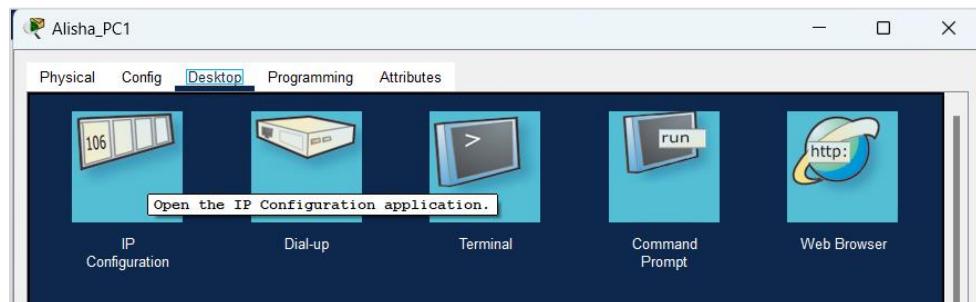
Step 1: Open Cisco Packet Tracer.

Step 2: Take 4 generic PC and 1 PT switch, connect all 4 PC to Switch using default connection.

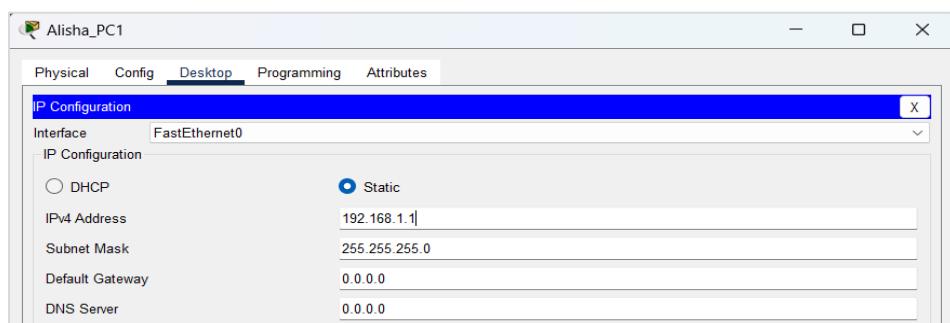
Now again takes 4 PC and 1 PT hub and connect all 4 PC to hub.



Step 3: Click on Alisha_PC1 and go to Desktop then a dialog box appears.



Step 4: Now go to the IP configuration and set the IP4 addresses and click on the subnet mask.
Alisha_PC1: 192.168.1.1



Similarly set the IP address for all PC's

Alisha_PC2: 192.168.1.2

Alisha_PC3: 192.168.1.3

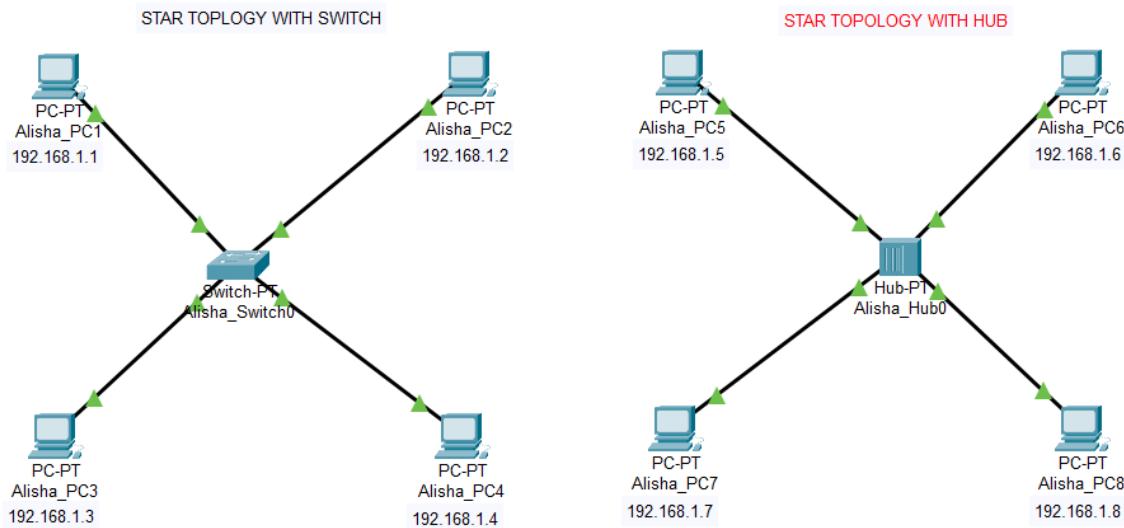
Alisha_PC4: 192.168.1.4

Alisha_PC5: 192.168.1.5

Alisha_PC6: 192.168.1.6

Alisha_PC7: 192.168.1.7

Alisha_PC8: 192.168.1.8

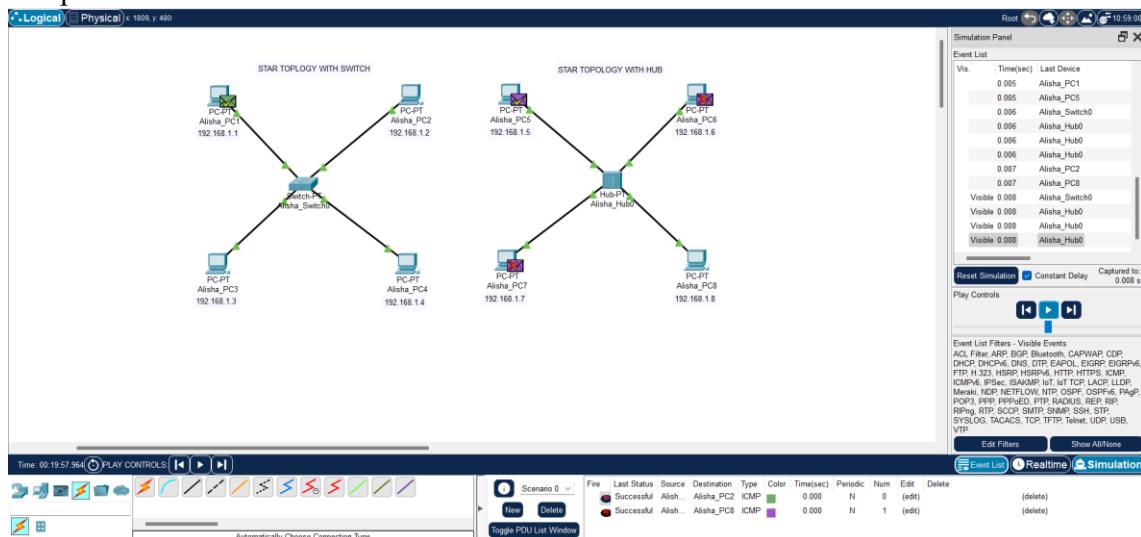


Step 5: Select the Add Simple PDU tool between

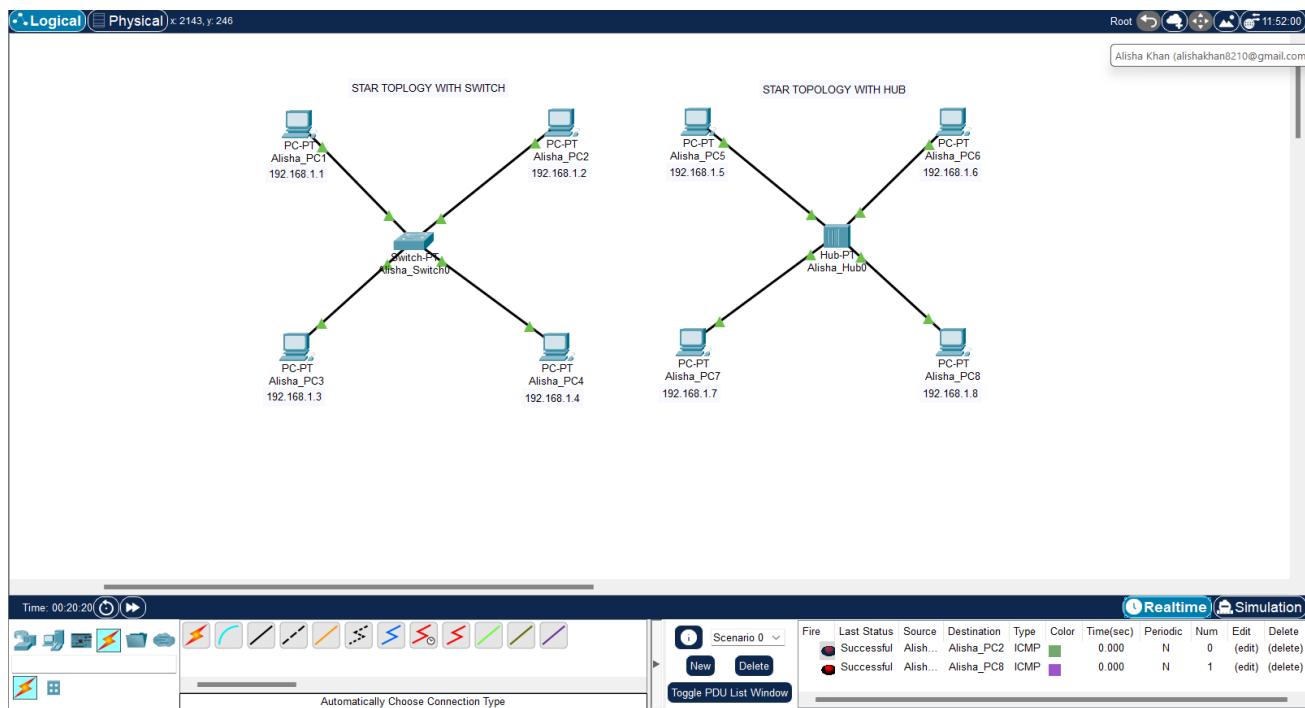
1. Alisha_Pc1 and Alisha_Pc2
2. Alisha_Pc5 and Alisha_Pc8

And click simulation option to show simulation.

Scenario in process:



Scenario after success:



From this scenario we can differentiate hub and switch: Switch unicast the message while hub multicast the message.

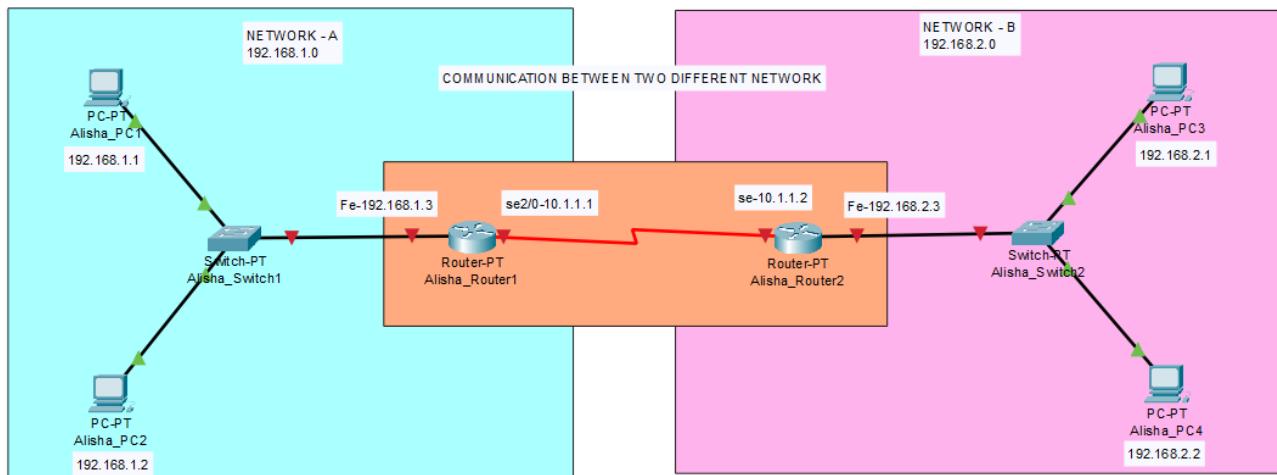
Program 7

Objective: Demonstrate communication between two different networks.

Step 1: Open Cisco Packet Tracer application.

Step 2: Take 4 generic PC, 2 PT switch.

Step3: Connect the PCs, Switch and router with the help of Copper straight-through cable and both router are connected with the serial DCE cable like this.



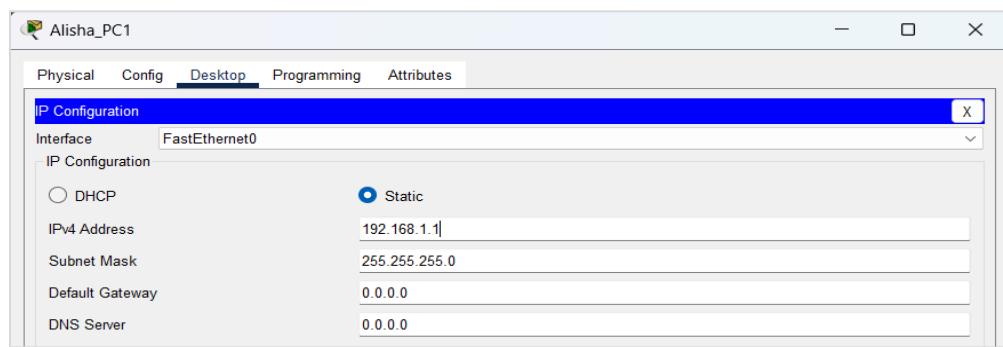
Step4: Now configure the IP address of all 4 PCs.

Alisha_PC1 : 192.168.1.1

Alisha_PC2 : 192.168.1.2

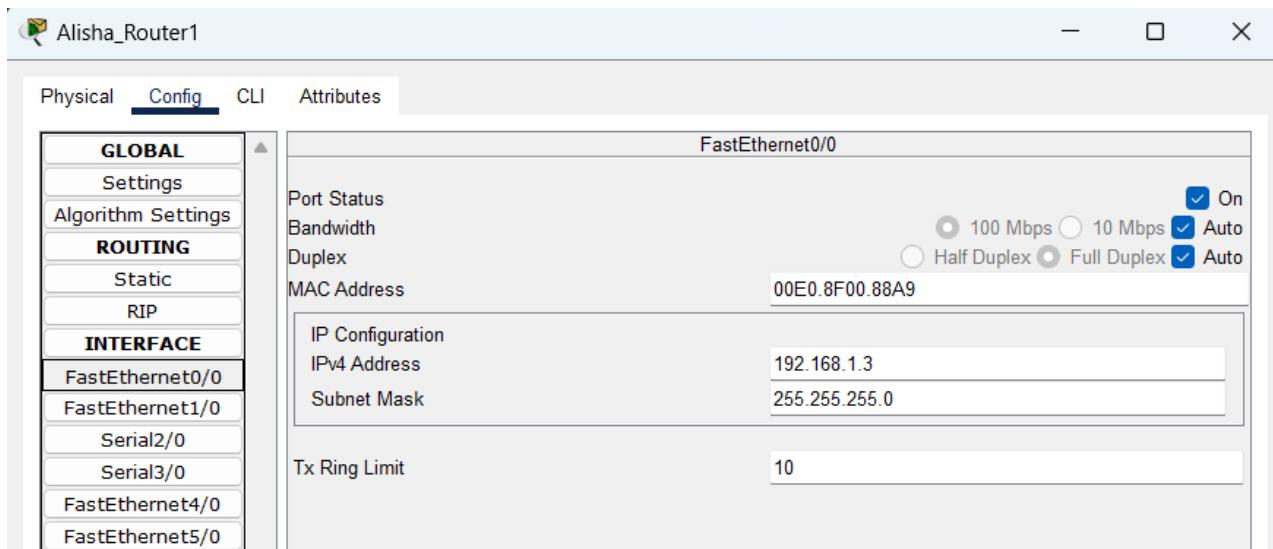
Alisha_PC3 : 192.168.2.1

Alisha_PC4 : 192.168.2.2

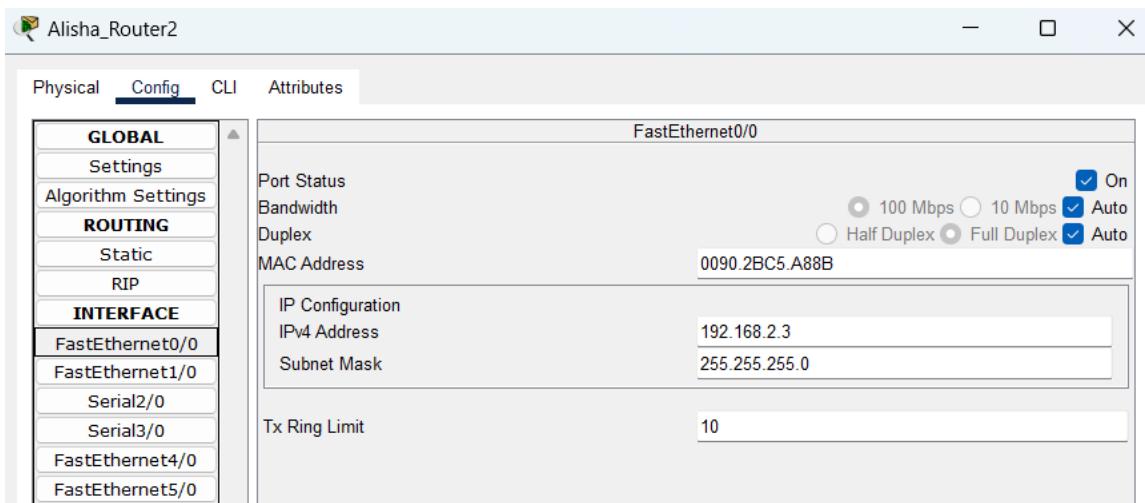


Step5: Now go to Alisha_Router1-> config ->FastEthernet0/0 and on the port status. Same things are done on the Alisha_Router2 also.

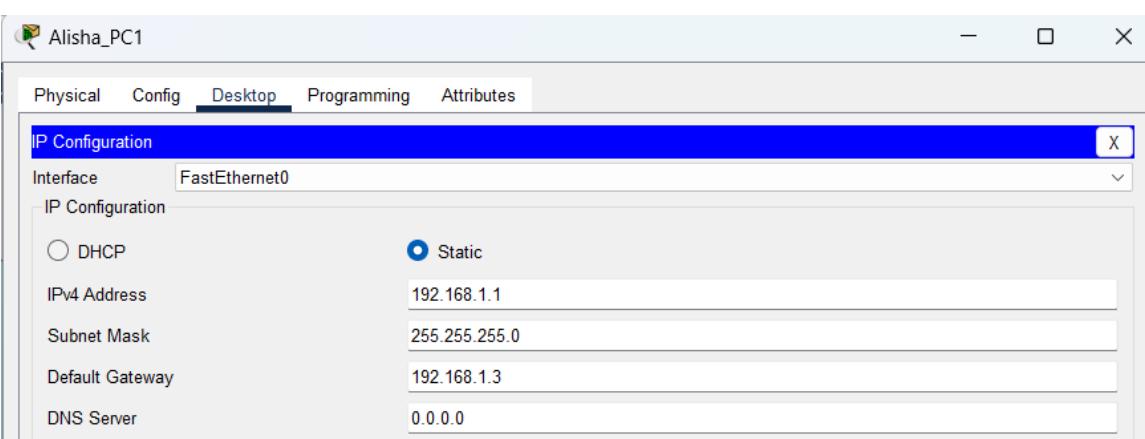
Alisha_Router1: 192.168.1.3(FastEthernet0/0)



Alisha Router2: 192.168.2.3(FastEthernet0/0)



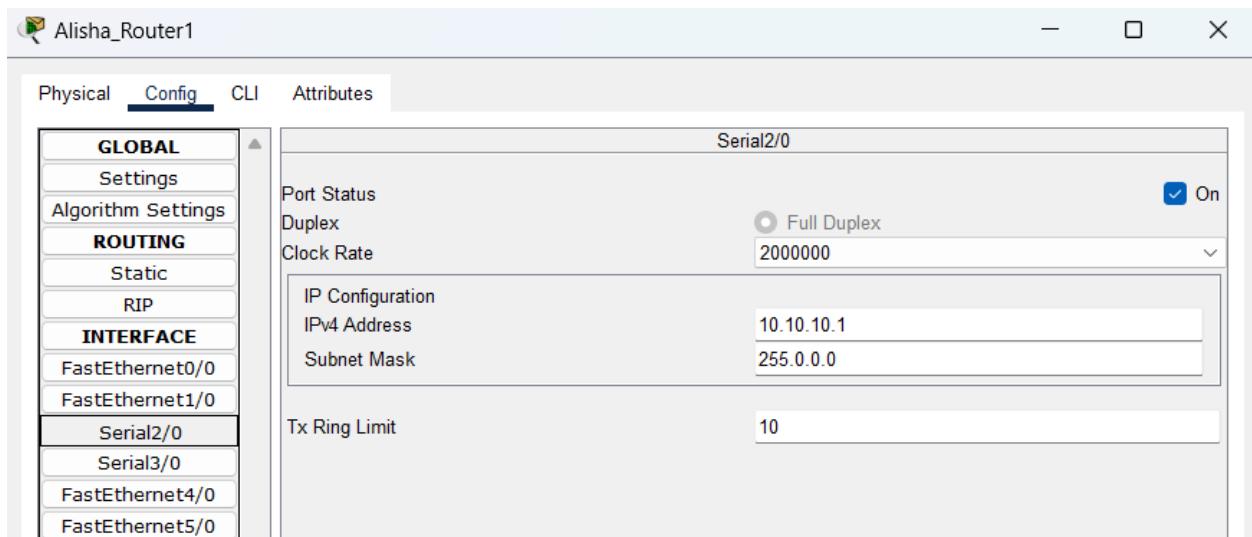
Step 6: Now the default gateway of Alisha PC1 and Alisha PC2 are set as same the IP address of Alisha Router1 and default gateway of Alisha PC3 and Alisha PC4 are set as the IP address of Alisha Router2.



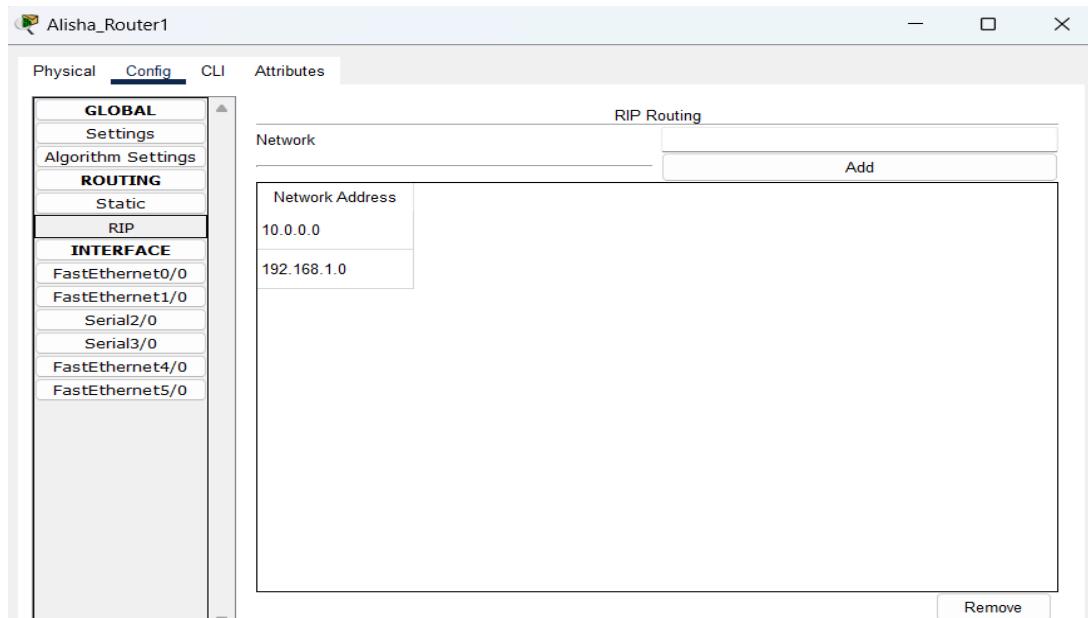
Step 7: Now set the serial 2/0 with IP address and subnet.

Alisha Router1 : 10.10.10.1

Alisha Router2 : 10.10.10.2

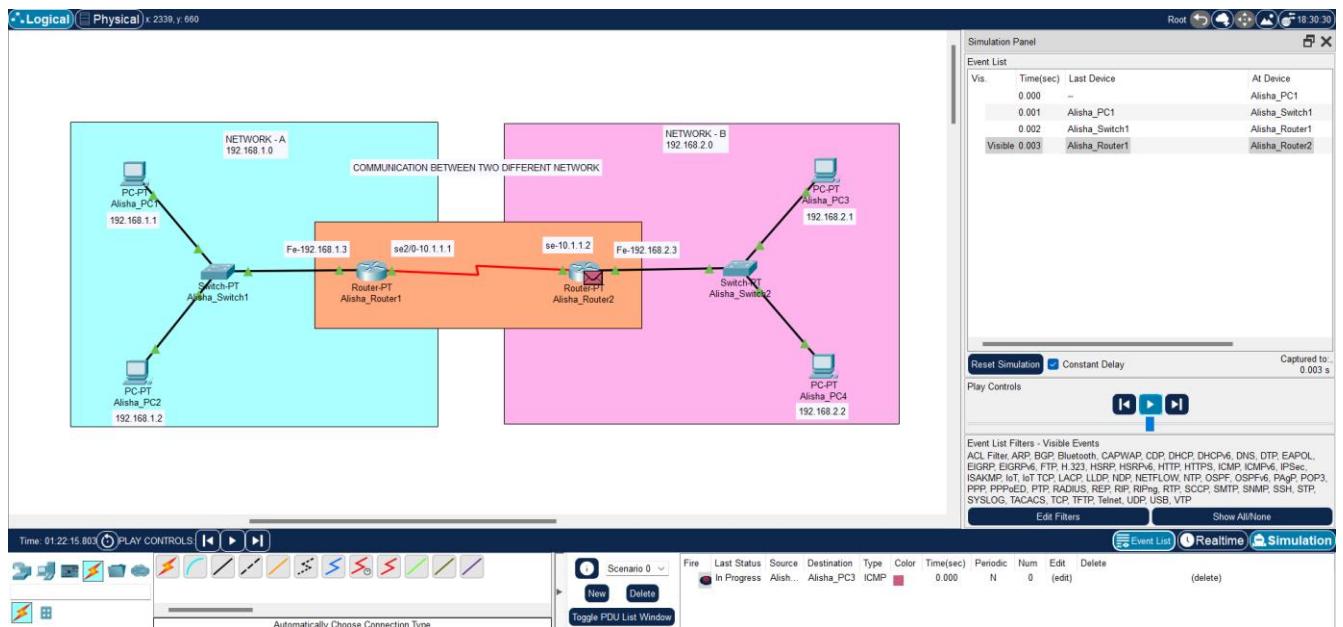


Step 8: Now go to Alisha Router1->RIP->Network->and then add the IP address of Router (FastEathernet and serial). Same process is done on other side also for Alisha Router2.

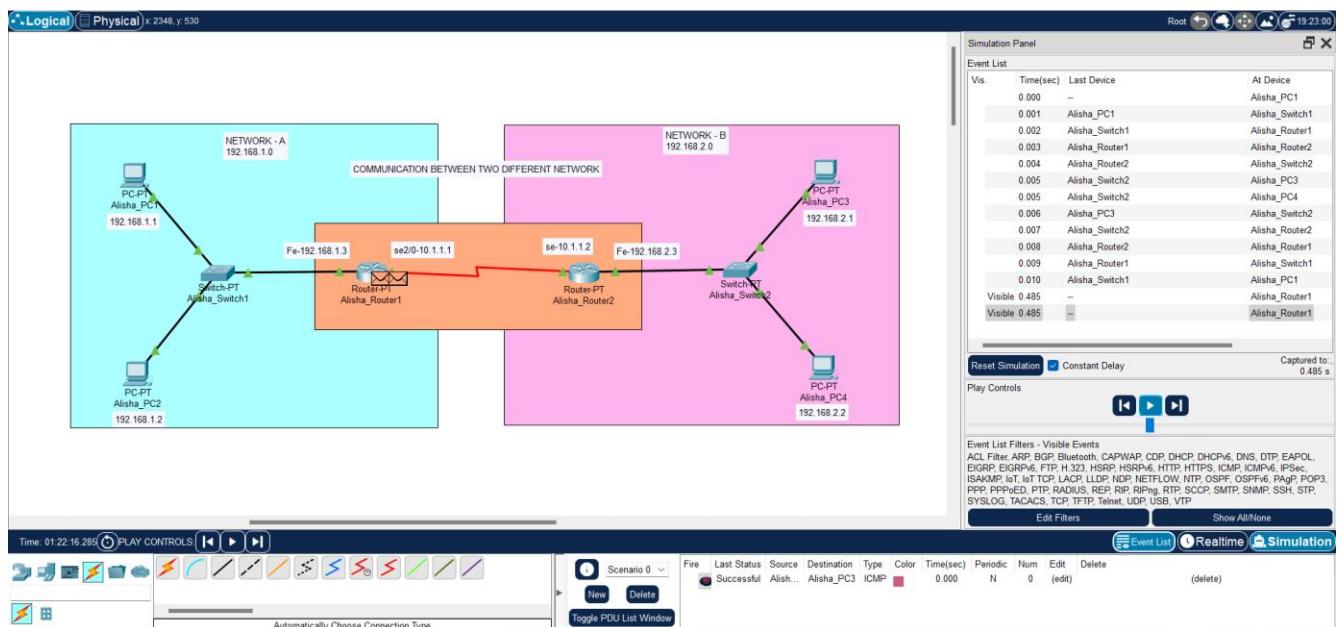


Step 9: Now simulate the message passing through Alisha PC1 to Alisha PC3.

Scenario in process:

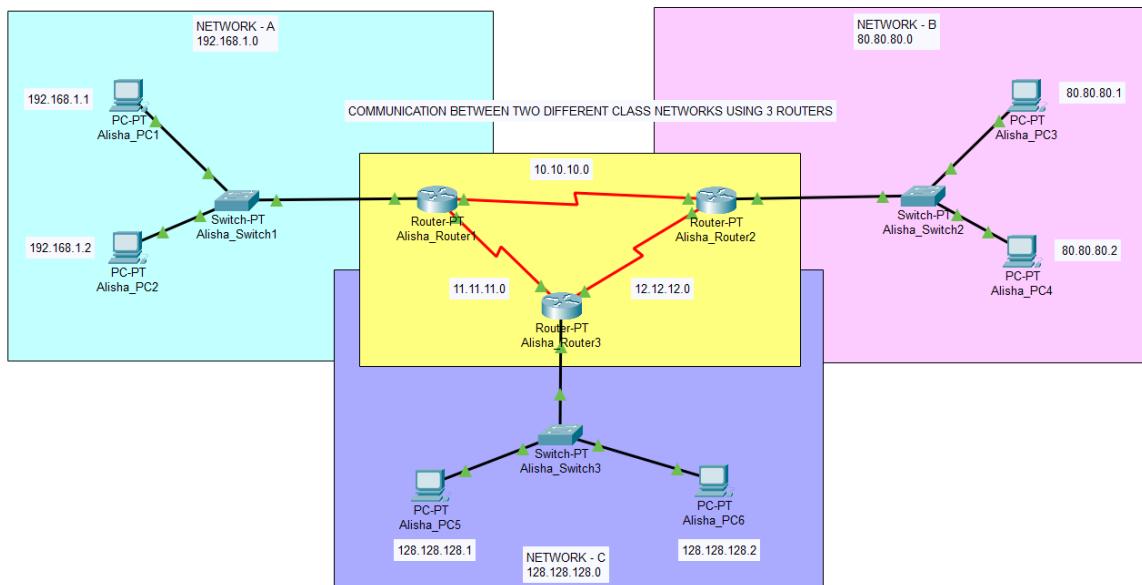


Scenario after success:



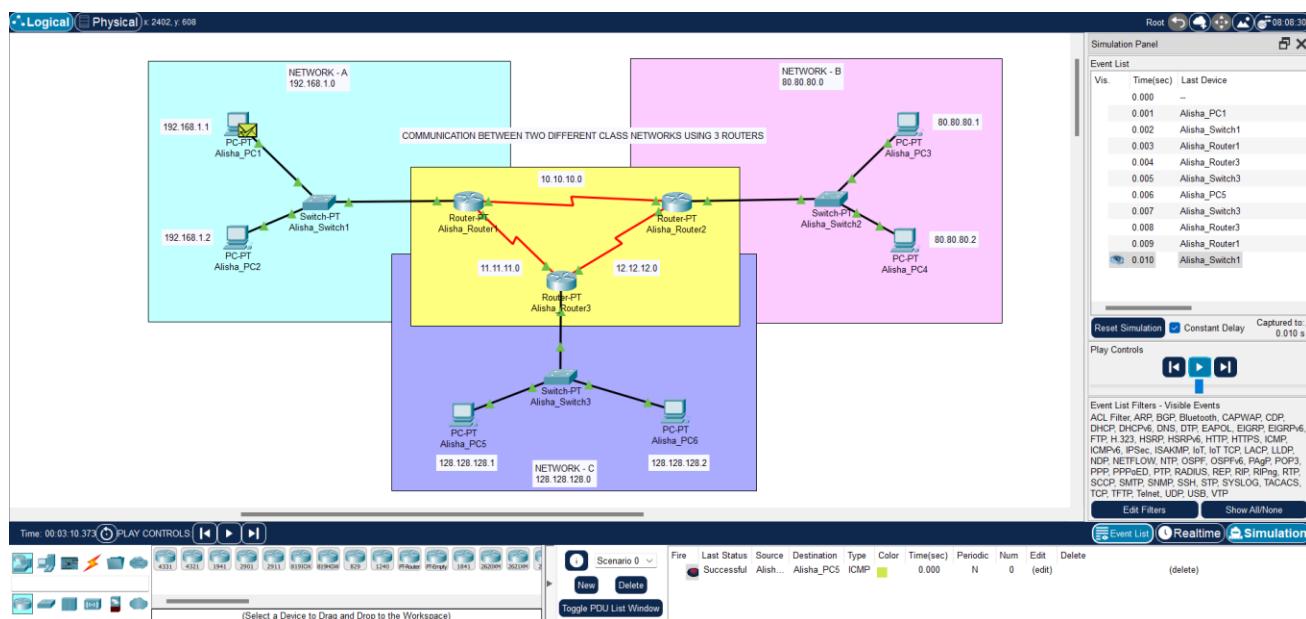
A. Communication between two different class networks using 3 Routers

Similar communication between three different networks using three Routers.



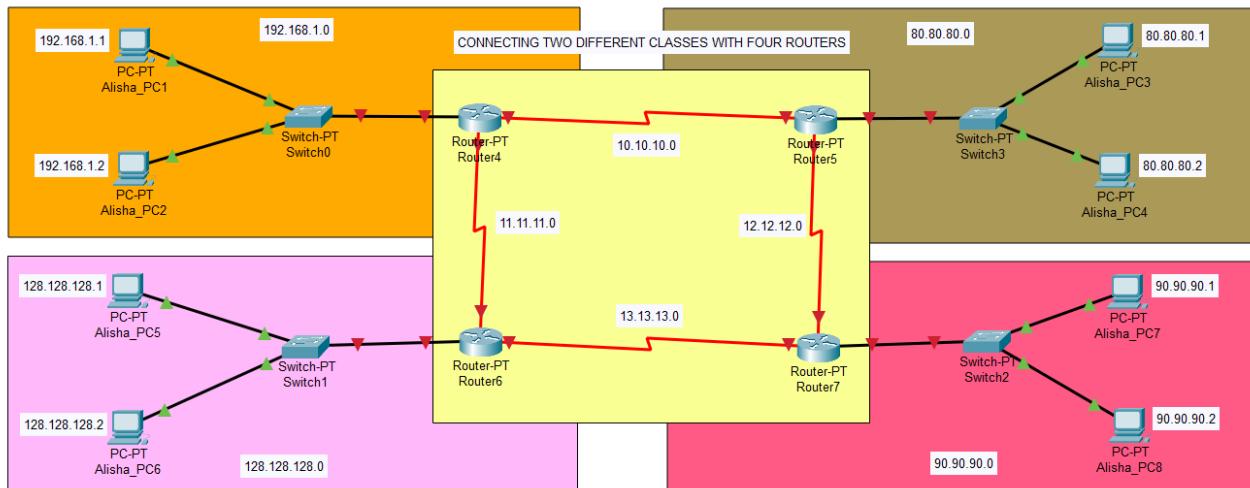
Step 10: Now simulate the message passing through Alisha PC1 to Alisha PC4.

Scenario after success:

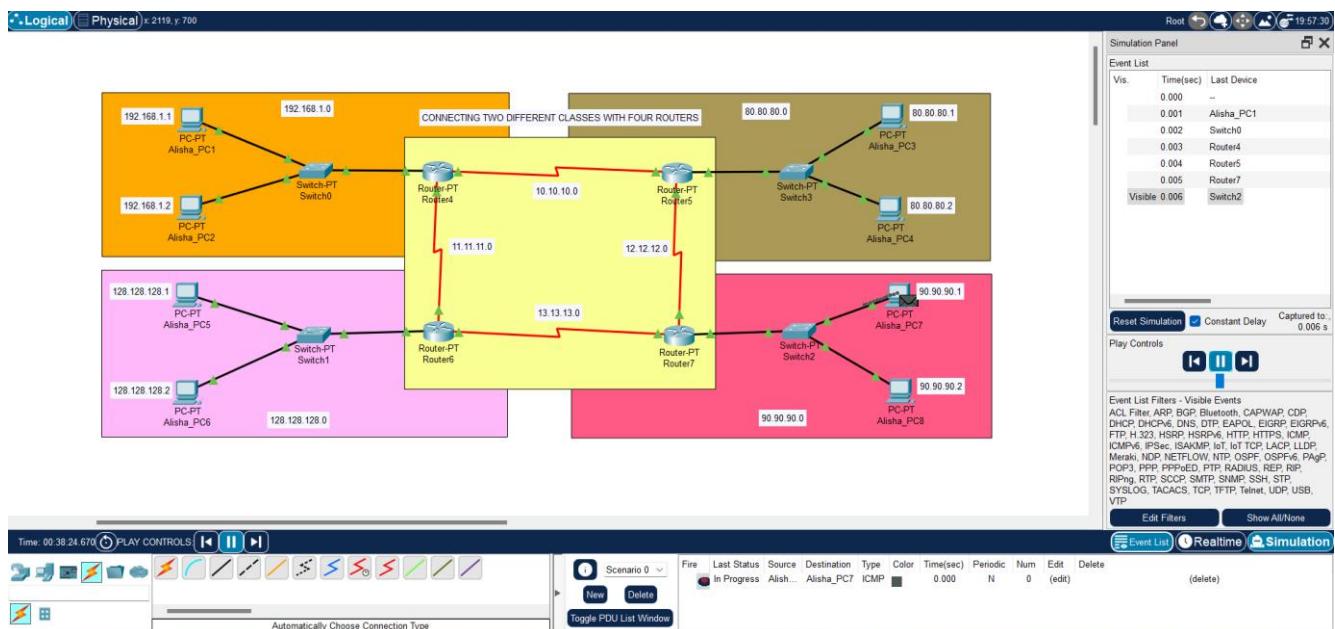


B. Communication between two different classes using four Routers.

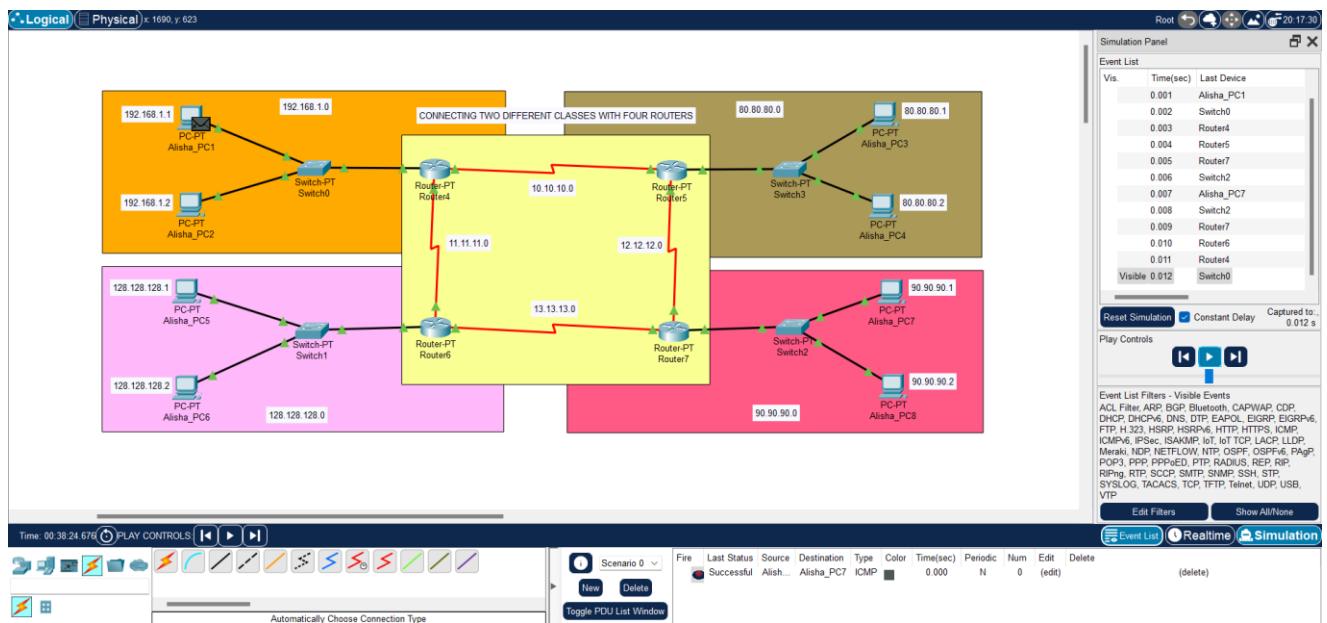
Similar communication between two classes using four Routers.



Step 11: Now simulate the message passing through Alisha PC1 Alisha PC7.



Scenario after success:



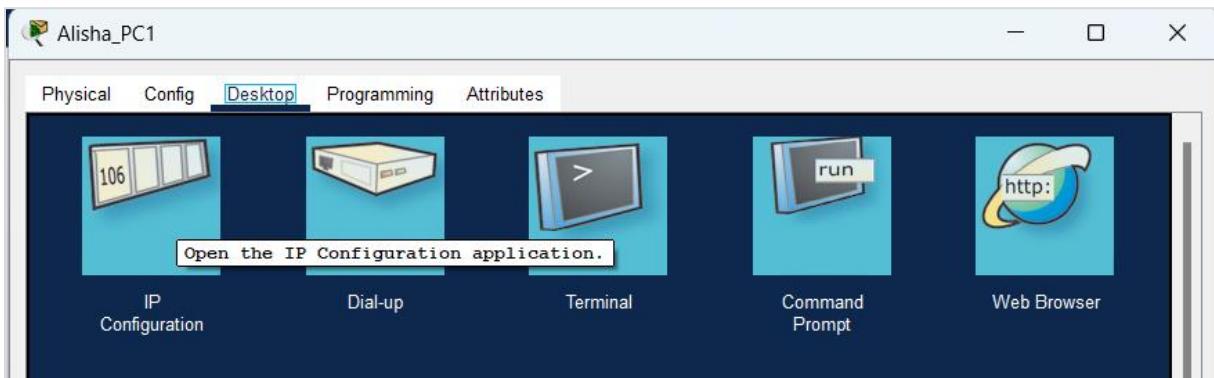
Program 8

Objective: Demonstrate http server in same network.

Step 1: Open Cisco packet Tracer.

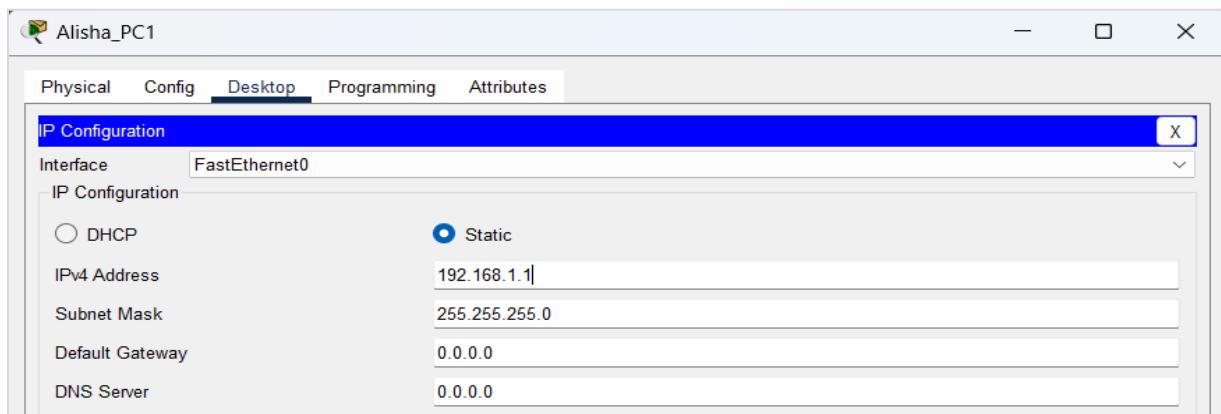
Step 2: Take 3 generic PC, 1 PT switch and 1 PT server and connect them using default connection, like this:

Step 3: Click of Puru PC1 and go to Desktop then a dialog box appears.



Step 4: Now go to the IP configuration and set the IP4 addresses and click on the subnet mask.

Alisha PC1: 192.168.1.1



Similarly set the IP address for all PC's and Server.

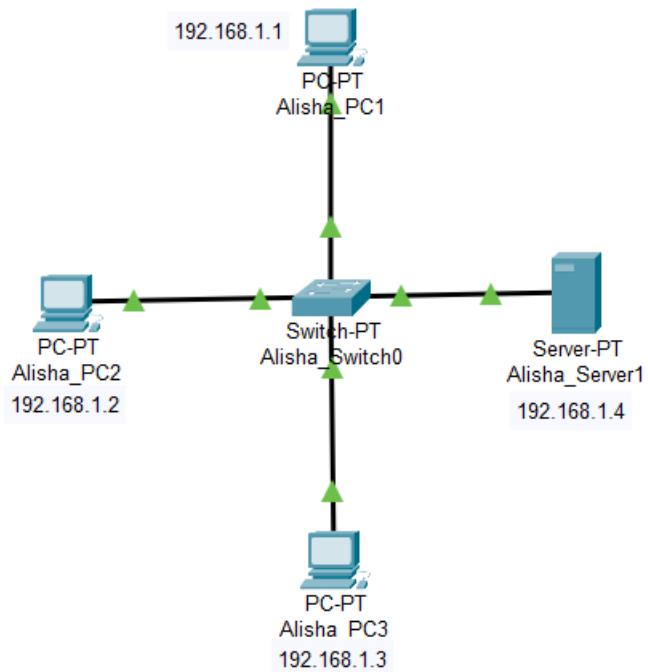
Alisha PC2: 192.168.1.2

Alisha PC3: 192.168.1.3

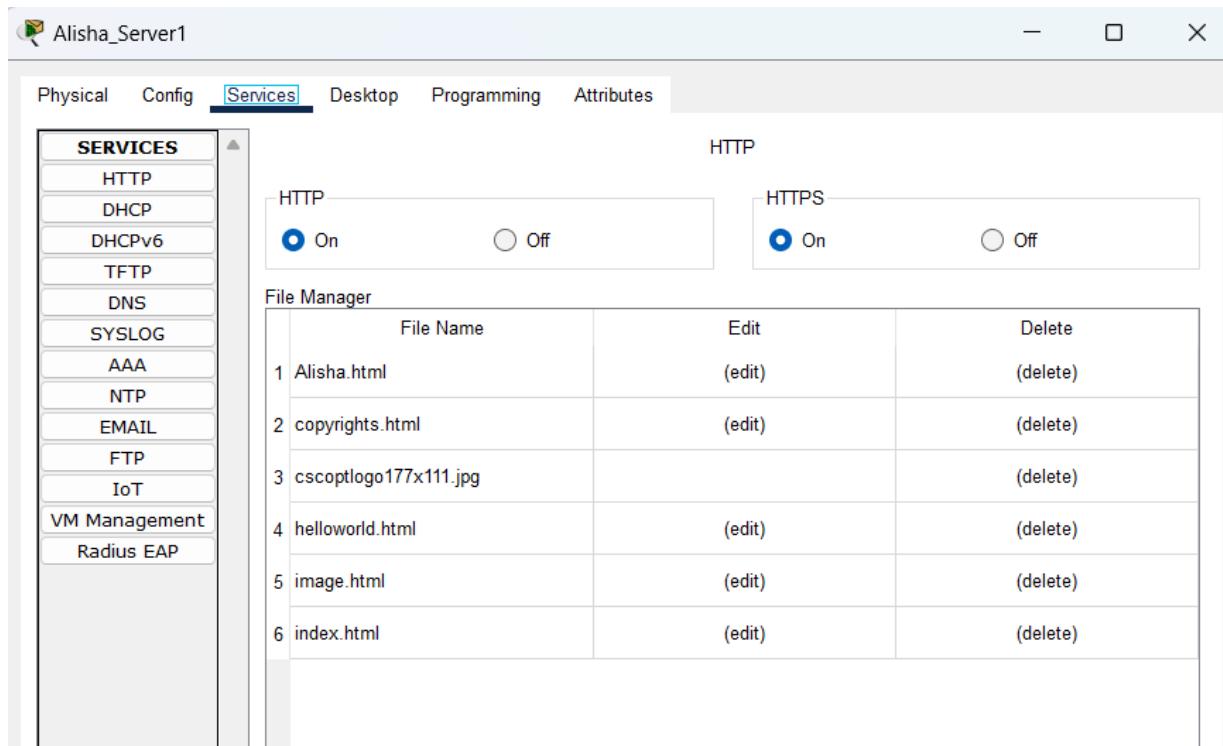
Server IP address

Alisha Server1: 192.168.1.4

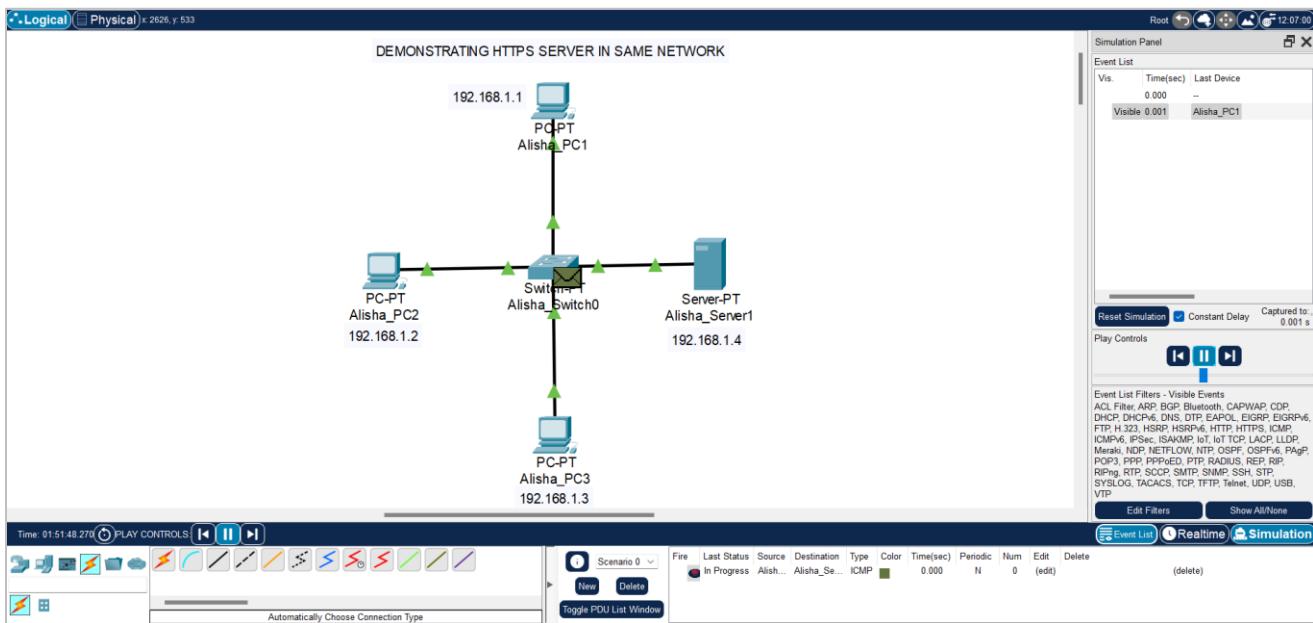
DEMONSTRATING HTTPS SERVER IN SAME NETWORK



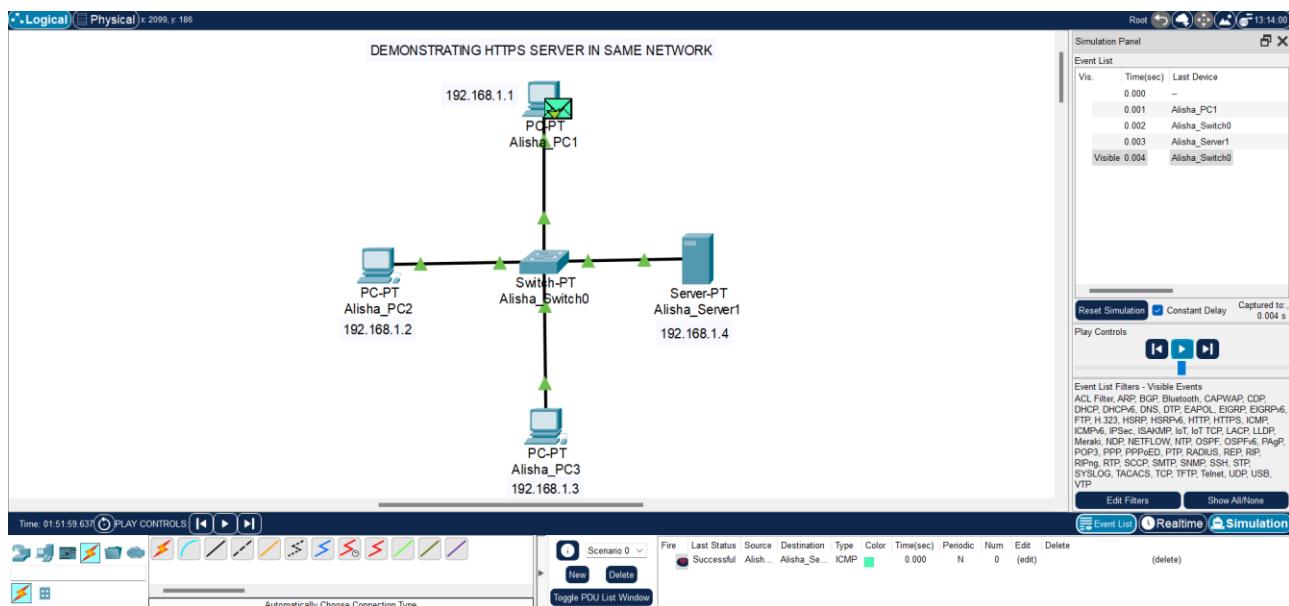
Step 5: Click on server and go to services-> and select HTTP then turned on HTTP and HTTPS.If you want to create your own HTML file then you can add new file.



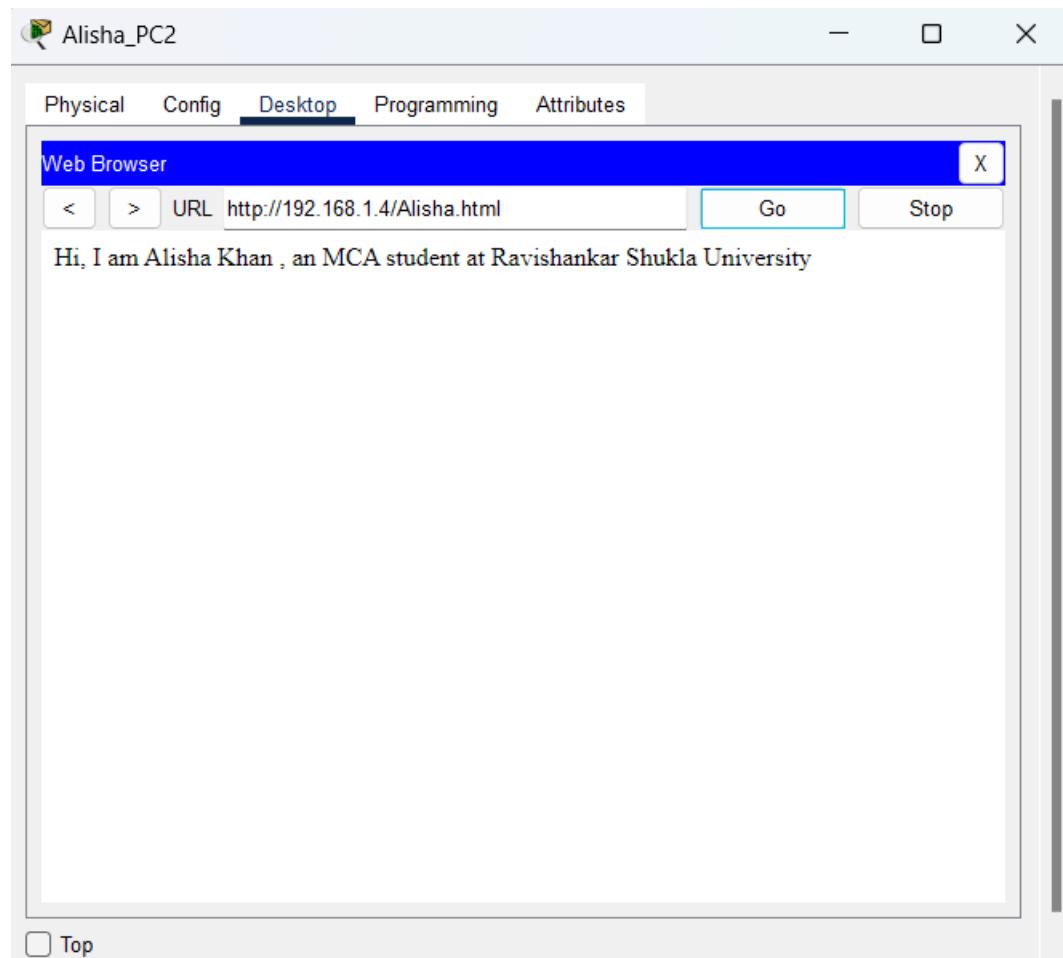
Step 6: Now Select the Add Simple PDU tool and click simulation option to show simulation.
Scenarioin progress:



Scenario after success:



Step 7: Now click on any PC and go to Desktop->Web Browser then type the IP address of server oraddress of any Website stored in server.



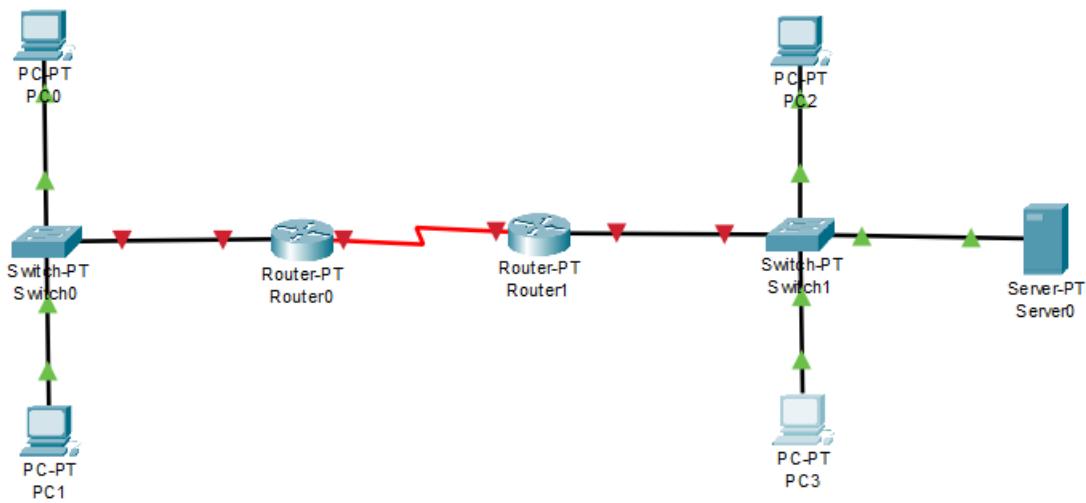
Program 9

Objective: Demonstrate the HTTP server in different networks.

Step 1: Open Cisco Packet Tracer application.

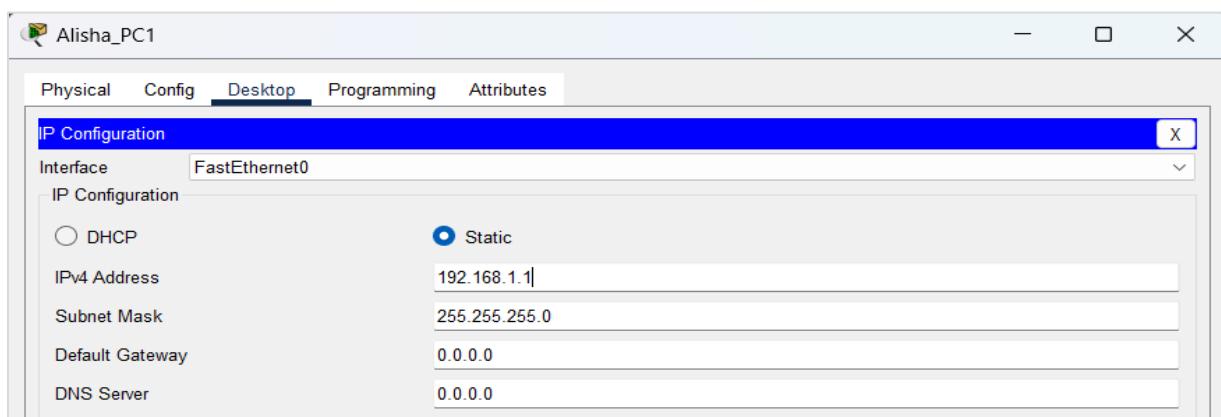
Step 2: Take 4 generic PC, 3 PT switch, 3 PT router and 1 PT server.

Step3: Connect the PC's, Switch and router with the help of Copper straight-through cable and both router are connected with the serial DCE cable.



Step4: Now configure the IP address of all 4 PCs.

Alisha-PC1: 192.168.1.1



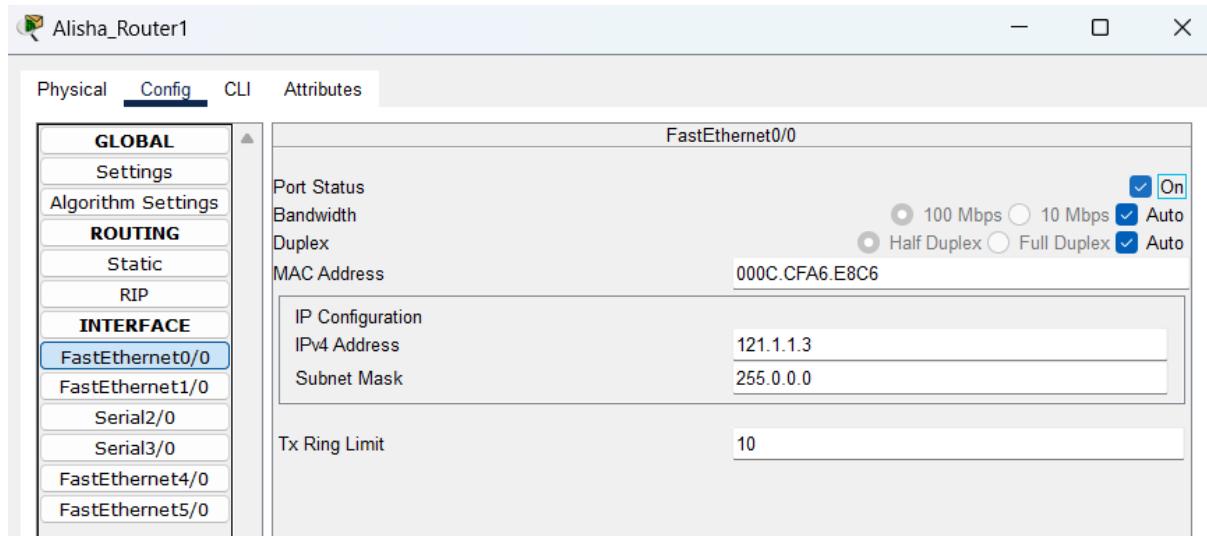
Alisha-PC2: 192.168.1.2

Alisha-PC3: 121.1.1.1

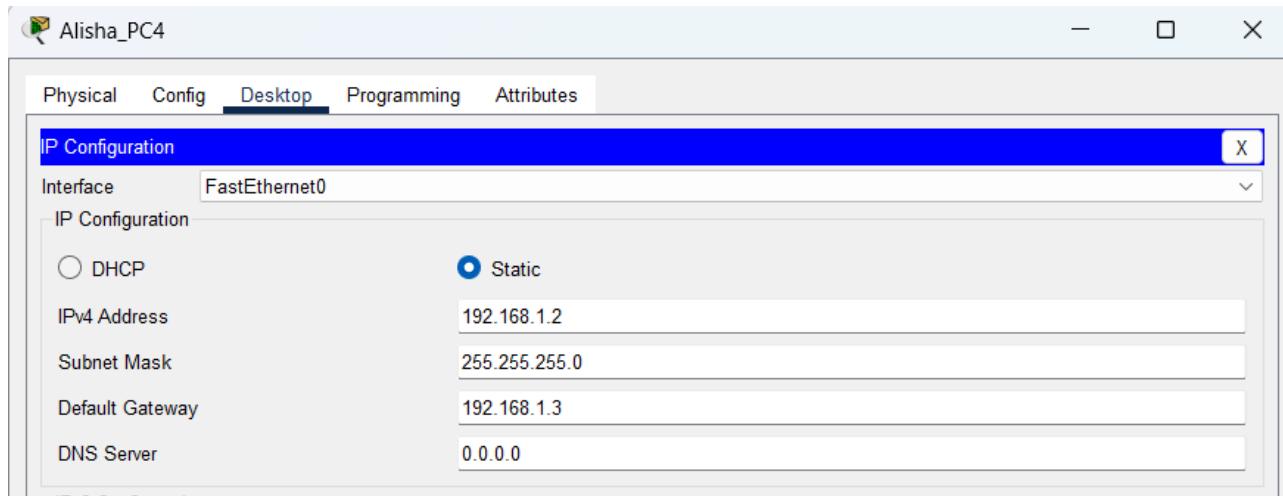
Alisha-PC4: 121.1.1.2

Step5: Now go to Alisha Router1-> config ->FastEathernet0/0 and on the port status. Same things are done on the Alisha Router2 also.

Alisha Router1 : 121.1.1.3(FastEthernet0/0)
Alisha Router2 : 192.168.1.3(FastEthernet0/0)



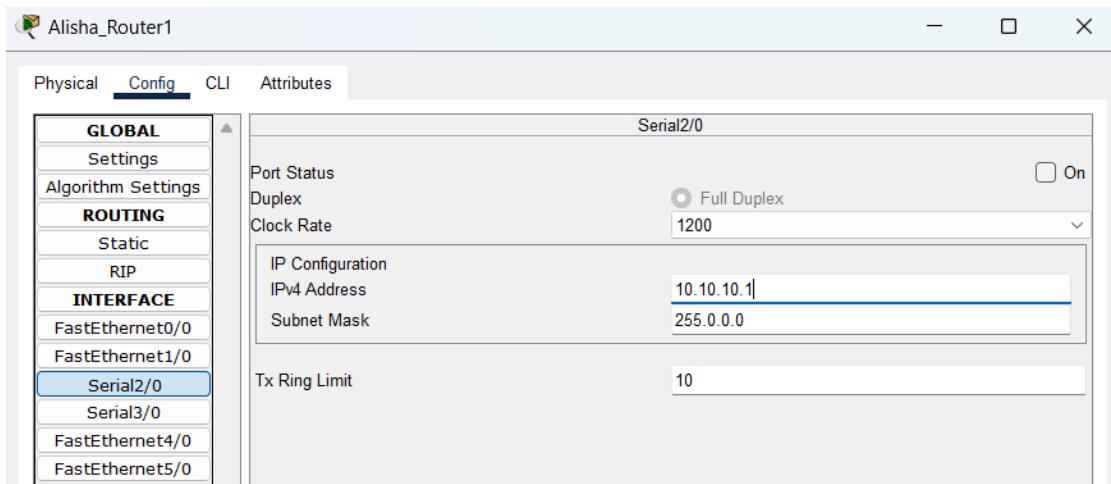
Step 6: Now the default gateway of Alisha PC1 and Alisha PC2 are set as same the IP address of Alisha_Router1 and default gateway of Alisha PC3 and Alisha PC4 are set as the IP address of Alisha Router2.



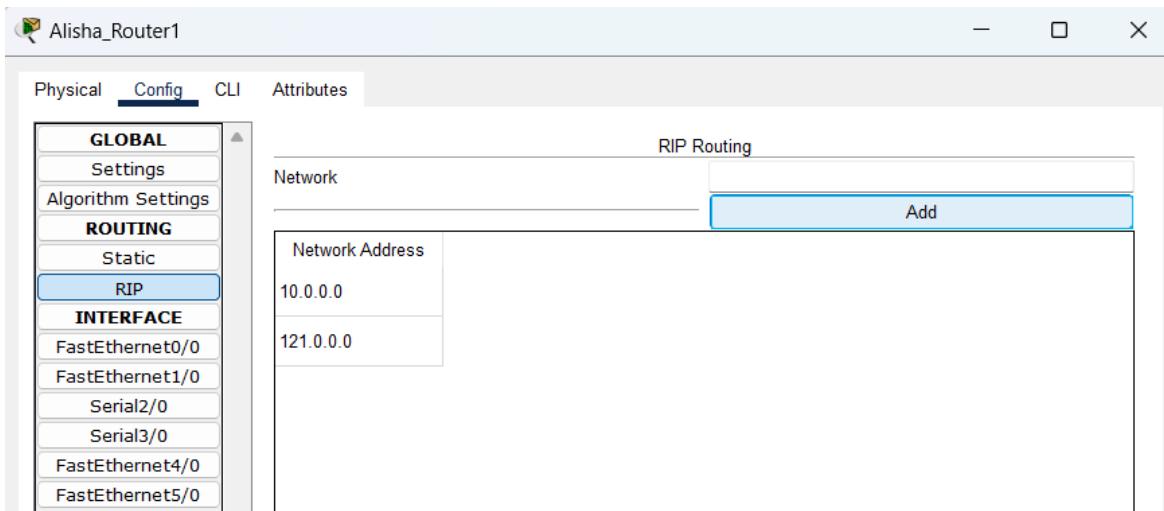
Step 7: Now set the serial 2/0 with IP address and subnet.

Alisha Router1: 10.10.10.1

Alisha Router2 : 10.10.10.2

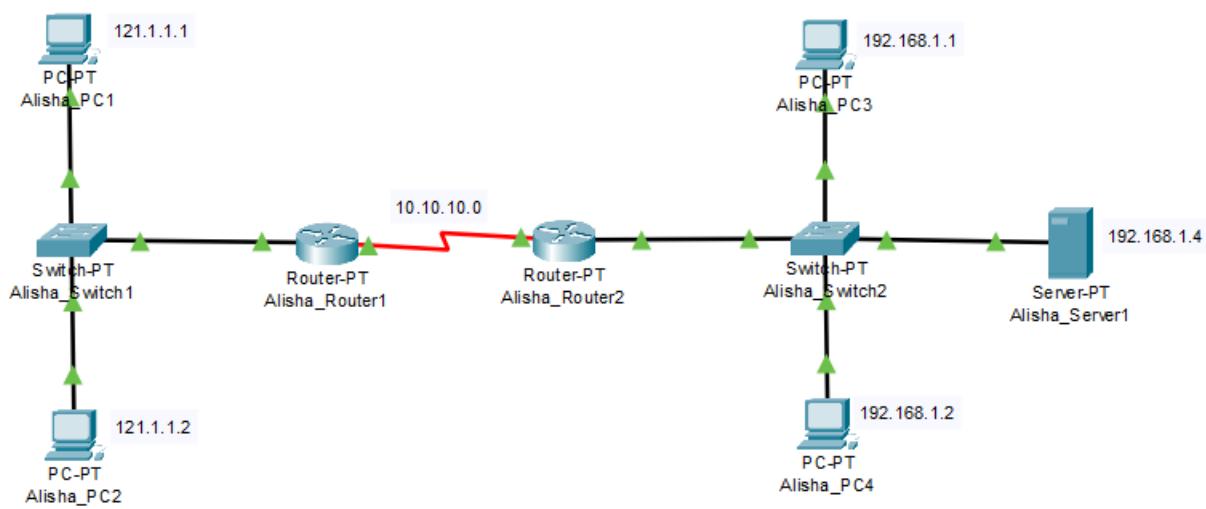


Step 8: Now go to Alisha Router1->RIP->Network->and then add the IP address of Router (FastEthernet and serial). Same process is done on other side also for Alisha Router2.



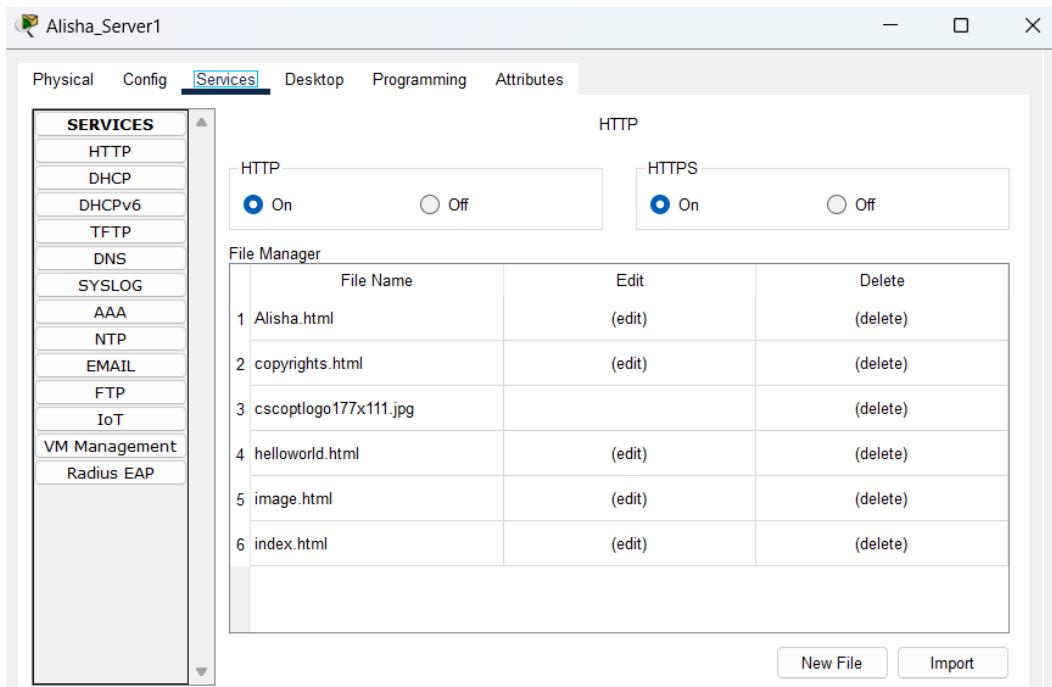
Step 9: connect server to router using switch, like this:

DEMONSTRATION HTTPS SERVER IN DIFFERENT NETWORK

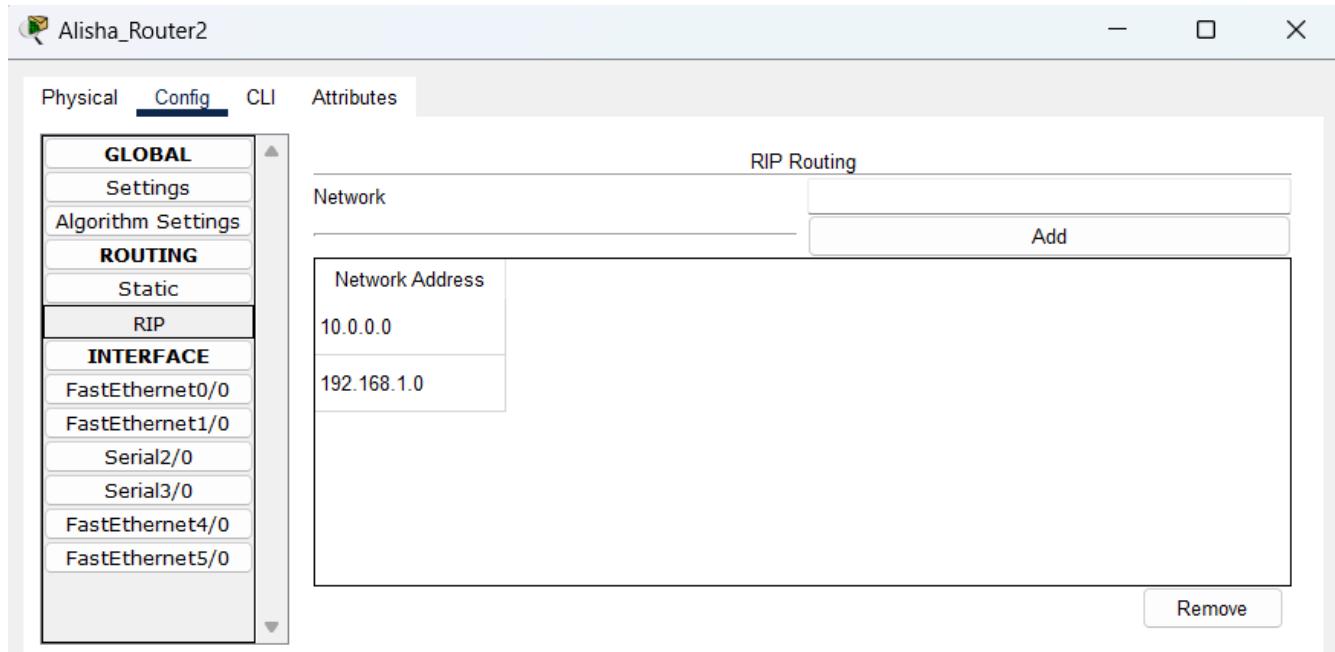


Step 10: Now set the IP address of Server and configure the FastEthernet0/0 of Alisha Router2Alisha server: 192.168.1.4
 Alisha Router2: 192.168.1.3(FastEthernet0/0)

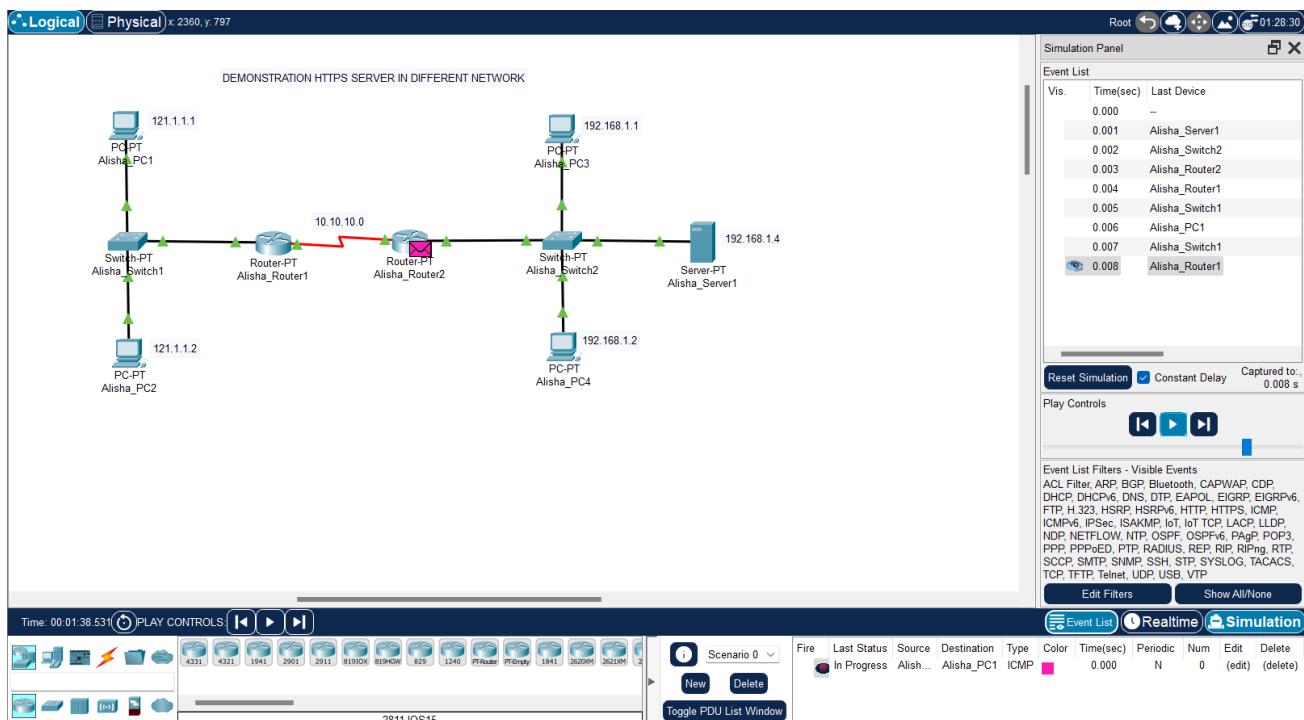
Step 11: Click on server and go to services-> and select HTTP then turned on HTTP and HTTPS.If you want to create your own HTML file then you can add new file



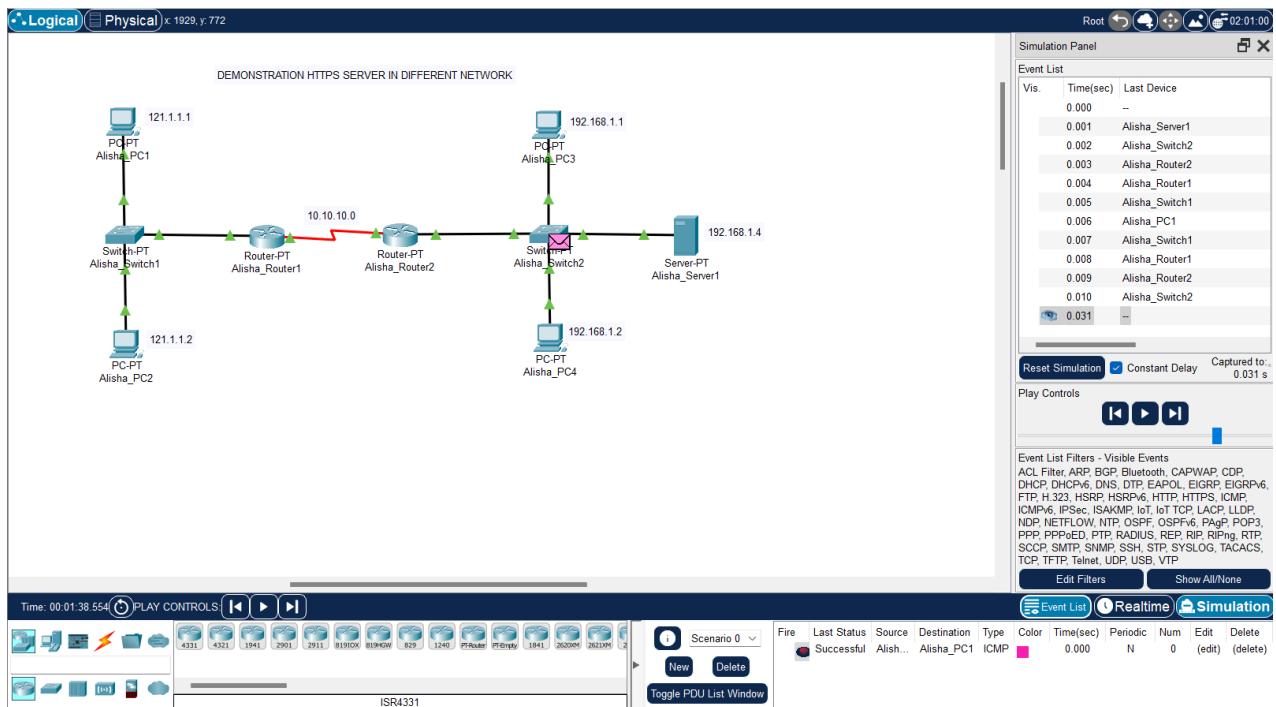
Step 12: Now go to Alisha Router2->RIP->Network->and then add the IP address of Router (FastEthernet0/0).



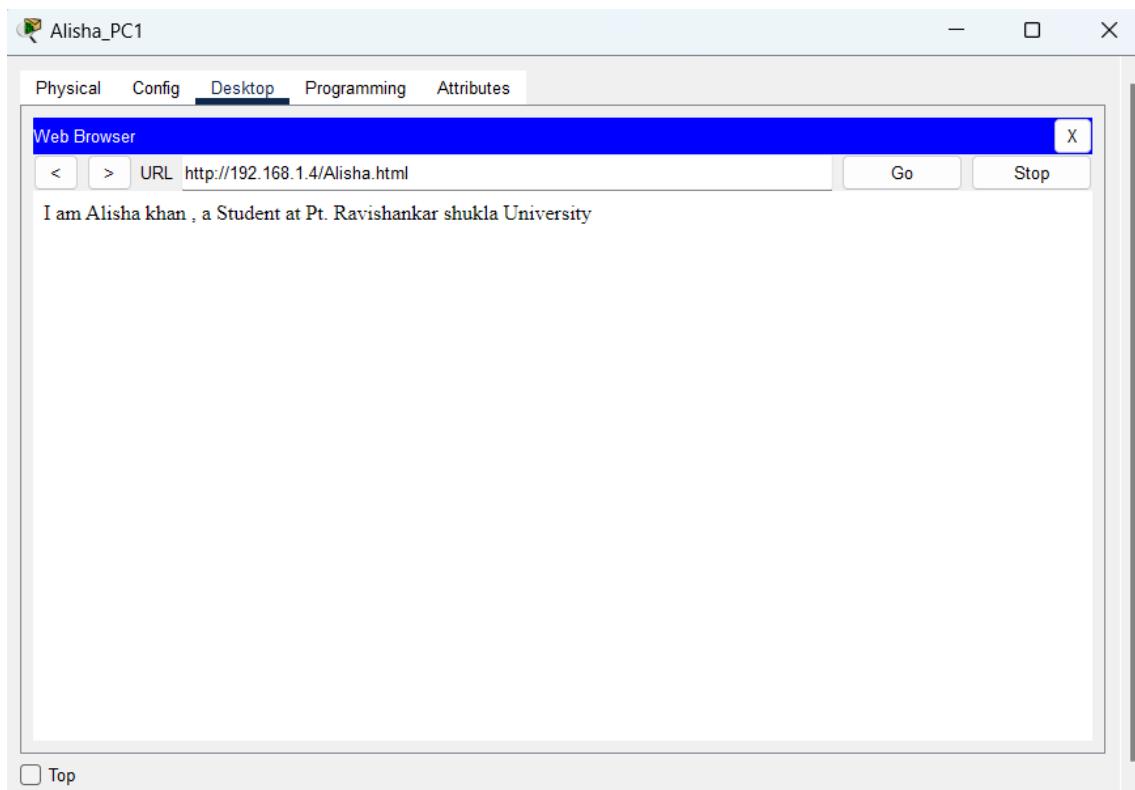
Step 13: Now simulate the message passing through Alisha server to Alisha PC1. Scenario in progress :



Step 14: Now click on any PC and go to Desktop->Web Browser then type the IP address of server.



Step 14: Now click on any PC and go to Desktop->Web Browser then type the IP address of server.



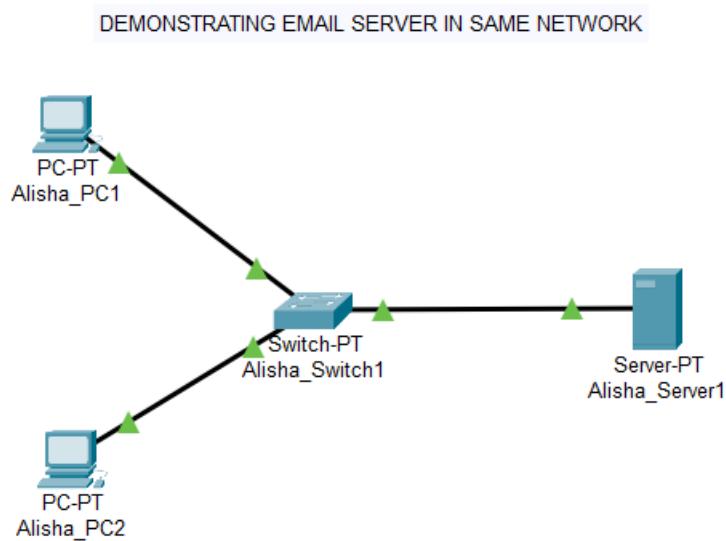
Program 10

Objective : Demonstrate the Email Server.

A. Email Server with same Network

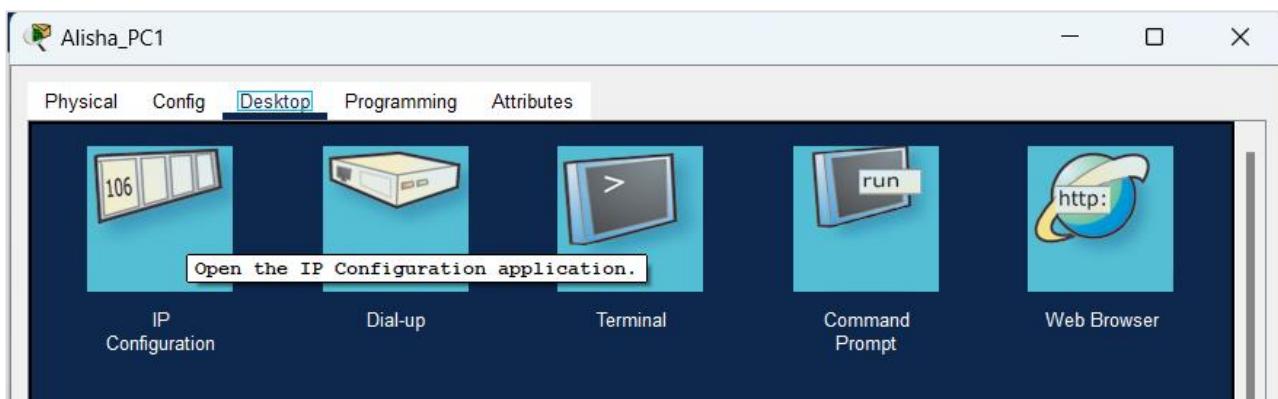
Step 1: Open Cisco Packet Tracer.

Step 2: Take 2 PC, 1 SWITCH and 1 server to create two different network and connect them using default connection.



Step 3: Now set the IP address for all the PC and server. By clicking on any pc and go to desktop and click IP configuration then set the IP address and click on subnet mask.

Alisha PC1: 192.168.1.1



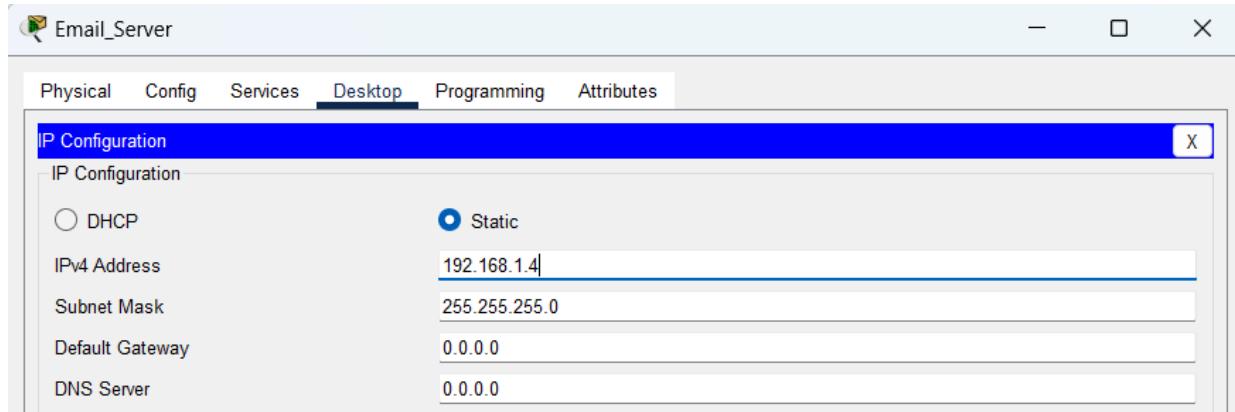
Similarly set the IP address of all PC's and server.

Alisha PC1 : 192.168.1.1

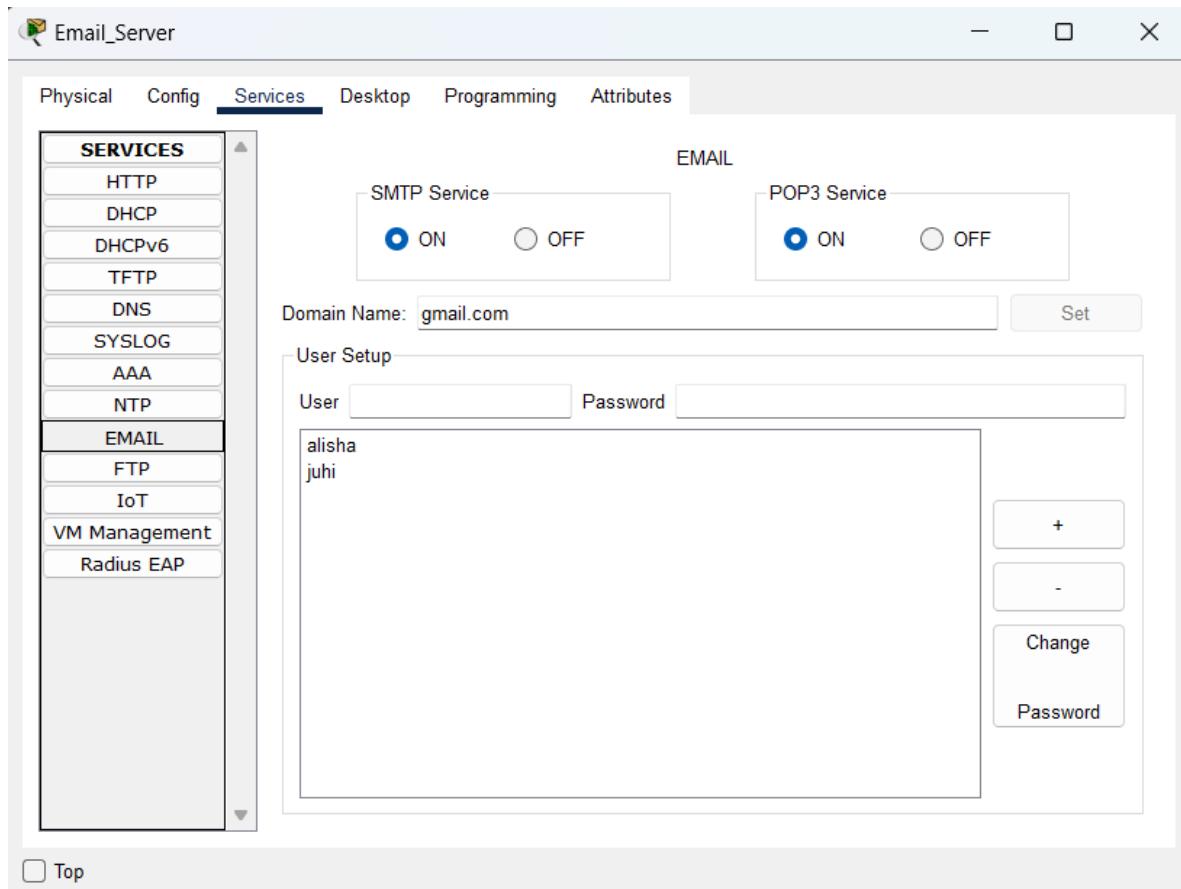
Alisha PC2 : 192.168.1.2

Server IP address

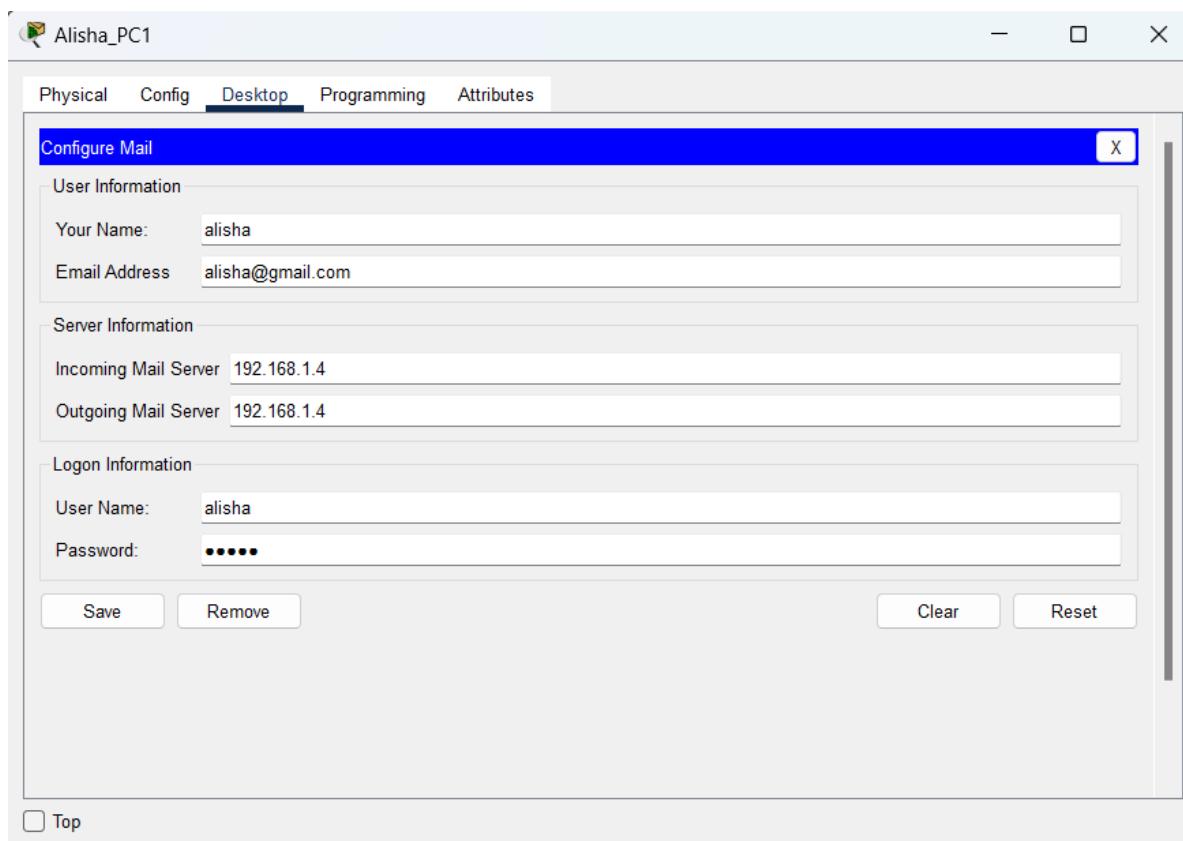
Alisha Email Server : 192.168.1.4



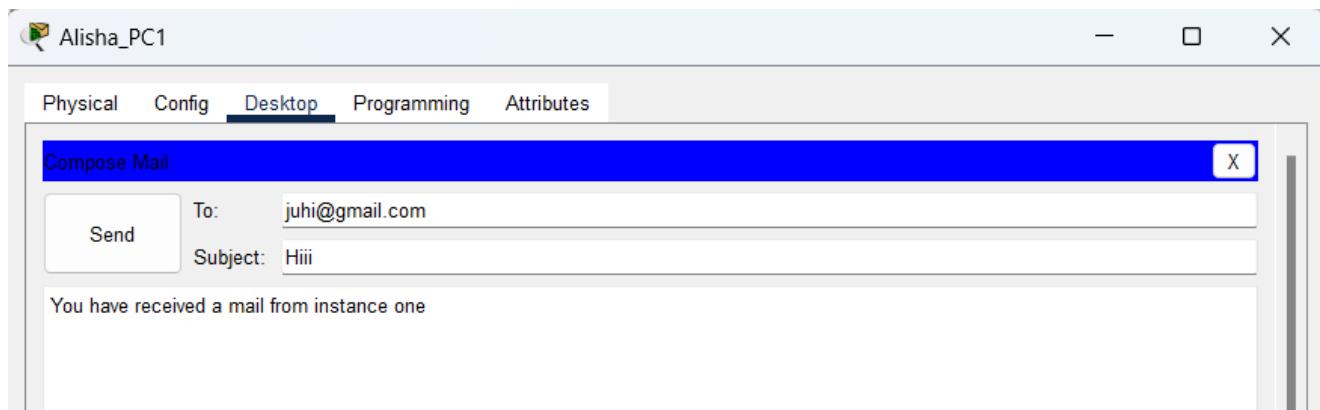
Step 4: Configure Email Server with Email Server Address and Add Users With domain **gmail.com** two users Alisha and Juhi

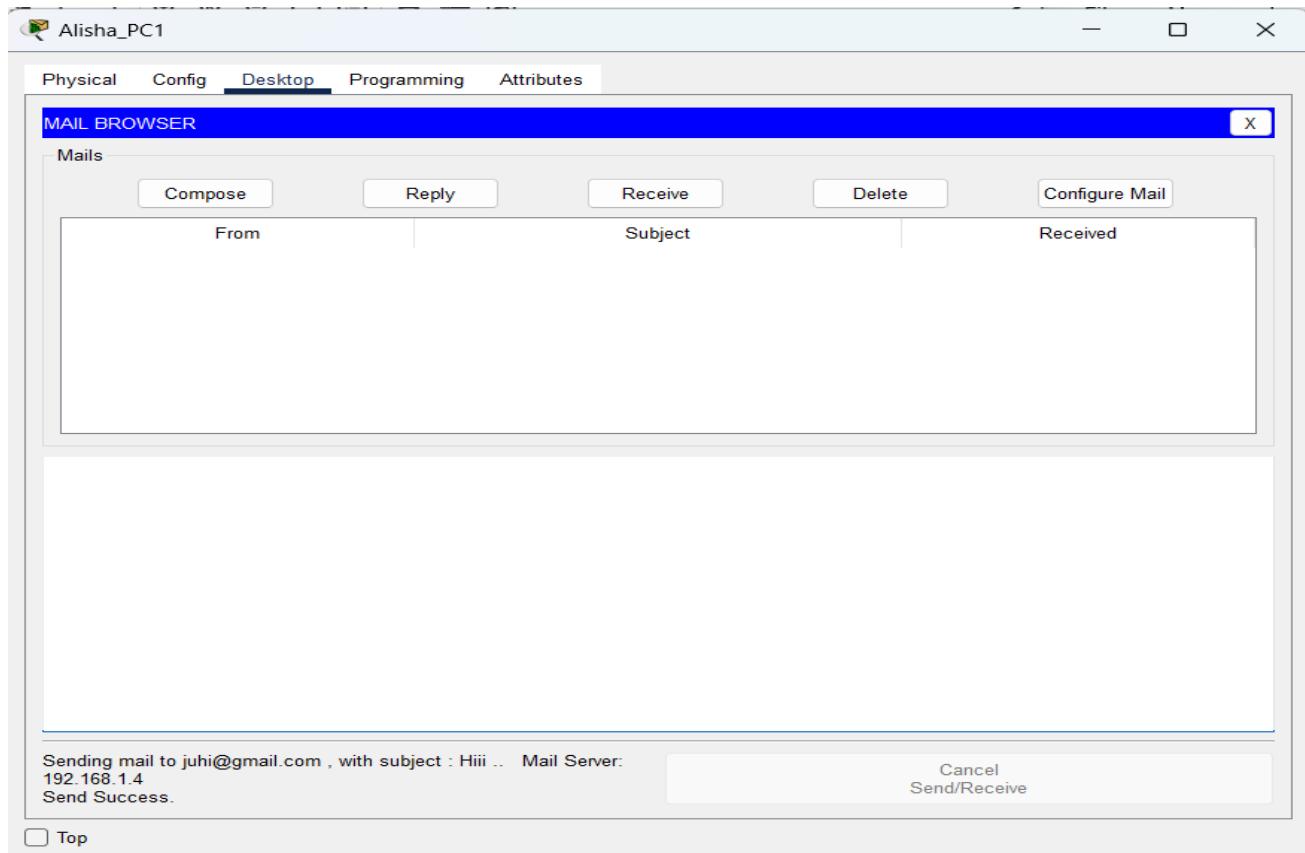


Step : 5 Configure Alisha PC1 and Alisha PC2 with emails. With aisha@gmail.com and juhi@gmail.com

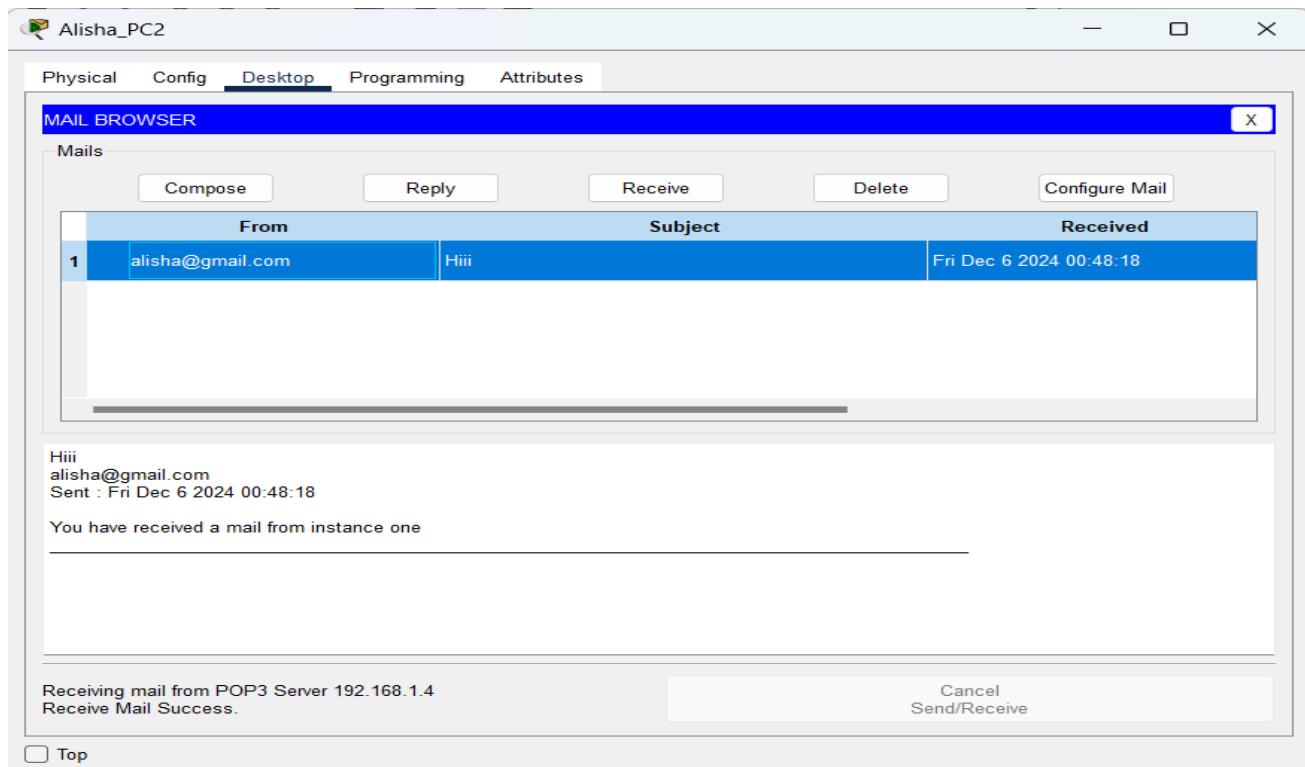


Step 6: Compose Message.





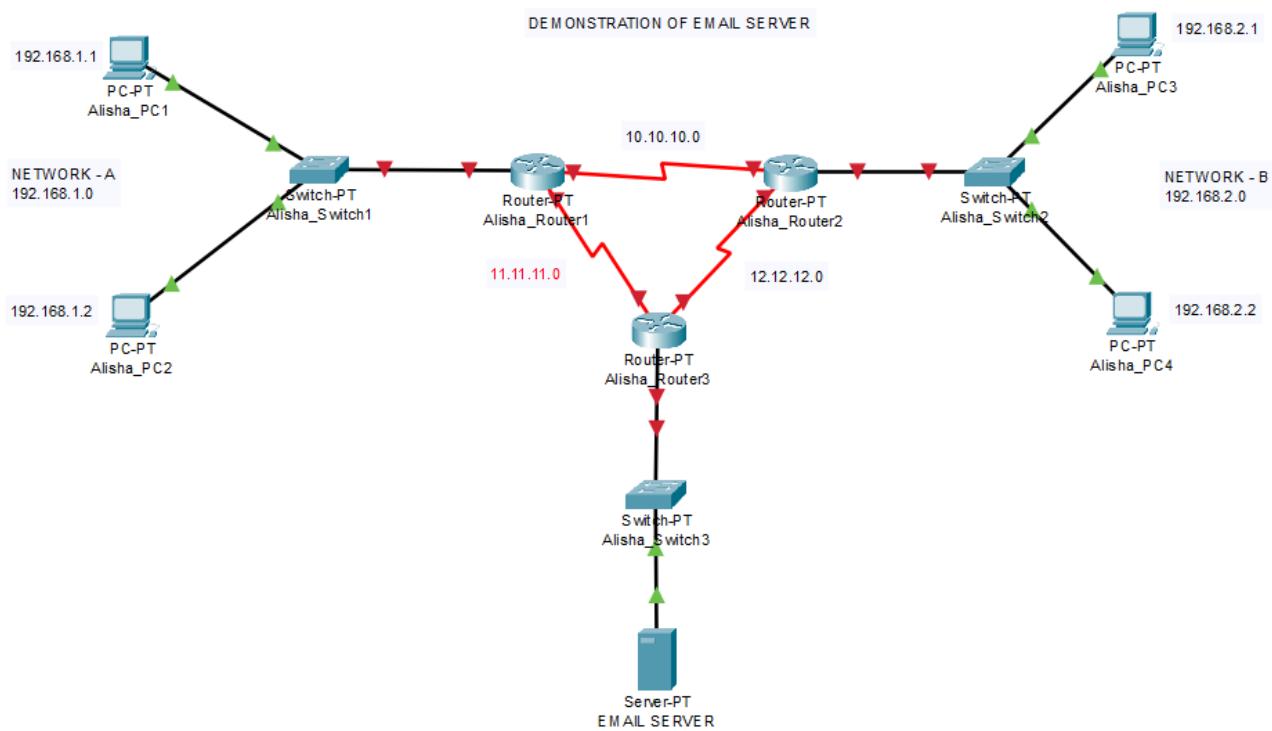
Receiving end Alisha PC2



B. Email Server With Different Networks.

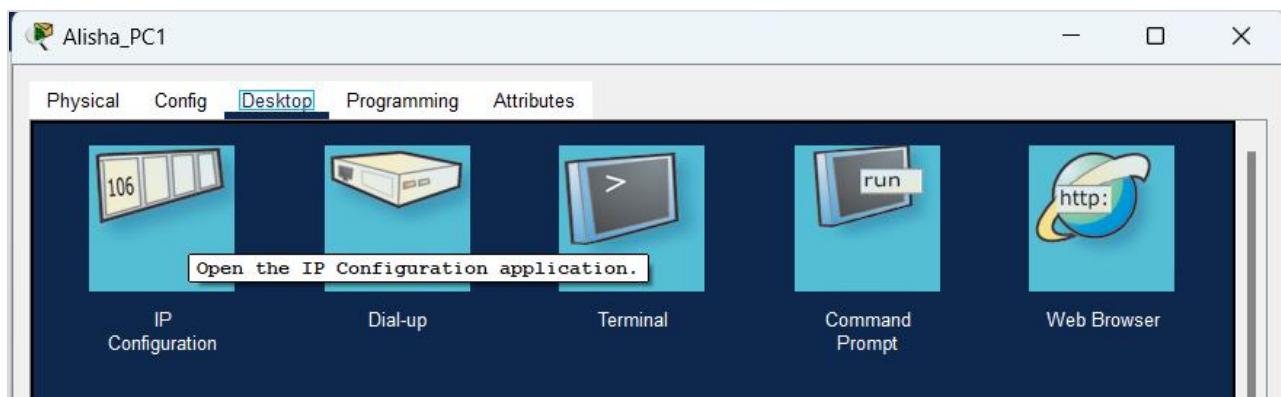
Step 1: Open Cisco Packet Tracer.

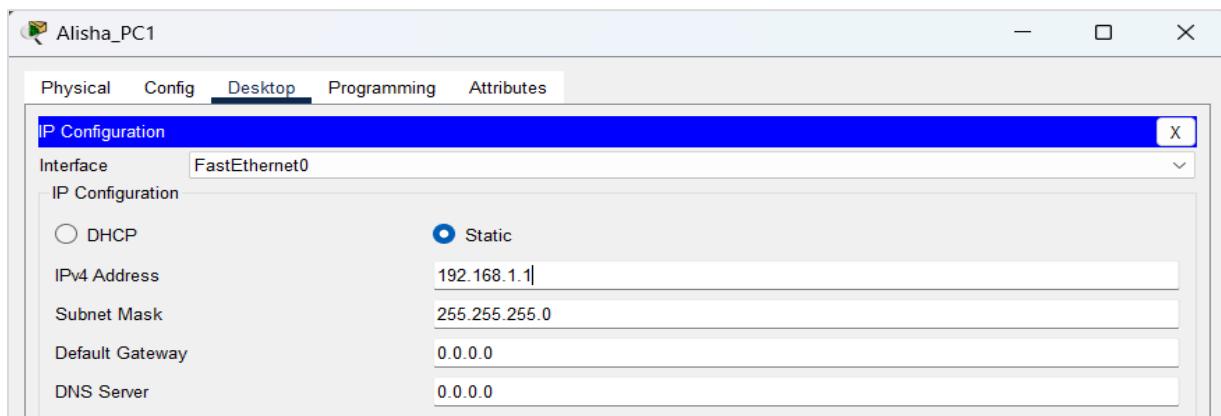
Step 2: Take 4 PC, 3 router, 3 switch and 1 server to create two different network and connect them using default connection.



Step 3: Now set the IP address for all the PC and server. By clicking on any pc and go to desktop and click IP configuration then set the IP address and click on subnet mask.

Alisha PC1: 192.168.1.1





Similarly set the IP address of all PC's and server.

Alisha PC2 : 192.168.1.2

Alisha PC3 : 192.168.2.1

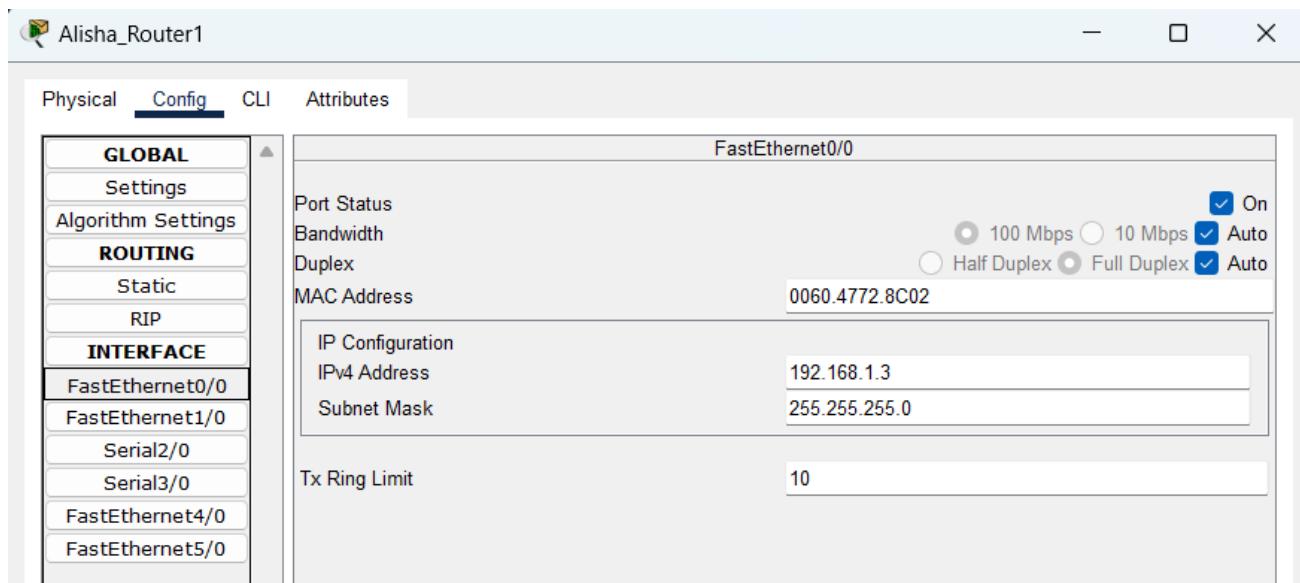
Alisha PC4 : 192.168.2.2

Server IP address

Alisha EMAIL SERVER : 192.168.3.1

Step 4: Now set IP address of router, click on Alisha Router1, then go to config->FastEthernet0/0 and turn on Port status.

Alisha Router1: 192.168.1.3(FastEthernet0/0)

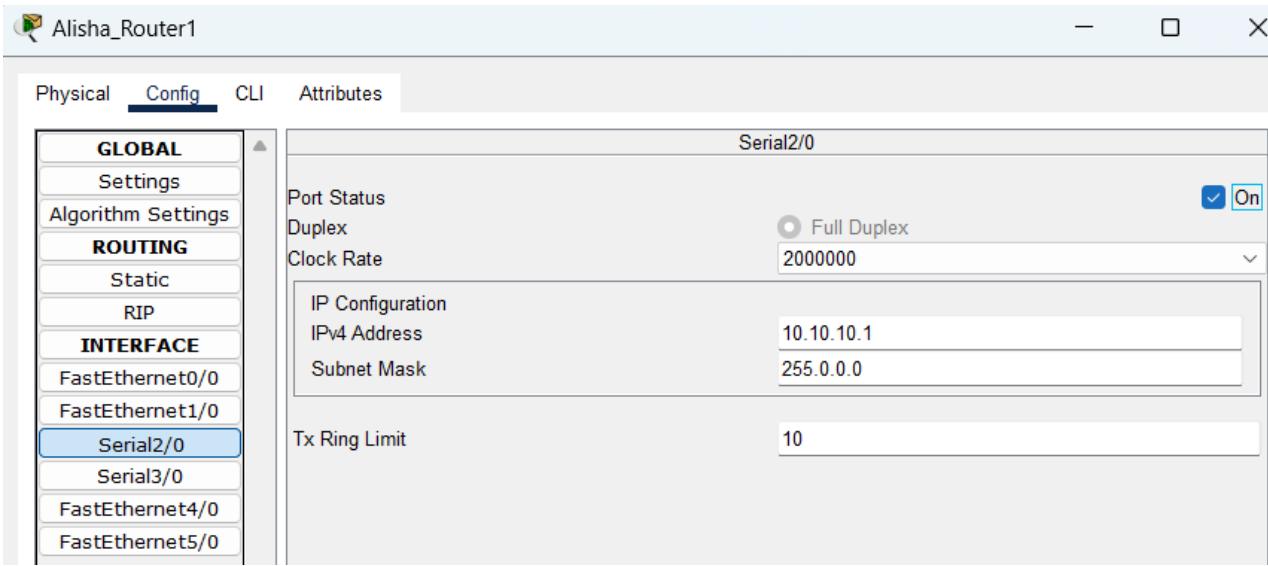


Same things are done on the Alisha Router2 also. Alisha Router2: 192.168.2.3(FastEthernet0/0)

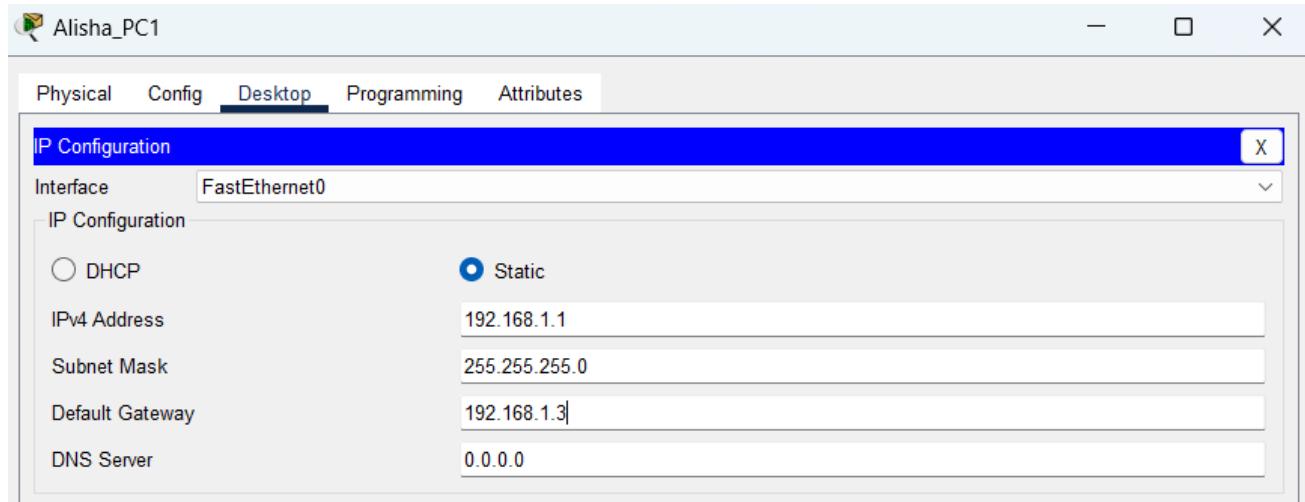
Step 5: Similarly configure the Serial2/0 for both routers.

Alisha Router1: 10.10.10.1(Serial2/0)

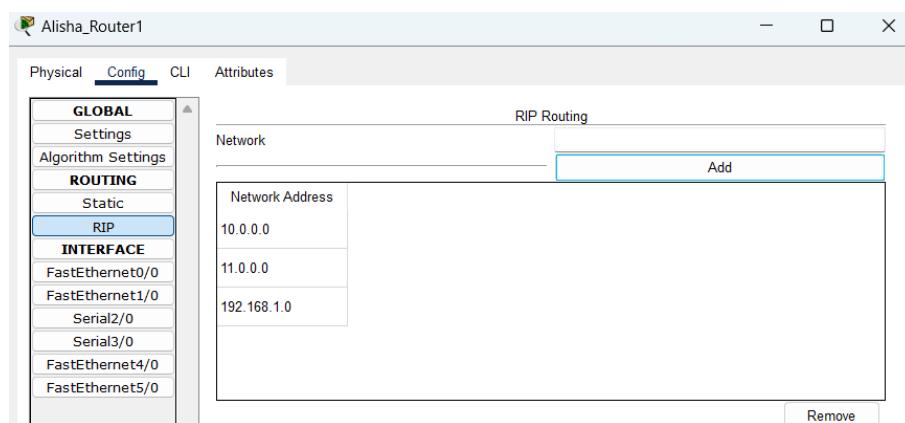
Alisha Router2: 10.10.10.2(Serial2/0)



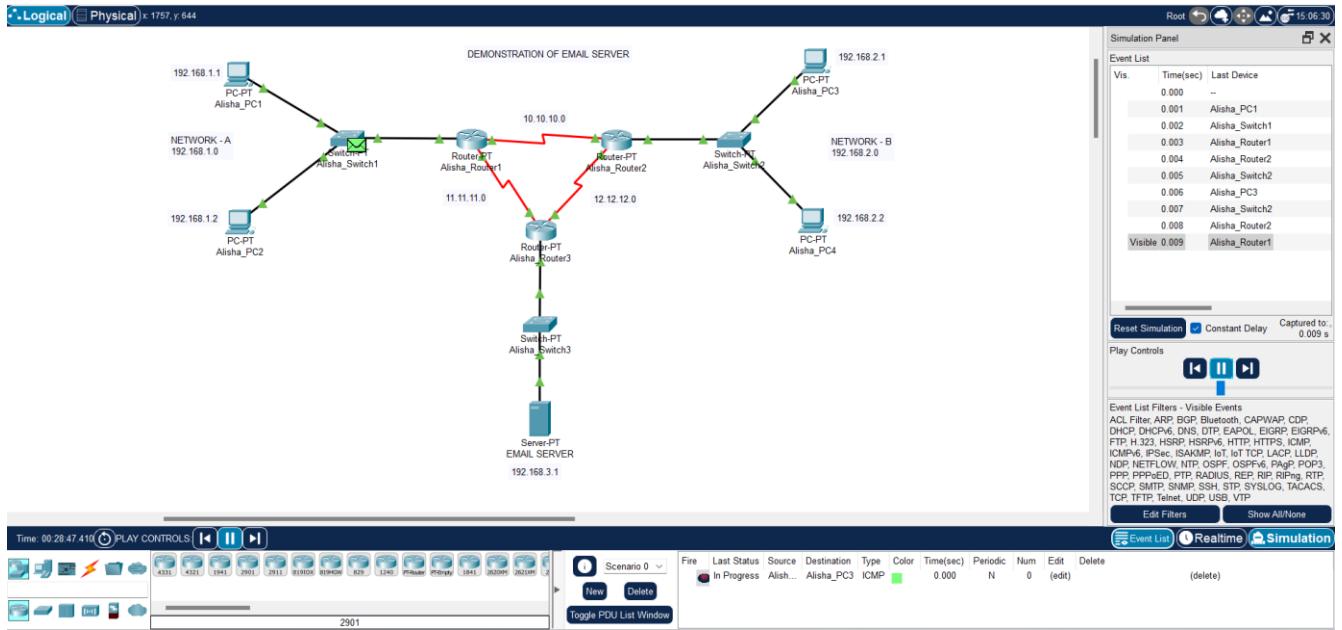
Step 6: Now the default gateway of Alisha PC1 and Alisha PC2 are set as same the IP address of Alisha Router1 and default gateway of Alisha PC3 and Alisha PC4 are set as the IP address of Alisha Router2.



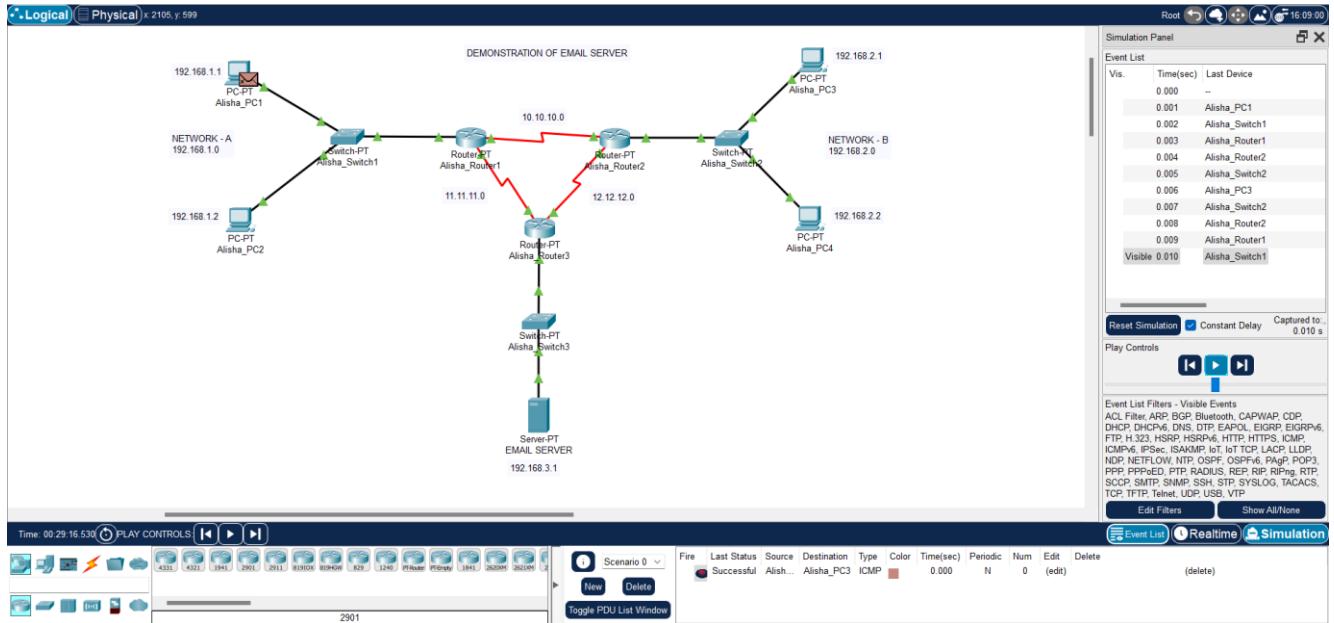
Step 7: Now go to Alisha Router1->config->RIP->Network and then add the IP addresses of Router(Fast Eathernet and serial). Same process is done on other side also for Alisha Router1



Step 8: Now simulate the message passing through Alisha PC1 to Alisha PC3. Scenario in progress



Scenario after success:

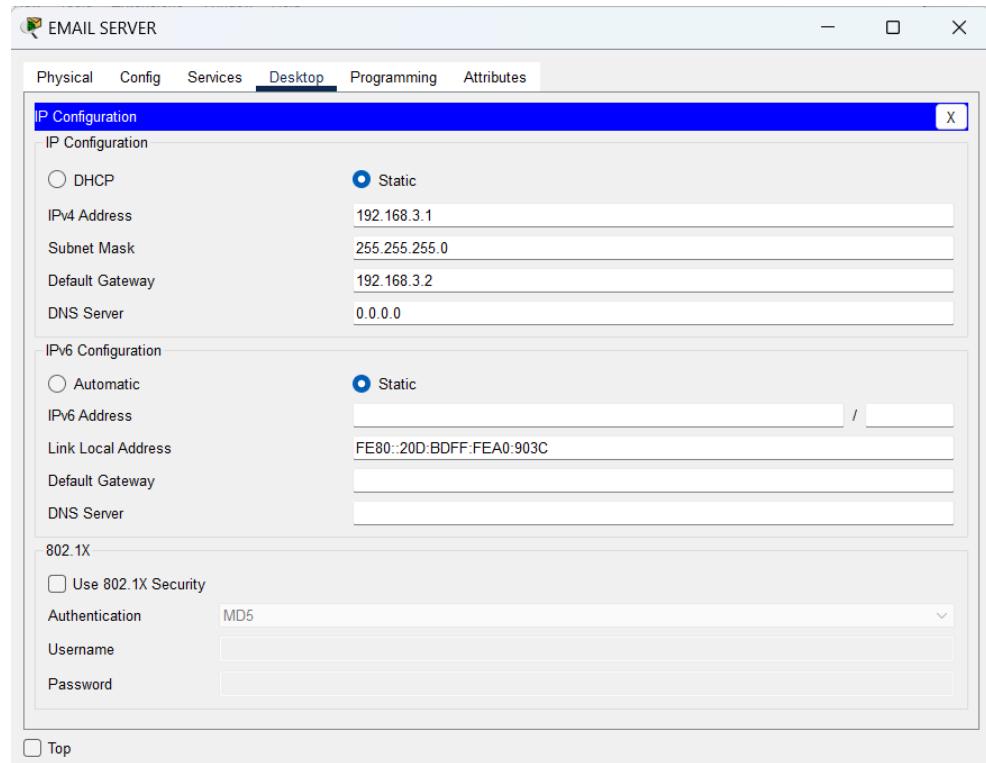


Step 9: To make Server ass mail server, add the server on Alisha Router2 with the help of copper crossover cable.

Now set the IP address and default gateway of the

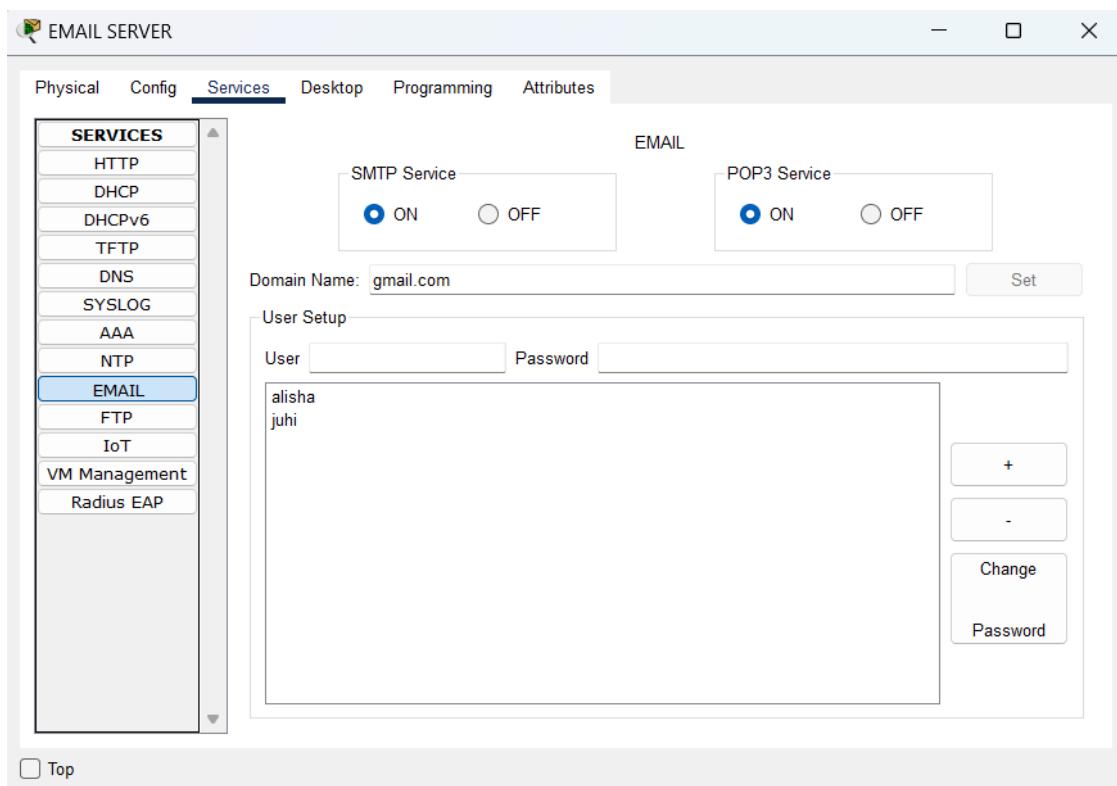
server. IP address: 192.168.3.1

Default gateway: 192.168.3.2



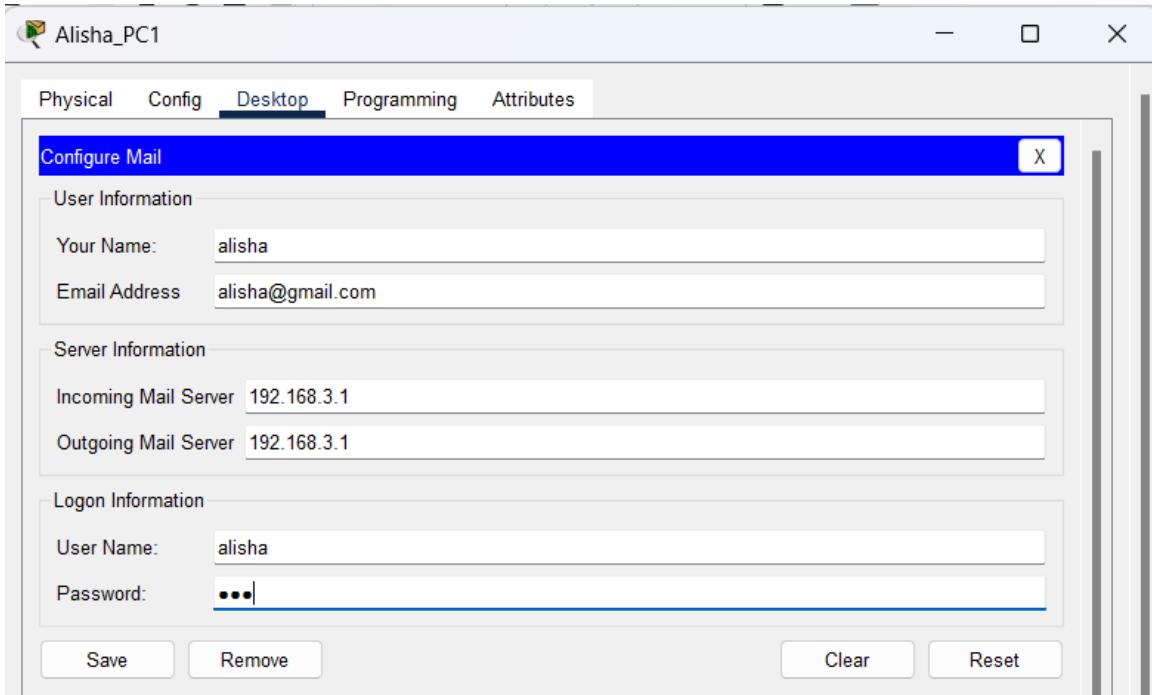
Step 10: Now go to Alisha server->services->Email and turn on SMPT and POP3 services then enter the domain name as gmail.com

Now enter user and password and then click + to add user.



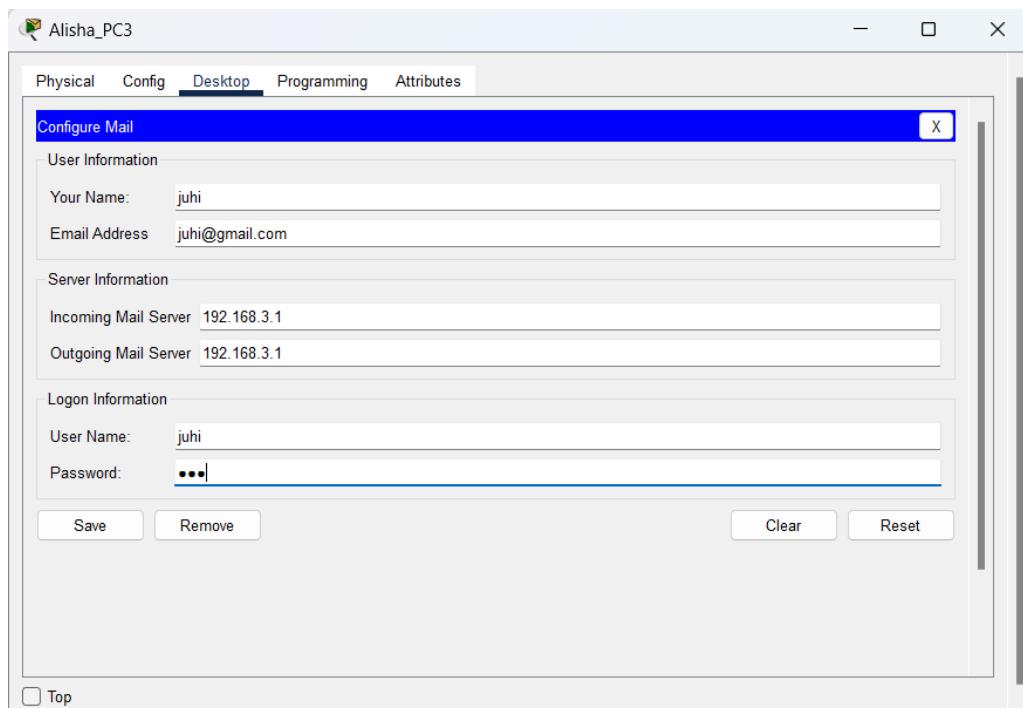
Step 11: Now click on Alisha PC1 and go to desktop->Email then go to configure mail to set the user name and Email of the Alisha PC1. In below server information incoming and outgoing addresses are same. Then enter the username and password and click on save.

Email address of Alisha PC1: aisha@gmail.com

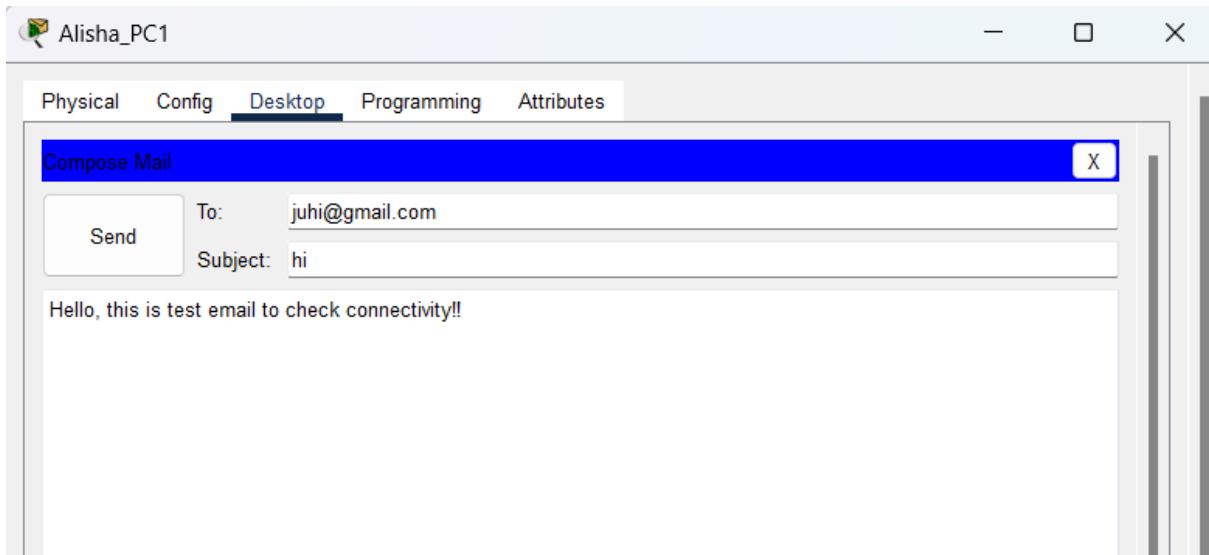


Similar thing will be done for Alisha PC3 Your name:

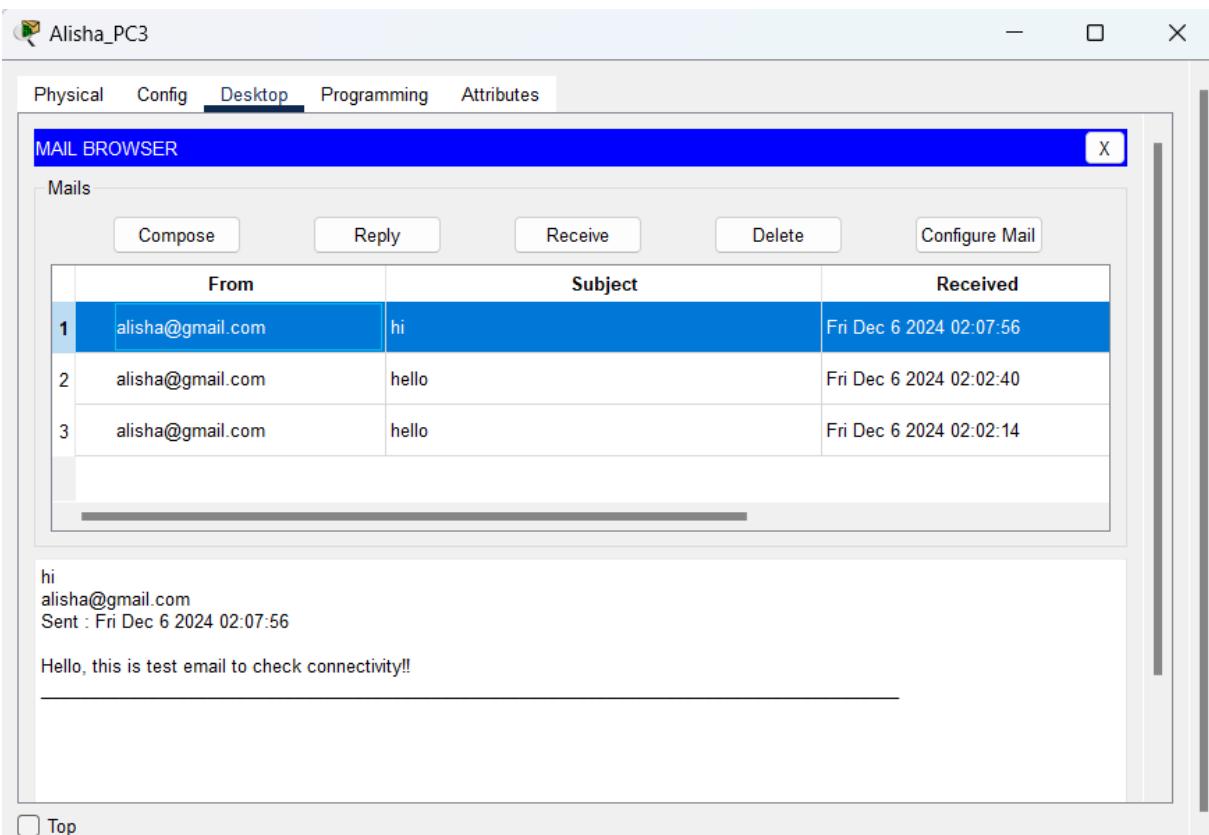
juhi Email address of Alisha PC3 : juhi@gmail.com



Step 12: Now compose mail from Alisha PC1 and enter the email address of Alisha PC3, then click sendto send mail.



Now see received Email from Alisha PC3.

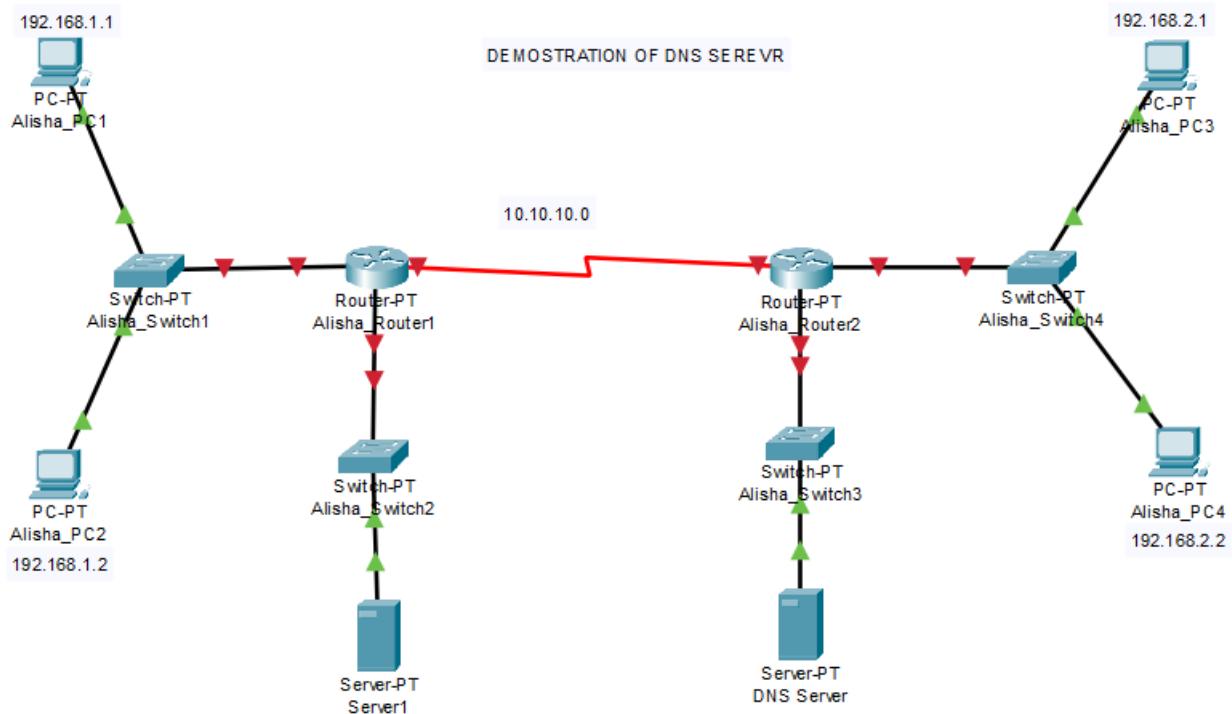


Program:11

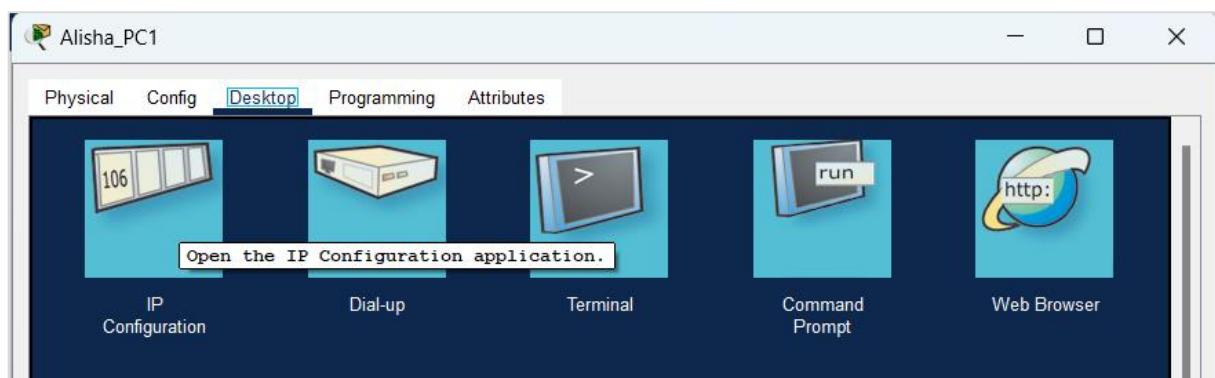
Objective: Demonstrate the DNS server.

Step 1: Open Cisco packet Tracer.

Step 2: Take 4 generic PC, 4 PT switch, 2 PT router and 2 server and connect them using default connection, and create two different network like this:

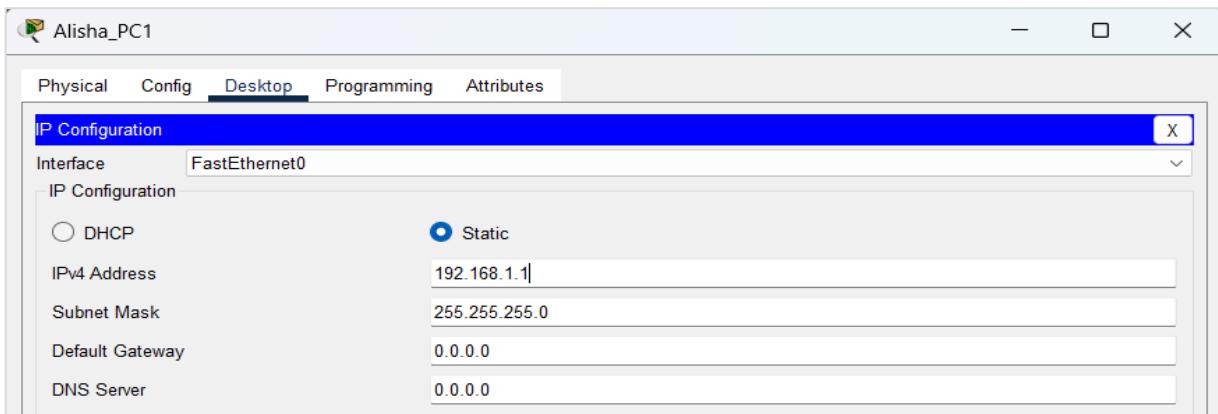


Step 3: Click on Alisha PC1 and go to Desktop then a dialog box appears.



Step 4: Now go to the IP configuration and set the IP4 address and click on the subnet mask.

Alisha PC1: 192.168.1.1



Similarly set the IP address for all PC's and Server.

Alisha PC2: 192.168.1.2 ,

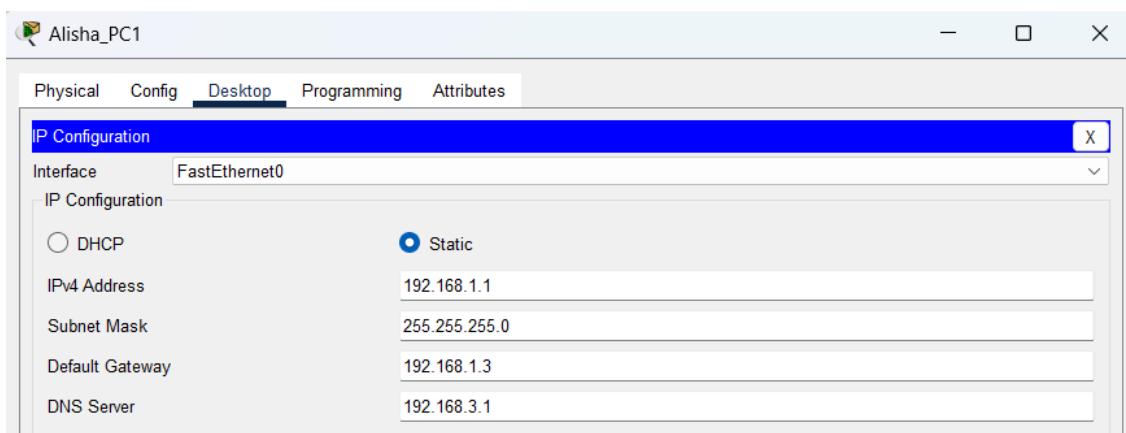
Alisha PC3: 192.168.2.1

Alisha PC4: 192.168.2.2

Server IP address

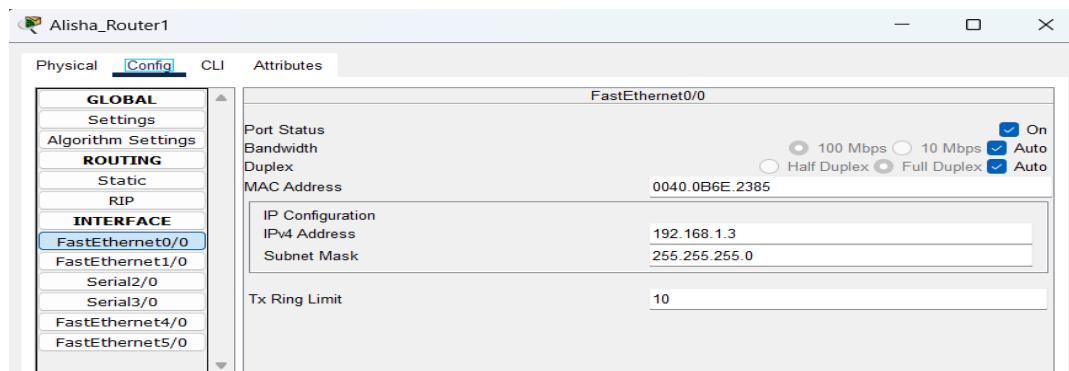
Alisha Server1: 192.168.4.1

Alisha DNS SERVER: 192.168.3.1



Step 5: Now set IP address of router, click on Alisha Router1, then go to config->FastEthernet0/0 and turn on Port status.

Alisha Router1: 192.168.1.3(FastEthernet0/0)



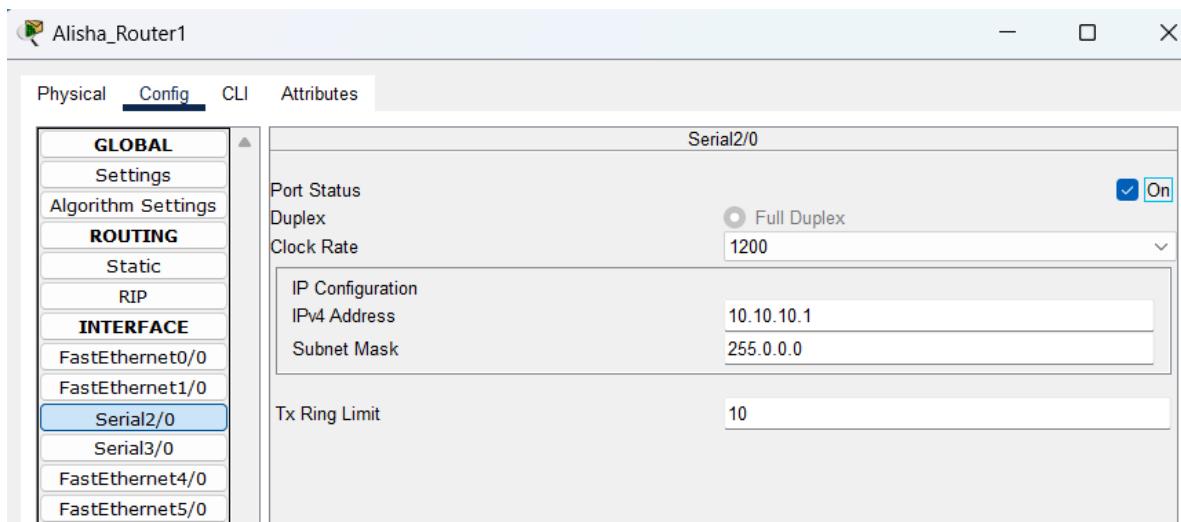
Same things are done on the Alisha Router 2 also.

Alisha Router2 : 192.168.2.3

Step 6 : Similarly configure the Serial 2/0.

Alisha Router1: 10.10.10.1(Serial2/0)

Alisha Router2: 10.10.10.2(Serial2/0)



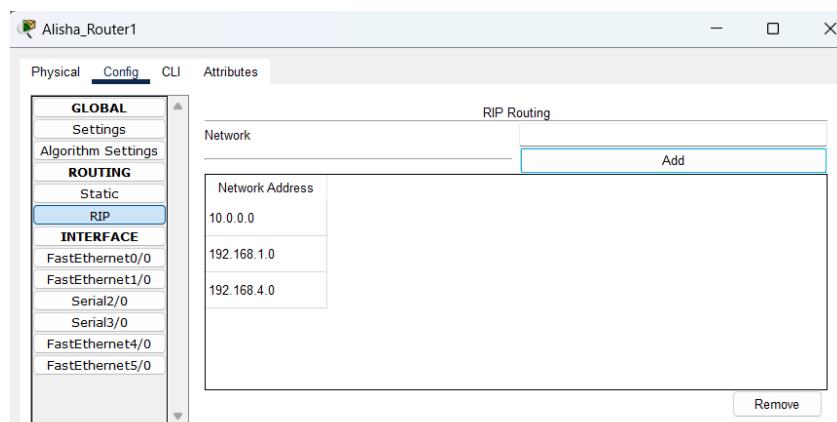
Step 7: Now the default gateway of Alisha PC1 and Alisha PC2 are set as same the IP address of Alisha Router1 and default gateway of Alisha PC2 and Alisha PC3 are set as the IP address of Alisha Router2.

Step 8: Now configure the FastEthernet1/0 for both

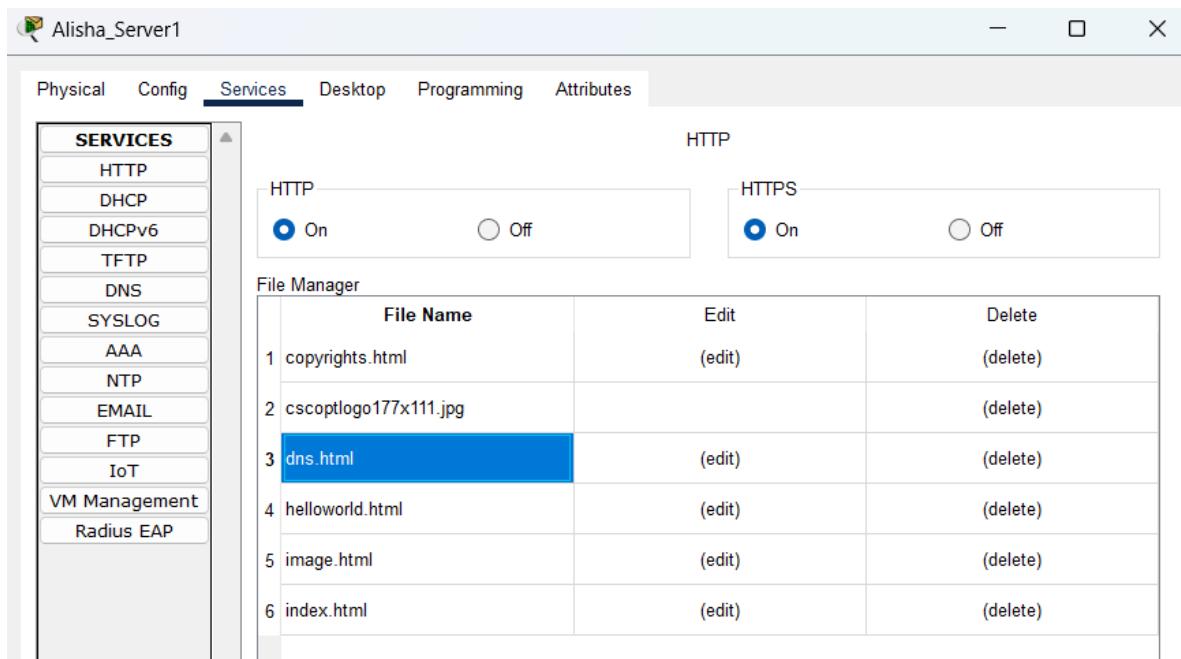
Routers.Alisha Router1: 192.168.4.2 (FastEthernet1/0)

Alisha Router2: 192.168.3.2 (FastEthernet1/0)

Step 9: Set the RIP of both routers, add three IP addresses of each router.

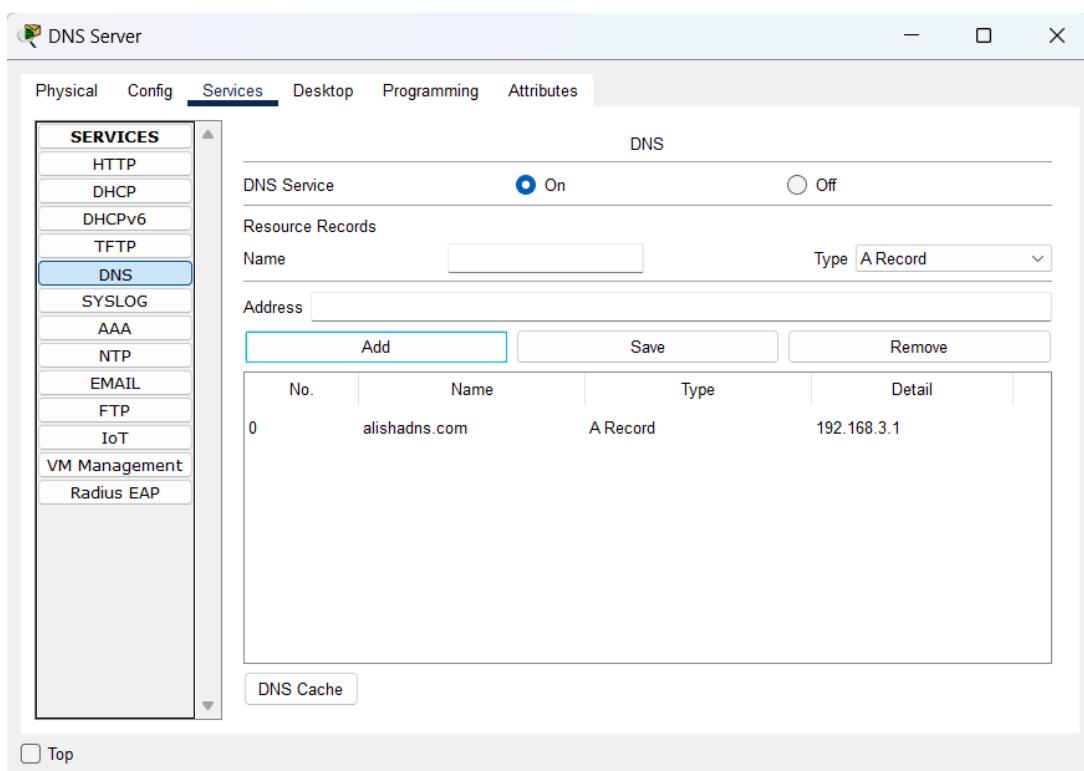


Step 10: Click on the Alisha server1 and go to services and select HTTP then turned on HTTP and HTTPS.

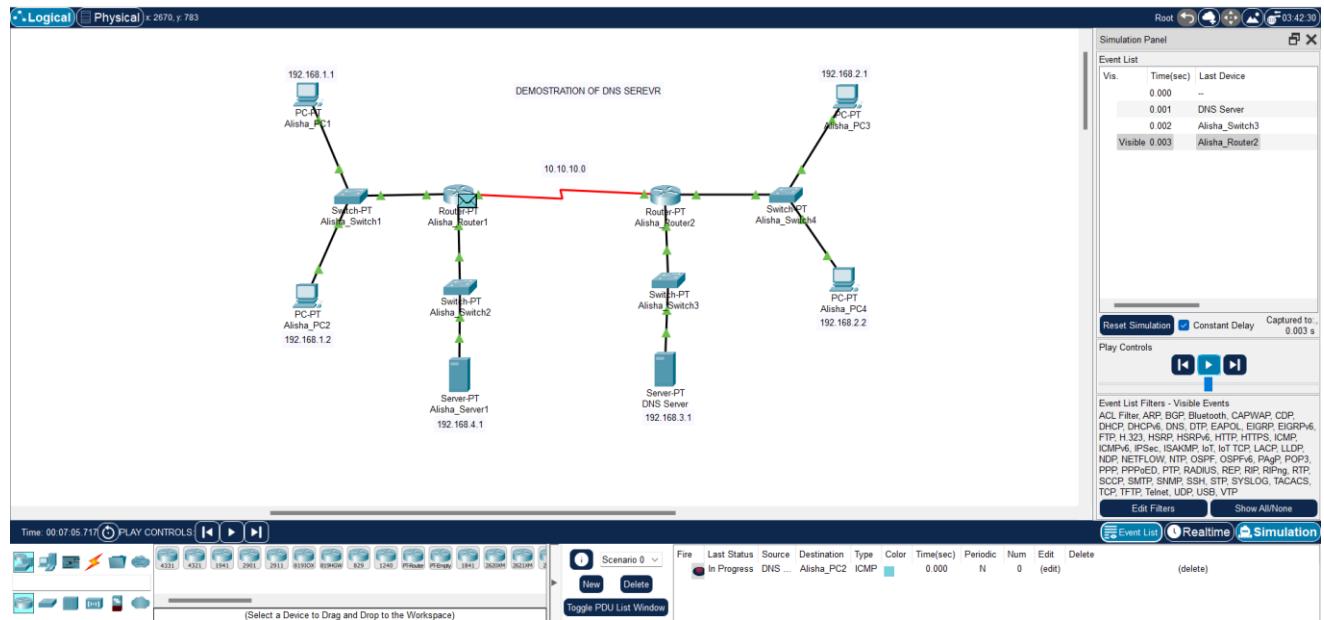


Step 11: To set Alisha server2 as DNS server, click on Alisha server2 and go to services and select DNS and turn on DNS server.

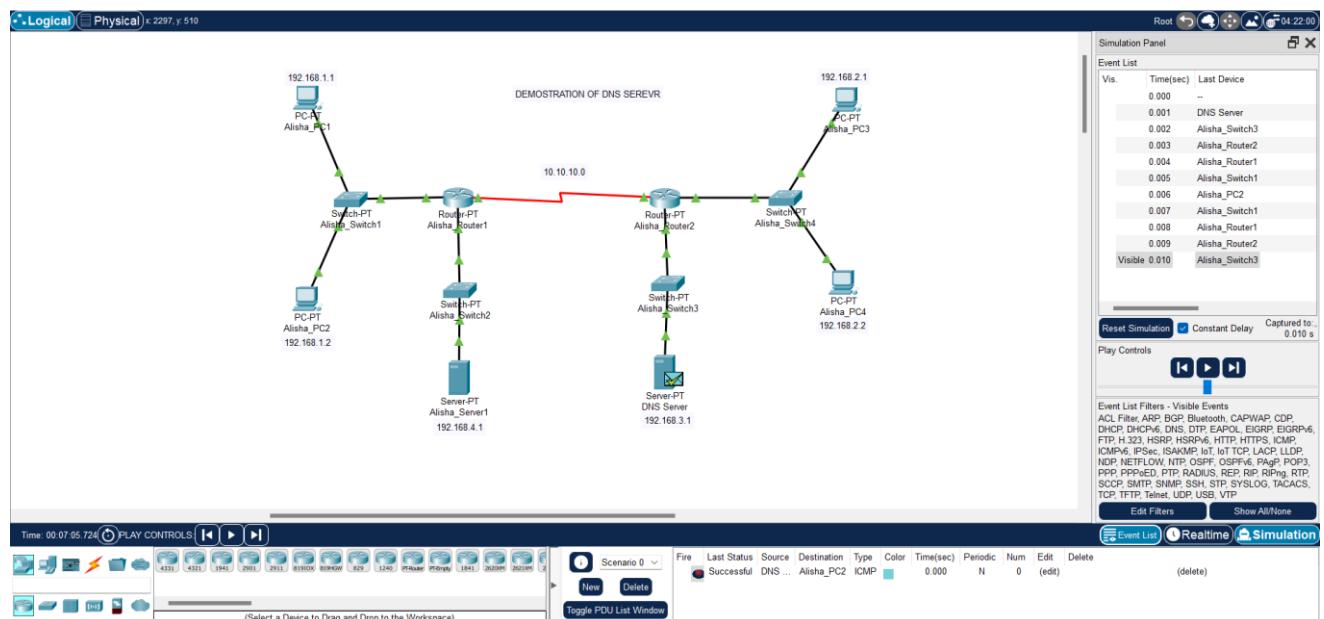
Now set the domain name for Alisha server2 and assign IP address of that server and click on add.



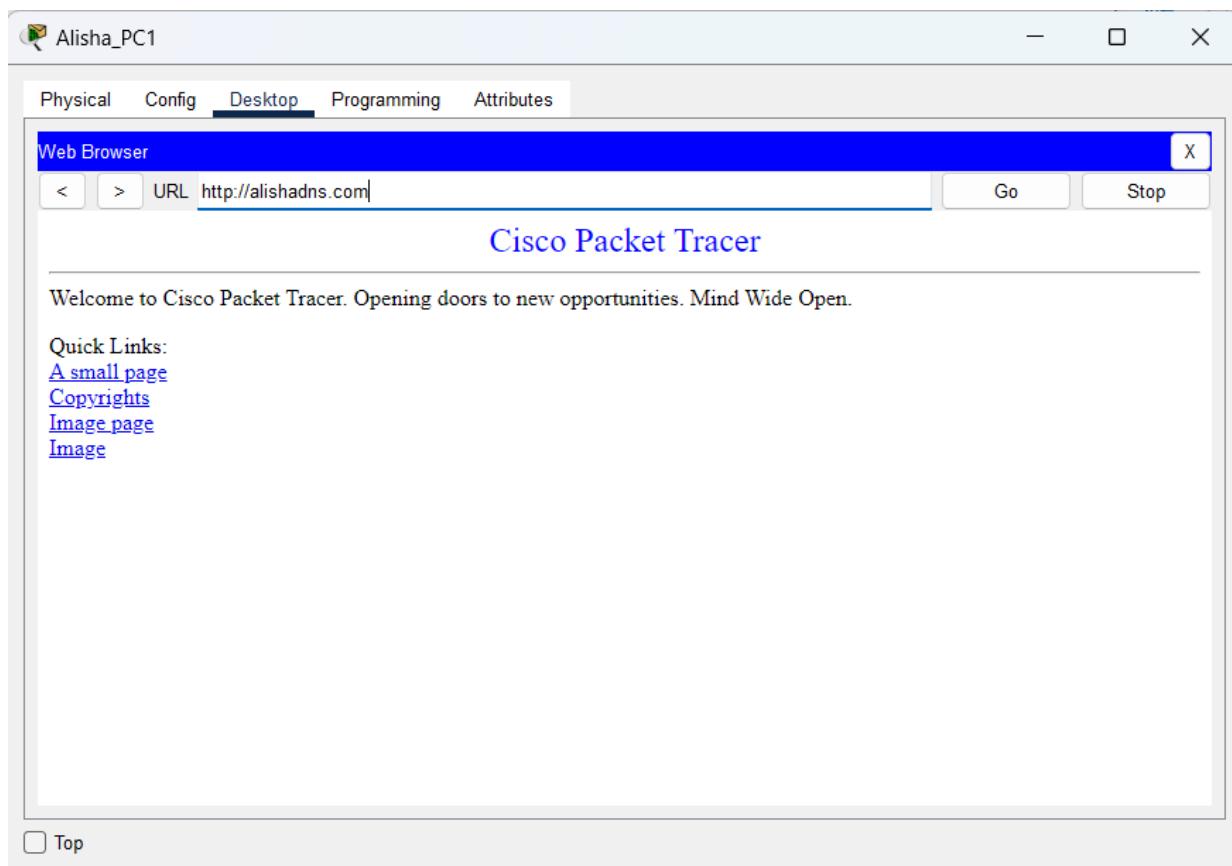
Step 12: Now simulate the message passing through Alisha DNS SERVER to AlishaPC2.
 Scenario in progress :



Scenario after success:



Step 13: Click on any PC and go to Desktop->Web Browser then type Alisha to access the Alisha server2.



Program: 12

Objective: Write step by step process of windows 2003/2000 server installation.

Step 1:

Requirement some of the most important things you should take into consideration when planning for your Windows Server 2003 installation:

- Check System Requirements
- Check Hardware and Software Compatibility
- Determine Disk Partitioning Options
- Choose the Appropriate File System: FAT, FAT32, NTFS
- Decide on a Workgroup or Domain Installation
- Complete a Pre-Installation Checklist

After you made sure you can go on, start the installation process.

Step 2:

Beginning the installation process

You can install Windows Server 2003 in several methods - all are valid and good, it all depends upon your needs and your limitations.

For example, you can install directly from a CD by booting your computer with the CD, or you can also copy the I386 folder from a CD and run the setup process by going into the I386 folder and using the WINNT or WINNT32 command
(depending upon your existing operating system).

It doesn't matter how you run the setup process, but the moment it runs all setup methods look alike.

Step 3:

Setup program

1. Start the computer from the CD.
2. You can press F6 if you need to install additional SCSI adapters or other massstorage devices. If you do you will be asked to supply a floppy disk with the drivers and you CANNOT browse it (or a CD for that matter). Make sure you have one handy.
3. If you want, you can press F2 to run the ASR sequence. For that you need a good backup created by the Windows Server 2003 backup program, and the ASR floppy disk. If you plan to install a new copy of 2003 - don't do anything.
4. Setup will load all the needed files and drivers.
5. Select To Setup Windows Server 2003 Now. If you want, and if you have a previous installation of the OS, you can try to fix it by pressing R. If not, just press ENTER.

Windows Server 2003, Enterprise Edition Setup

Welcome to Setup.

This portion of the Setup program prepares Microsoft(R) Windows(R) to run on your computer.

- To set up Windows now, press ENTER.
- To repair a Windows installation using Recovery Console, press R.
- To quit Setup without installing Windows, press F3.

6. Read and accept the licensing agreement and press F8 if you accept it.

Windows Licensing Agreement**END-USER LICENSE AGREEMENT FOR
MICROSOFT SOFTWARE****MICROSOFT WINDOWS SERVER 2003, STANDARD EDITION
MICROSOFT WINDOWS SERVER 2003, ENTERPRISE EDITION**

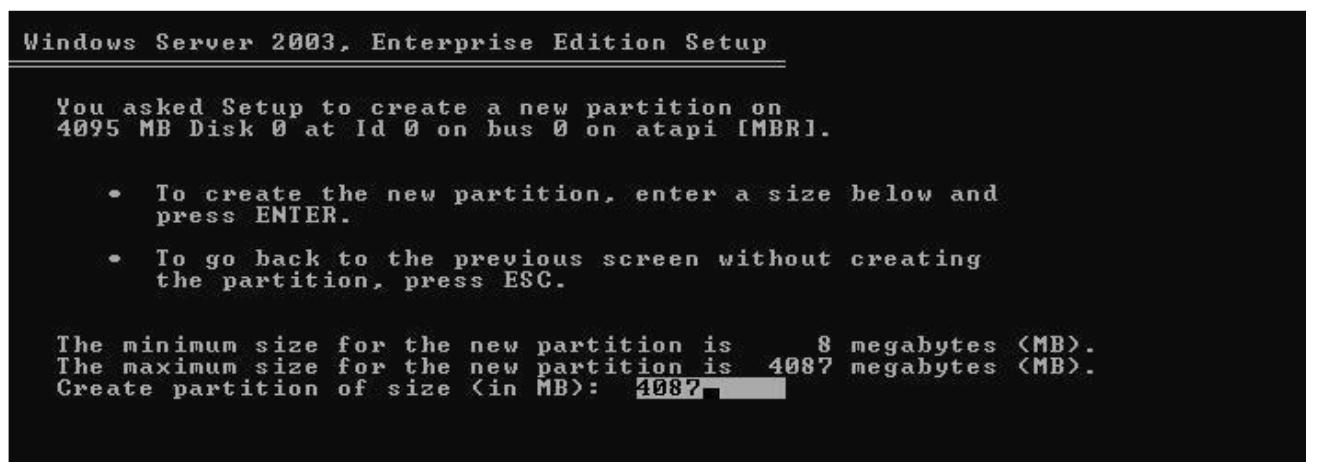
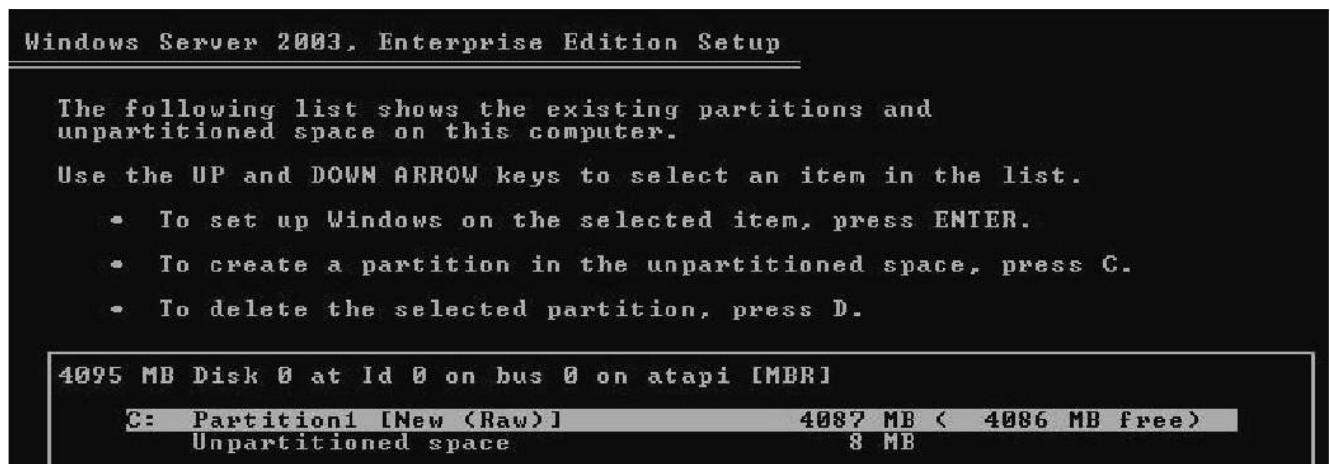
PLEASE READ THIS END-USER
LICENSE AGREEMENT ("EULA") CAREFULLY. BY
INSTALLING OR USING THE SOFTWARE THAT
ACCOMPANIES THIS EULA ("SOFTWARE"), YOU AGREE
TO THE TERMS OF THIS EULA. IF YOU DO NOT
AGREE, DO NOT USE THE SOFTWARE AND, IF
APPLICABLE, RETURN IT TO THE PLACE OF
PURCHASE FOR A FULL REFUND.

THIS SOFTWARE DOES NOT TRANSMIT ANY
PERSONALLY IDENTIFIABLE INFORMATION FROM YOUR
SERVER TO MICROSOFT COMPUTER SYSTEMS WITHOUT
YOUR CONSENT.

1. GENERAL. This EULA is a legal agreement between you (either an individual or a single entity) and Microsoft Corporation ("Microsoft"). This EULA governs the Software, which includes computer software (including online and electronic documentation) and any associated media and printed materials. This EULA applies to updates, supplements, add-on components, and Internet-based services components of

F8=I agree ESC=I do not agree PAGE DOWN=Next Page

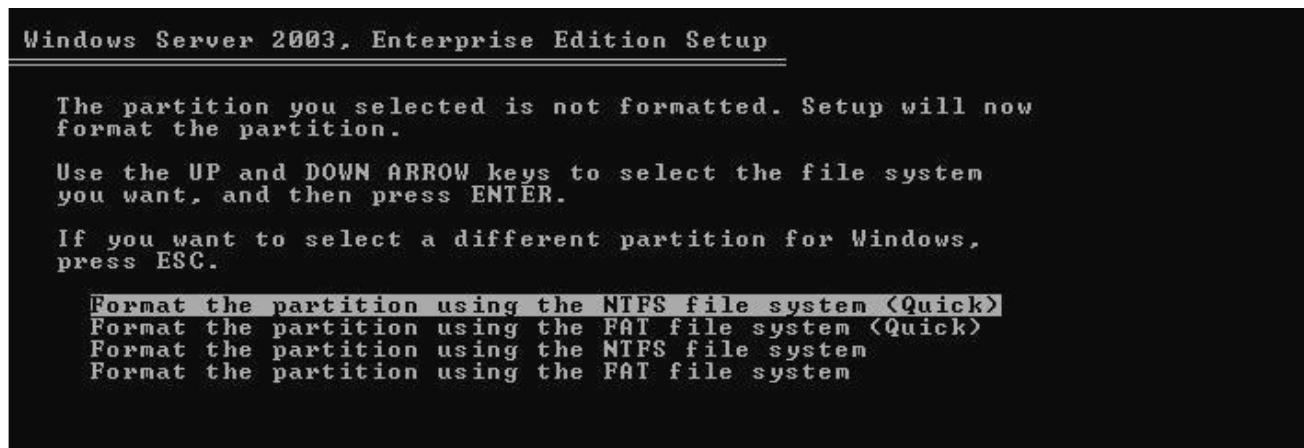
7. Select or create the partition on which you will install Windows Server 2003. Depending upon your existing disk configuration choose one of the following:

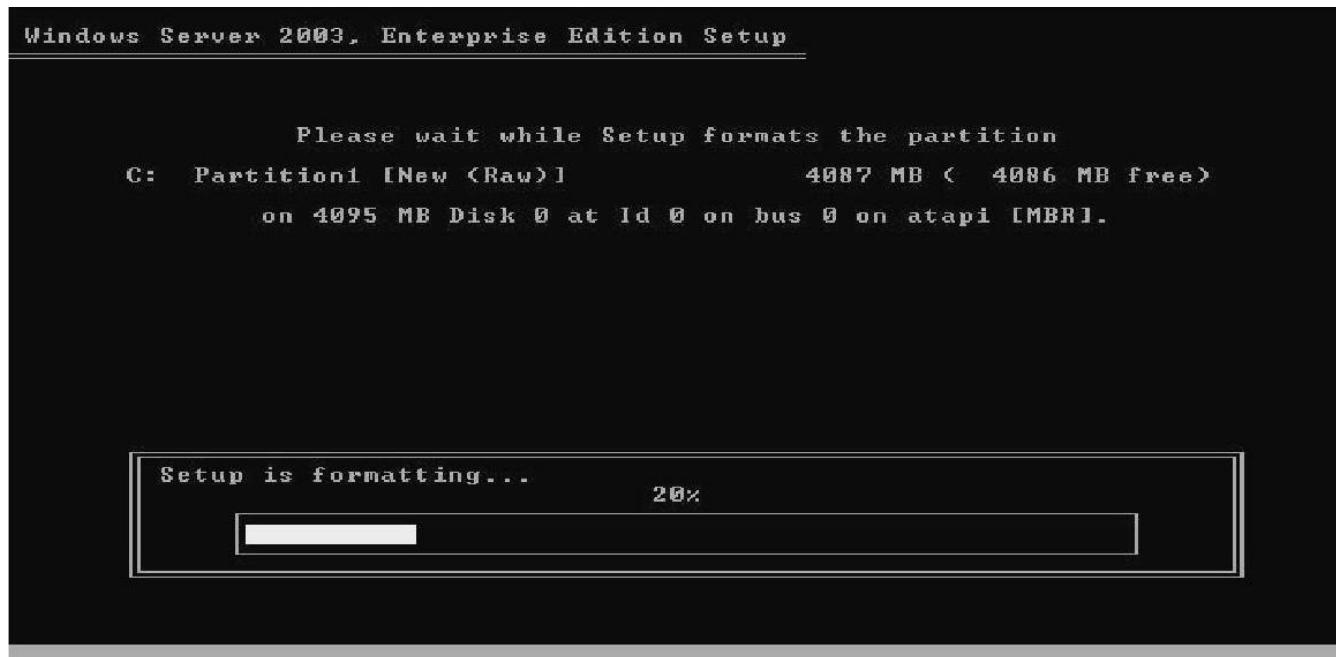


- If the hard disk is unpartitioned, you can create and size the partition on which you will install Windows Server 2003.
- If the hard disk is already partitioned, but has enough unpartitioned disk space, you can create an additional partition in the unpartitioned space.
- If the hard disk already has a partition that is large enough, you can install Windows Server 2003 on that partition. If the partition has an existing operating system, you will overwrite that operating system if you accept the default installation path. However, files other than the operating system files, such as program files and data files, will not be overwritten.
- If the hard disk has an existing partition, you can delete it to create more unpartitioned space for the new partition. Deleting an existing partition erases all data on that partition.

If you select a new partition during Setup, create and size only the partition on which you will install Windows Server 2003. After installation, use Disk Management to partition the remaining space on the hard disk.

1. Select a file system for the installation partition. After you create the partition on which you will install Windows Server 2003, you can use Setup to select the file system with which to format the partition. Windows Server 2003 supports the NTFS file system in addition to the file allocation table (FAT) and FAT32 file systems. Windows Server 2003, Windows XP Professional, Windows 2003, and Windows NT are the only Microsoft operating systems that you can use to gain access to data on a local hard disk that is formatted with NTFS. If you plan to gain access to files that are on a local Windows Server 2003 partition with the Microsoft Windows 95 or Windows XP operating systems, you should format the partition with a FAT or FAT32 file system. We will use NTFS.





2. Setup will then begin copying necessary files from the installation point (CD, local I386 or network share).

3. Note: If you began the installation process from an MS-DOS floppy, make sure you have and run SMARTDRV from the.

floppy, otherwise the copying process will probably last more than an hour, perhaps even more. With SMARTDRV (or if setup was run by booting from CD) the copying will probably last a few minutes, no more than 5 max.

The computer will restart in graphical mode, and the installation will continue.

4: The GUI-based portion of the Setup program The setup process reboots and loads a GUI mode phase. It will then begin to load device drivers based upon what it finds on your computer. You don't need to do anything at this stage.

1. Click Customize to change regional settings, if necessary.

Current System Locale - Affects how programs display dates, times, currency, and numbers. Choose the locale that matches your location, for example, French (Canada).

Current Keyboard Layout - Accommodates the special characters and symbols used in different languages.

Your keyboard layout determines which characters appear when you press keys on the keyboard.

If you don't need to make any change just press Next.

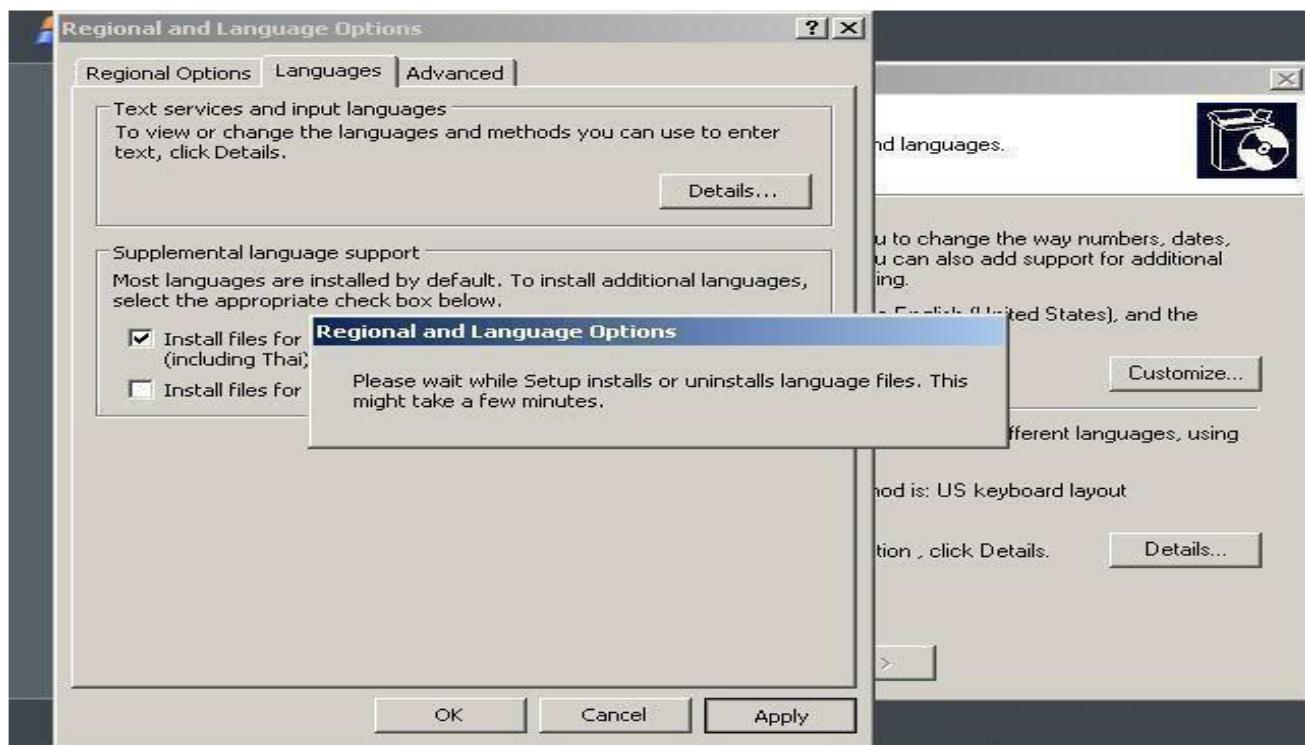


If you do need to make changes press Customize and add your System Locale etc. To install Hebrew support:

After pressing Customize go to the Languages tab and select the "Install files for complex script and right-to-left languages".

A warning message will appear. Press Ok.

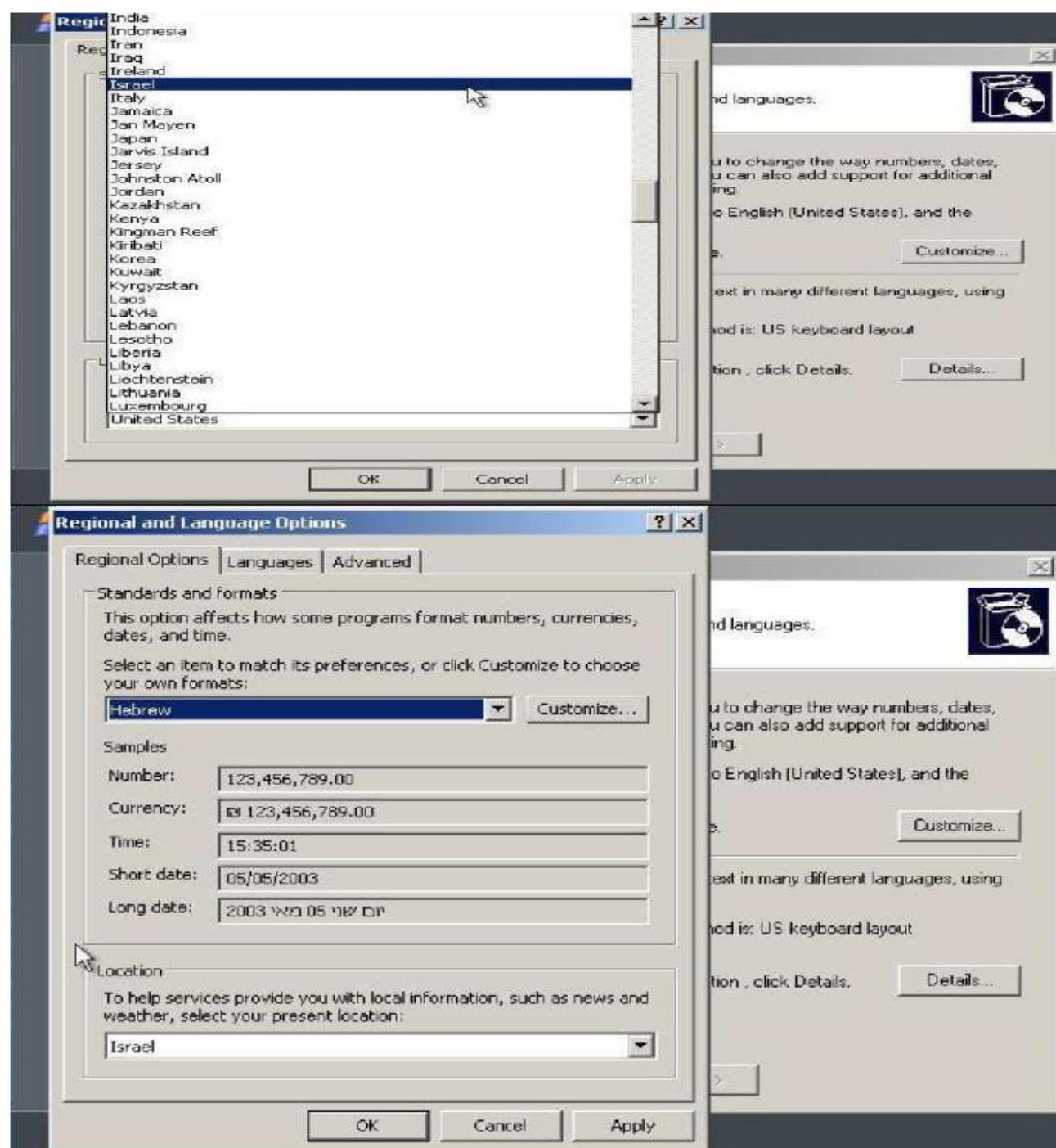


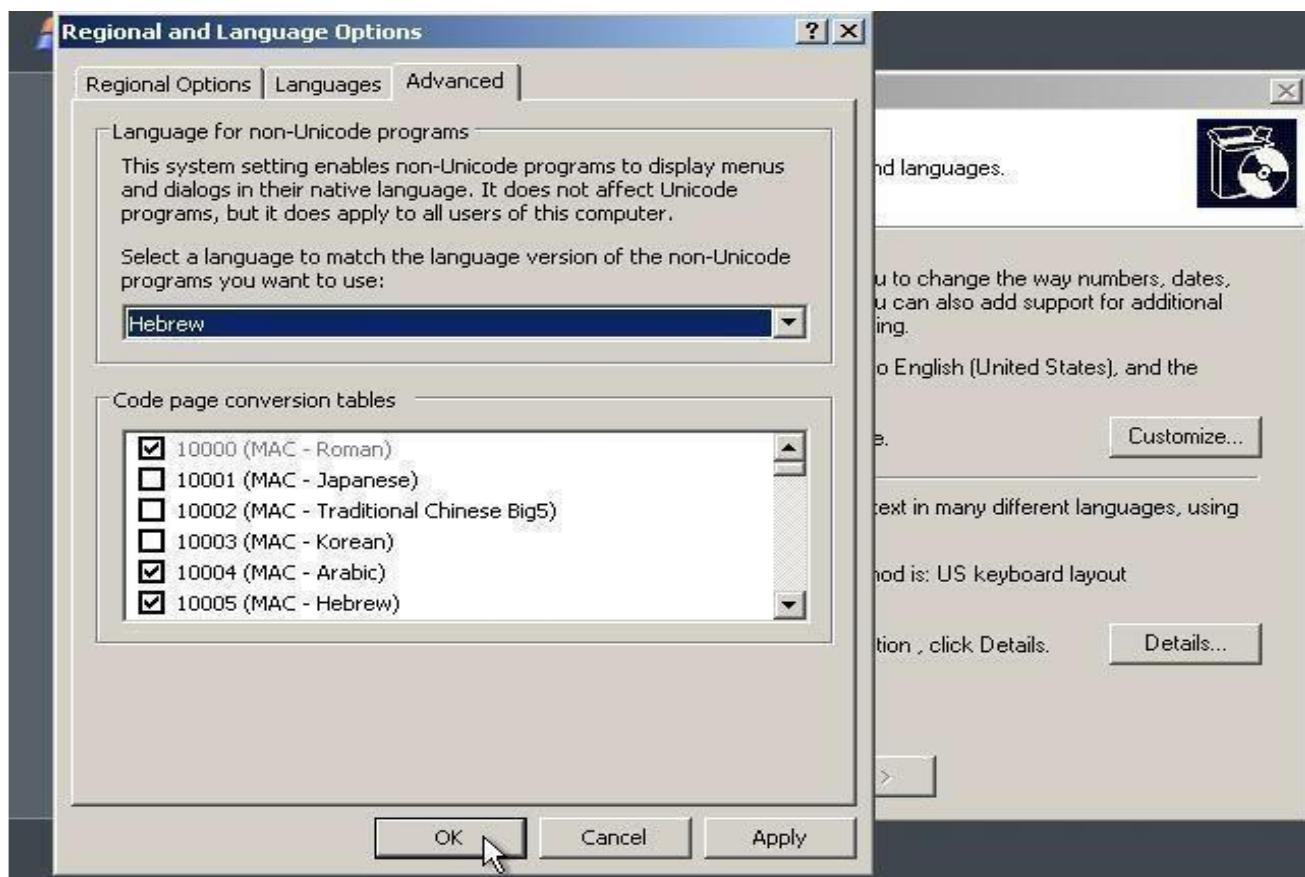


You must now press Apply!!!

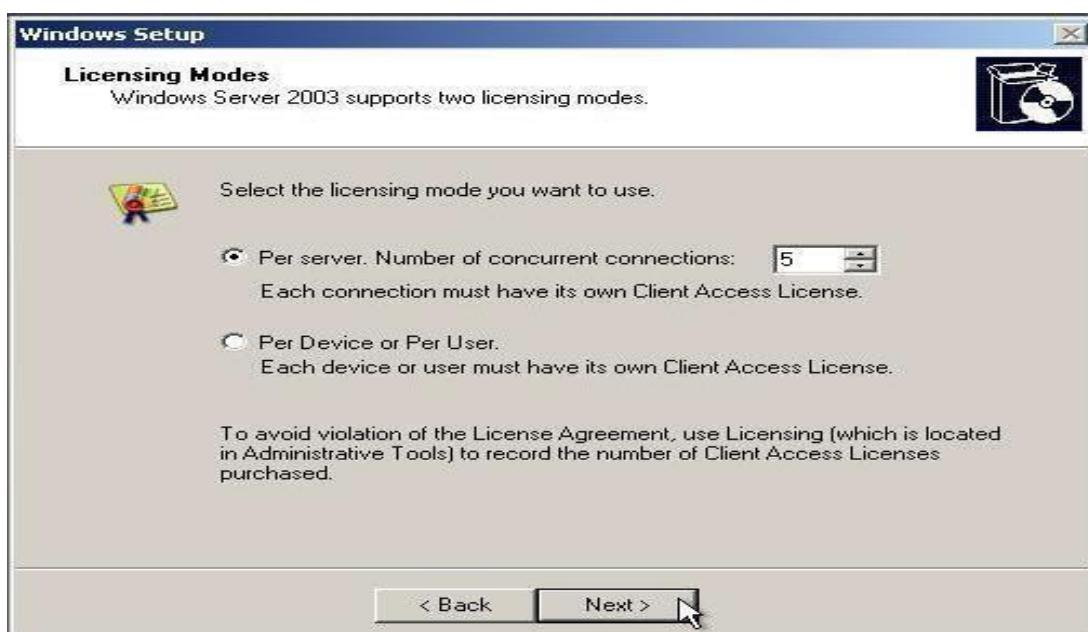
Setup will copy the necessary files from the installation point.

You can now go to the Regional Options tab and select Israel in the Location dropdown list, and Hebrew in the Standards and Formats drop-down list. Click Ok.

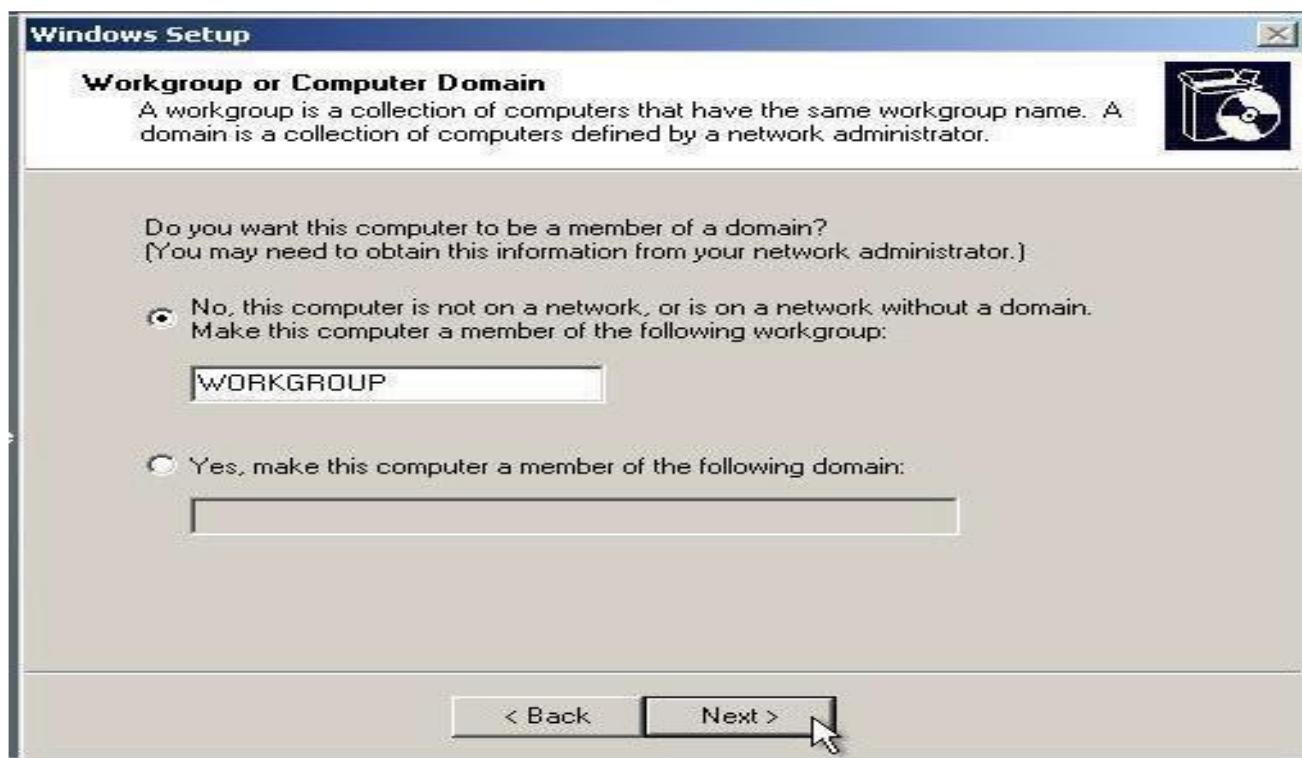




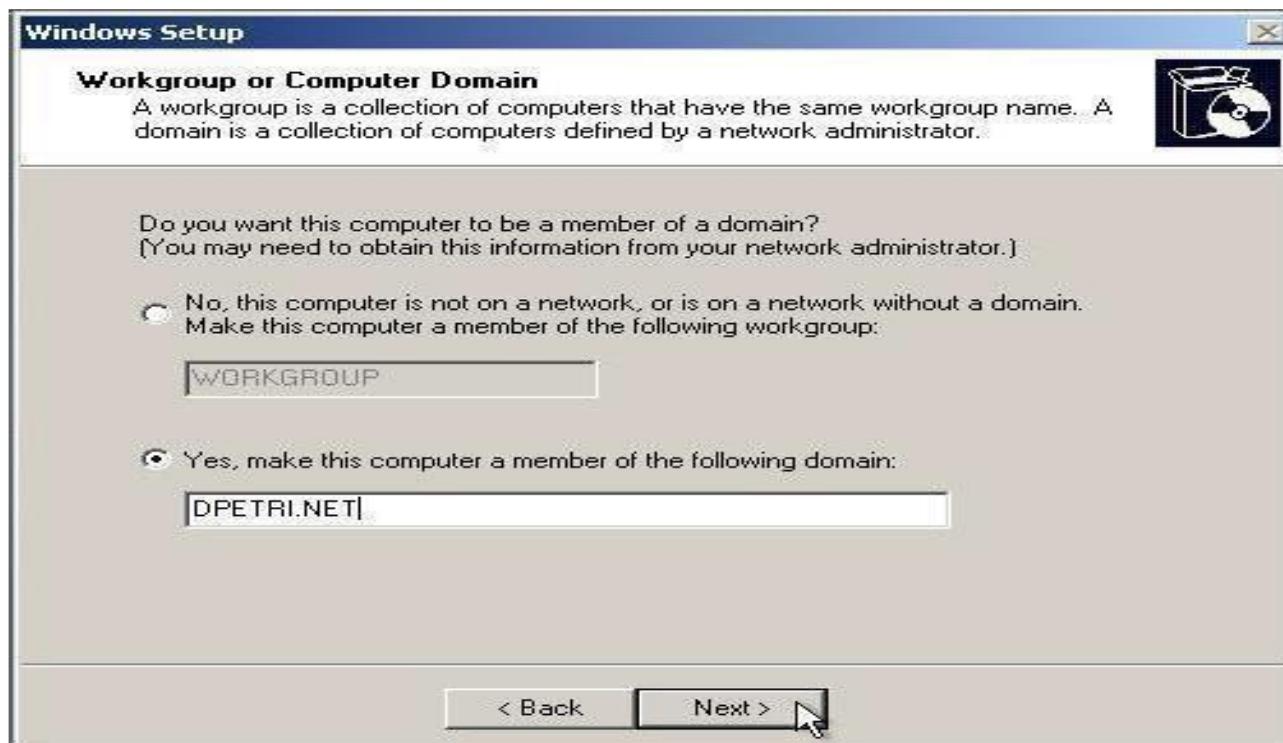
1. Type your name and organization.
2. Type the product key.
3. Enter the appropriate license type and number of purchased licenses.



1. Type the computer name and a password for the local Administrator account. The local Administrator account resides in the SAM of the computer, not in Active Directory. If you will be installing in a domain, you need either a pre-assigned computer name for which a domain account has been created, or the right to create a computer account within the domain.
2. If you enter a password that is blank or does not match the required complexity settings you will get a warning message.
3. Select the date, time, and time zone settings.
4. Setup will now install the networking components.
 - . In the Workgroup or Domain window enter the name of your workgroup or domain.
 - A workgroup is a small group of computers on a network that enables users to work together and does not support centralized administration.
 - A domain is a logical grouping of computers on a network that has a central security database for storing security information. Centralized security and administration are important for computers in a domain because they enable an administrator to easily manage computers that are geographically distant from each other. A domain is administered as a unit with common rules and procedures. Each domain has a unique name, and each computer within a domain has a unique name. If you're a standalone computer, or if you don't know what to enter, or if you don't have the sufficient rights to join a domain - leave the default entry selected and press Next.



If you want to join a domain (NT 4.0 domain or W2K/2003 Active Directory domain) enter the domain's name in the "Yes, make this computer a member of the following domain" box.



To successfully join a domain you need the following:

- The person performing the installation must have a user account in Active Directory. This account does not need to be the domain Administrator account. and
- The computer must have an existing computer account in the Active Directory database of the domain that the computer is joining, and the computer must be named exactly as its domain account is named. or
- The person performing the installation must have appropriate permission to create a domain account for the computer during installation. Also, you need to have connectivity to the domain's domain controllers (only to the PDC if on an NT 4.0 domain) and a fully functional DNS server (only in AD domains). Read the Joining a Domain in Windows XP Pro and Requirements when Joining a Domain pages for more on this issue.

Enter the Active Directory domain name (for example: DPETRI.NET) or the NetBIOS name of the NT 4.0 domain (for example: DPETRI). Press Next.

Note: If you provide a wrong domain name or do not have the correct connectivity to the domain's DNS server you will get an error message.

A username/password window will appear. Enter the name and password of the domain's administrator (or your own if you're the administrator on the target domain).



Note: Providing a wrong username or password will cause this phase to fail.

- Next the setup process will finish copying files and configuring the setup. You do not need to do anything.
- After the copying and configuring phase is finished, if Windows Server 2003 finds that you have a badly configured screen resolution it will advise you to change it and ask you if you see the new settings right.

Setup finishes and boots

Windows Server 2003. d.

That's it

