BUBT BANGLADESH UNIVERSITY OF BUSINESS AND TECHNOLOGY

Committed to Academic Excellence

Course Title : Computer Network Lab

Course Code : CSE-320

Experiment No : 03

Experiment Name : Basic Router Coconfiguration

Submitted By:

Name: Md. Nafijur Rahaman

ID No: 20234103116

Intake: 52

Section: 03

Program: CSE

Submitted To:

Name: Md. Mahbub-Or-Rashid

Designation : Assistant Professor

Department of: CSE

Bangladesh University of Business & Technology.

Date of Submission:

Signature of Teacher

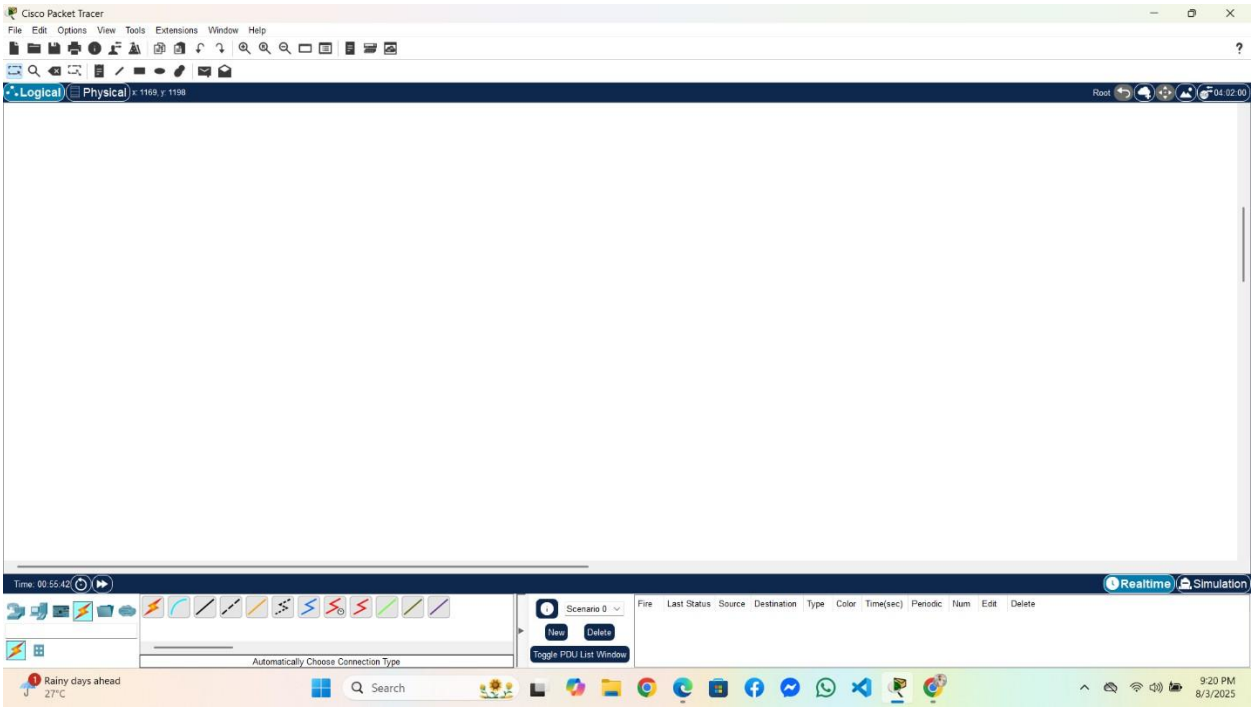
Experiment Name: : Basic Router configuration

Devices Component List: Device name Cisco Packet Tracer

Components –

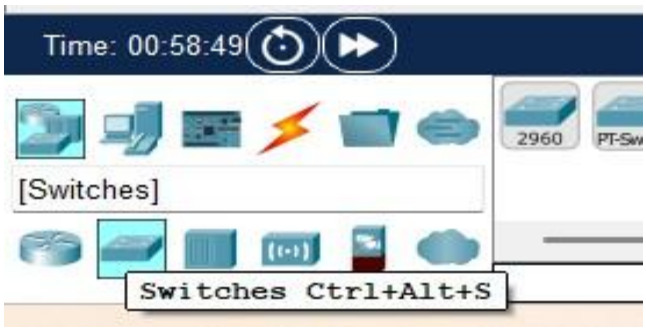
- Network Connection
- IP addressing

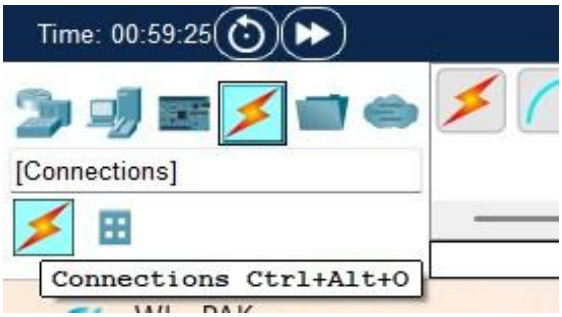
Step 1: First of all, start Cisco Packet Tracer



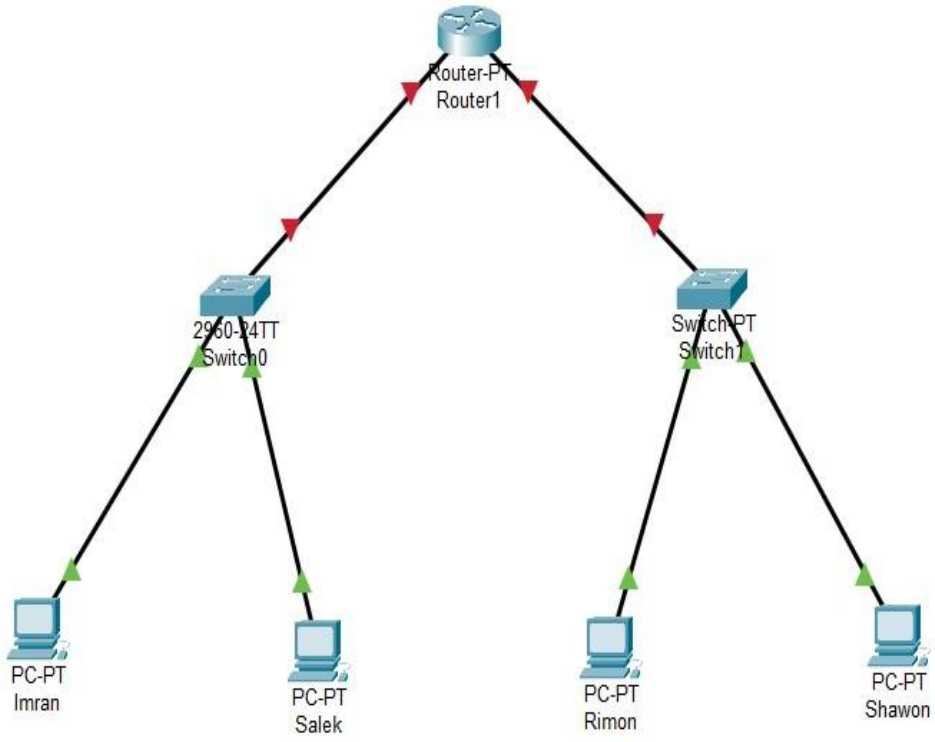
Step 2 : Before configuring the network layout, it is crucial to initially select the appropriate devices (such as routers, switches, and end-user equipment) and decide how they will be linked. This decisionmaking process guarantees that the network will operate efficiently once established.

We will use **Switches, Connections, Devices (PC), and Routers.**

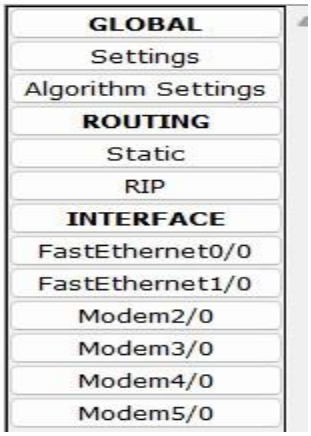




Step 3 Creating the network by connecting all required devices..



Step 4: Configuring the router's port in Physical mode is the first step. Once the router port is set up, proceed to configure the router using the Command Line Interface (CLI) with specific commands, as demonstrated below. Since our network includes only two Ethernet ports, we will configure only the fa0/0 and fa1/0 ports.

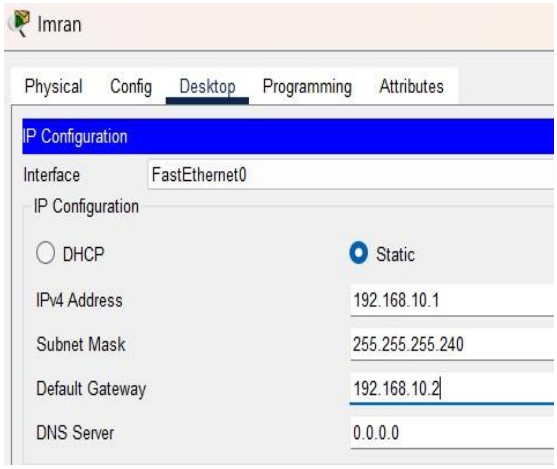


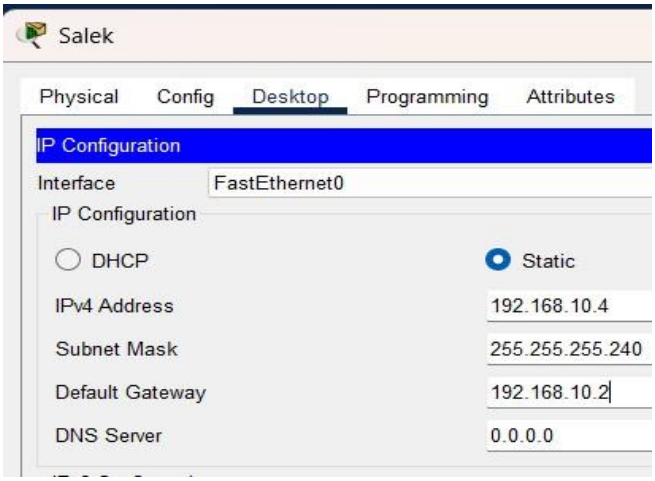

```
         --- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: n
```

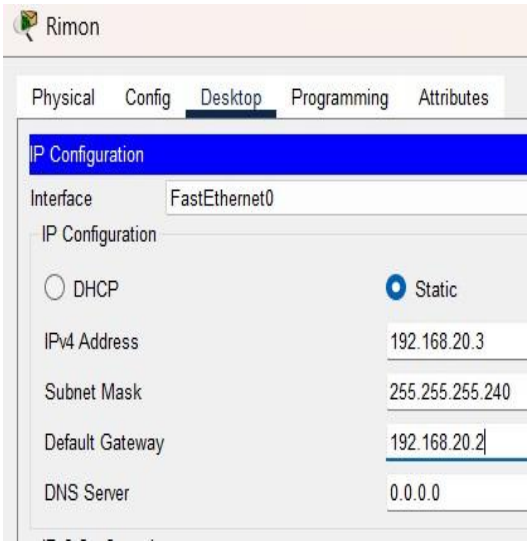
```
Router>en
Router#Conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#int fa0/0
Router(config-if)#int fa0/0
Router(config-if)#ip address 192.168.10.2 255.255.255.240
Router(config-if)#no shut
```

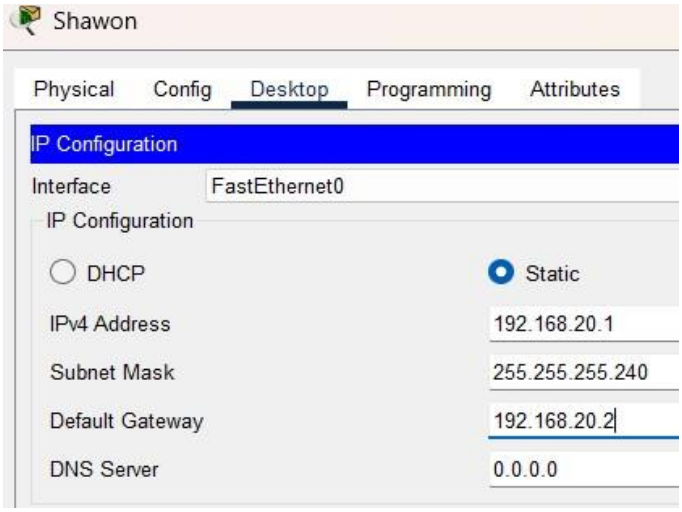
```
Router#en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa1/0
Router(config-if)#ip address 192.168.20.2 255.255.255.240
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
exit
```

Step 5: Assign a unique IP address, subnet masks, and a default gateway to each host in the network..









IP addresses I assigned for pc's are:

Imran pc:

IP: 192.168.10.1

subnet mask: 255.255.255.240

Default gateway: 192.168.10.2

Salek pc:

IP:192.168.10.2

Subnet masl:255.255.255.240

Default gateway:192.186.10.2

Rimon pc:

IP: 192.168.10.3

Subnet mask: 255.255.255.240

Shawon pc:

IP:192.168.20.1

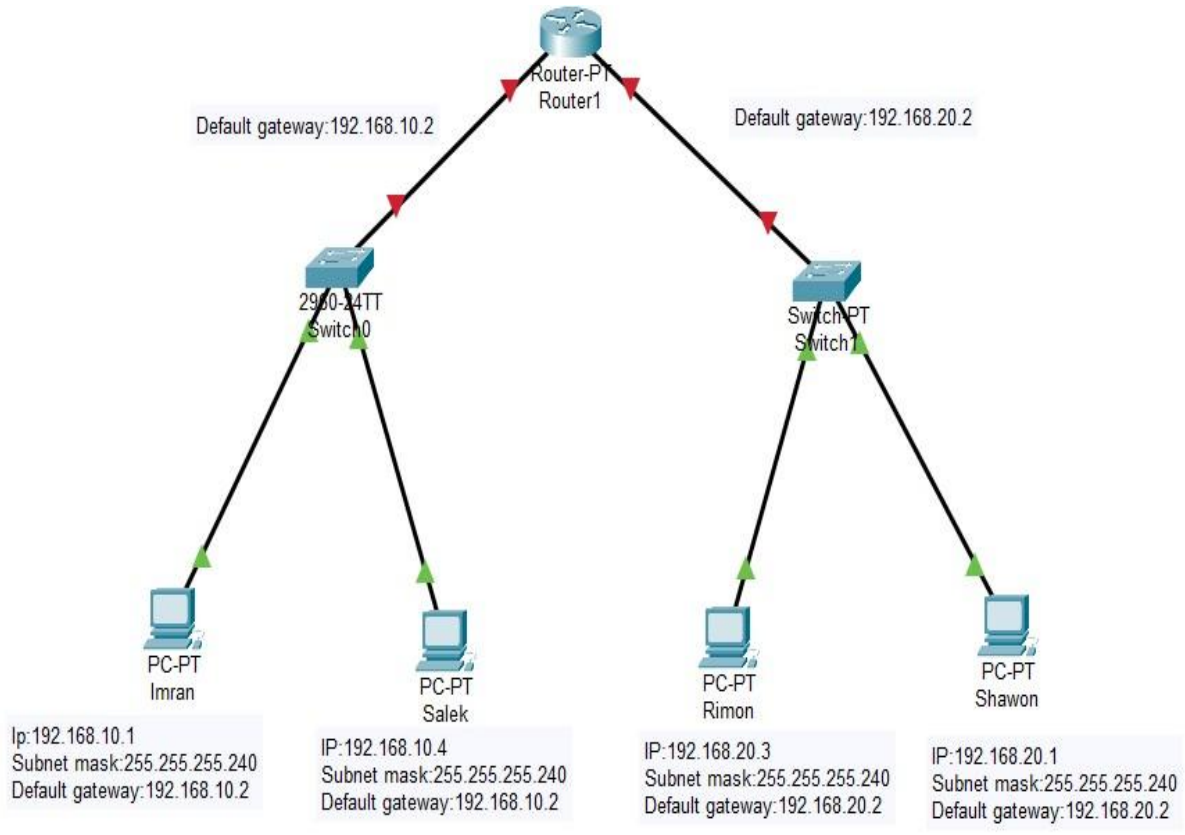
Subnet mash:255.255.255.240

Default gateway: 192.168.10.2 Default gateway:192.168.20.5

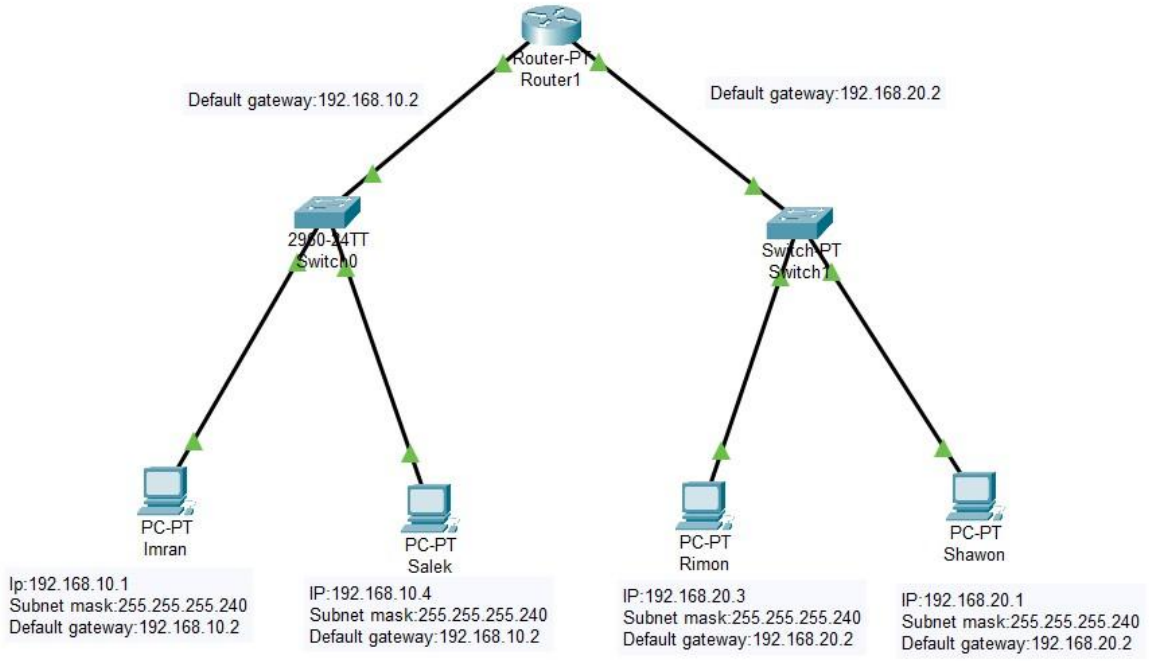
My FastEthernet 0/0 default gateway is: 192.168.10.2

My FastEthernet 1/0 default gateway is: 192.168.20.2

After doing all these things, our network will look like this, as shown below:



Step 6: Verify that all configurations are correct and the devices are properly connected through message passing.



Realtime | Simulati

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	Salek	Rimon	ICMP		0.000	N	1	(edit)	(delete)
	Successful	Rimon	Shawon	ICMP		0.000	N	2	(edit)	(delete)
	Successful	Salek	Shawon	ICMP		0.000	N	3	(edit)	(delete)
	Successful	Imran	Shawon	ICMP		0.000	N	4	(edit)	(delete)

2:18 AM
8/17/2025