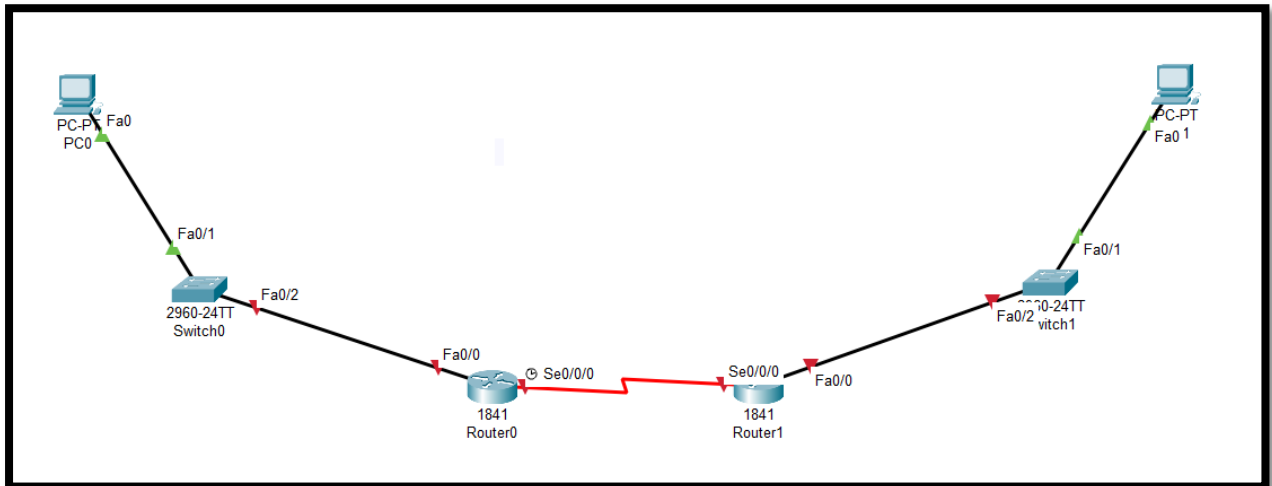


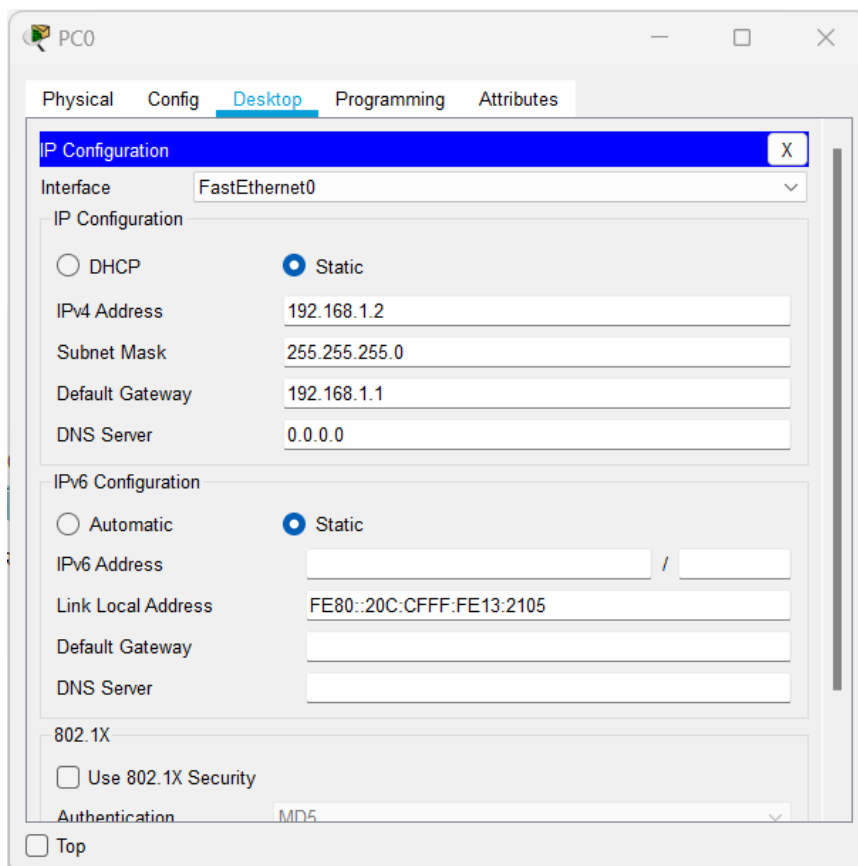
## Practical No: 1

### Aim: Configuring WEP on a Wireless Router.

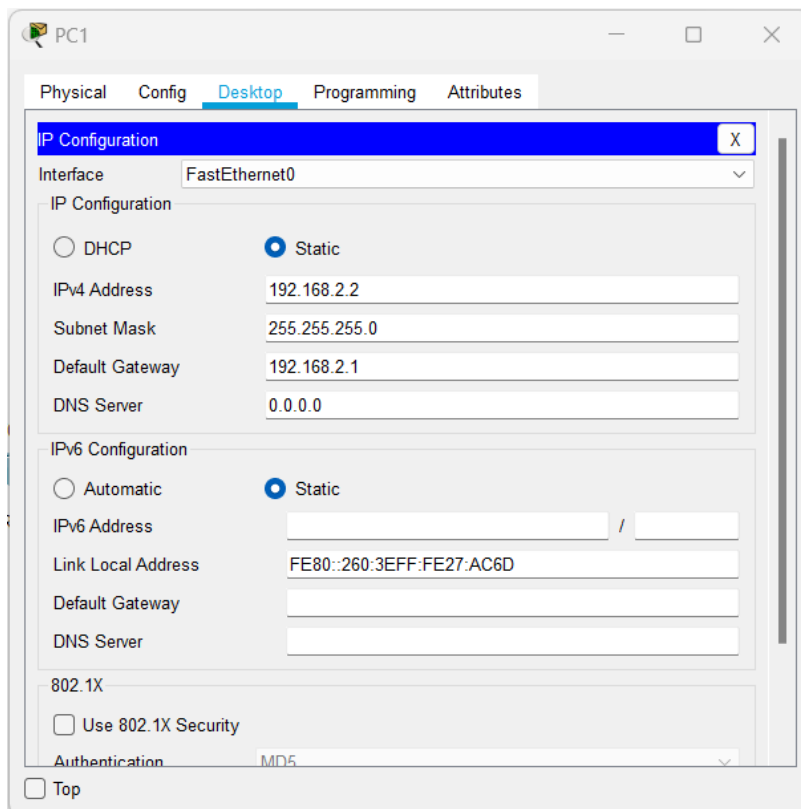
Step 1: Make connection like this.



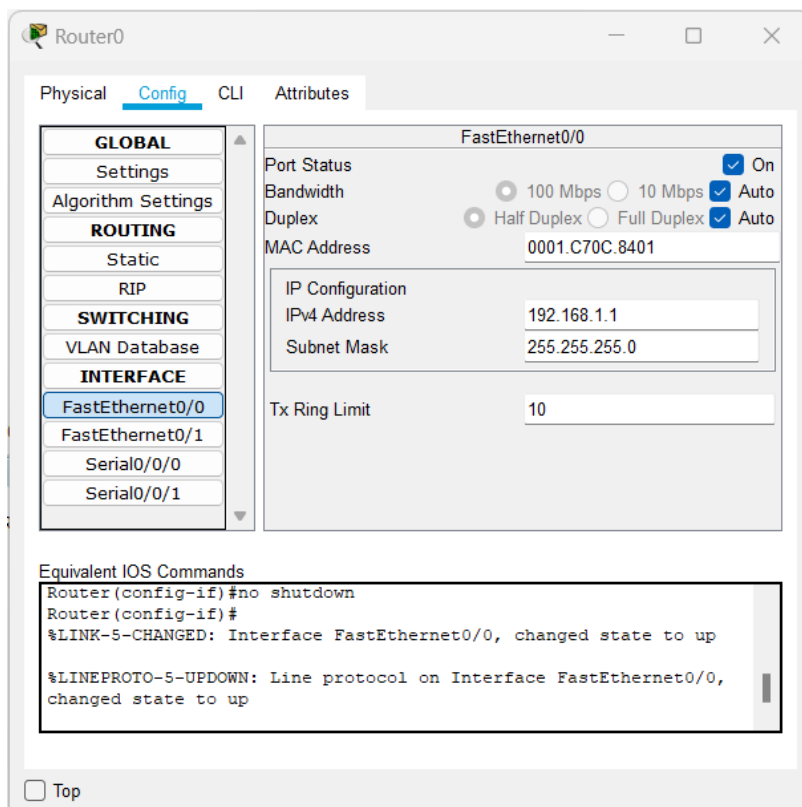
Step 2: Click on PC0 > Desktop > IP Configuration > set IPv4 Address and Default Gateway.



Step 3: Click on PC1 > Desktop > IP Configuration > set IPv4 Address and Default Gateway.



Step 4: Click on Router0 > Config > FastEthernet 0/0 > set IPv4 Address and On the Port Status



Step 5: Click on Router1 > Config > FastEthernet 0/0 > set IPv4 Address and On the Port Status

The screenshot shows the configuration window for Router1, specifically for the FastEthernet0/0 interface. The window has tabs for Physical, Config, CLI, and Attributes. The Config tab is active, showing a sidebar with categories: GLOBAL, ROUTING, SWITCHING, and INTERFACE. Under INTERFACE, FastEthernet0/0 is selected. The main area displays the configuration for FastEthernet0/0, including Port Status (On), Bandwidth (100 Mbps), Duplex (Half Duplex), MAC Address (0001.C741.6E01), IP Configuration (IPv4 Address: 192.168.2.1, Subnet Mask: 255.255.255.0), and Tx Ring Limit (10). Below the configuration fields, there is a section for Equivalent IOS Commands, which lists the commands used to configure the interface.

Router1

Physical **Config** CLI Attributes

**GLOBAL**

Settings

Algorithm Settings

**ROUTING**

Static

RIP

**SWITCHING**

VLAN Database

**INTERFACE**

FastEthernet0/0

FastEthernet0/1

Serial0/0/0

Serial0/0/1

FastEthernet0/0

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☐ Full Duplex ☒ Auto

MAC Address 0001.C741.6E01

IP Configuration

IPv4 Address 192.168.2.1

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0,
changed state to up
```

☐ Top

Step 6: Click on Router0 > Config > Serial 0/0/0 > set IPv4 Address and On the Port Status. Clock Rate = 64000.

The screenshot shows the configuration window for Router0, specifically for the Serial0/0/0 interface. The window has tabs for Physical, Config, CLI, and Attributes. The Config tab is active, showing a sidebar with categories: GLOBAL, ROUTING, SWITCHING, and INTERFACE. Under INTERFACE, Serial0/0/0 is selected. The main area displays the configuration for Serial0/0/0, including Port Status (On), Duplex (Full Duplex), Clock Rate (64000), IP Configuration (IPv4 Address: 10.0.0.1, Subnet Mask: 255.0.0.0), and Tx Ring Limit (10). Below the configuration fields, there is a section for Equivalent IOS Commands, which lists the commands used to configure the interface.

Router0

Physical **Config** CLI Attributes

**GLOBAL**

Settings

Algorithm Settings

**ROUTING**

Static

RIP

**SWITCHING**

VLAN Database

**INTERFACE**

FastEthernet0/0

FastEthernet0/1

Serial0/0/0

Serial0/0/1

Serial0/0/0

Port Status ☒ On

Duplex ☐ Full Duplex

Clock Rate 64000

IP Configuration

IPv4 Address 10.0.0.1

Subnet Mask 255.0.0.0

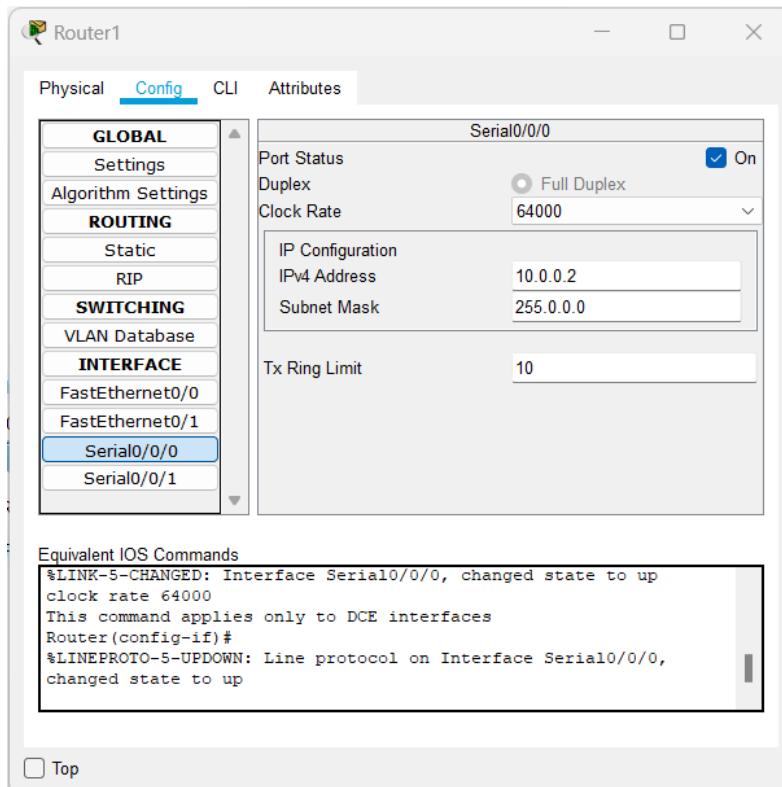
Tx Ring Limit 10

Equivalent IOS Commands

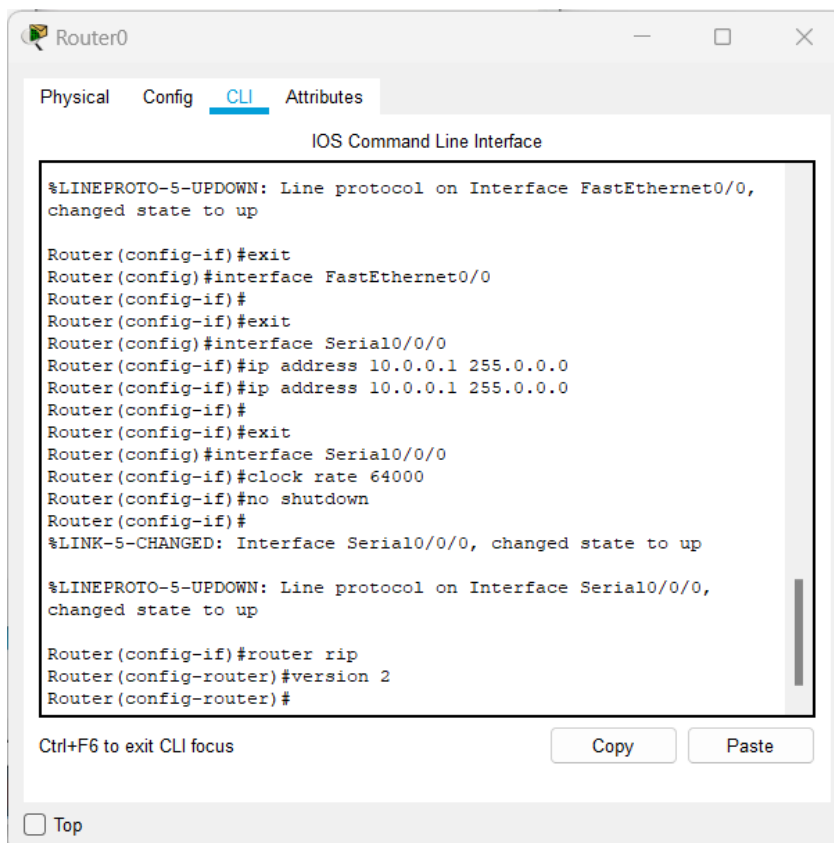
```
Router(config-if)#ip address 10.0.0.1 255.0.0.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial0/0/0
Router(config-if)#clock rate 64000
Router(config-if)#no shutdown
Router(config-if)#
```

☐ Top

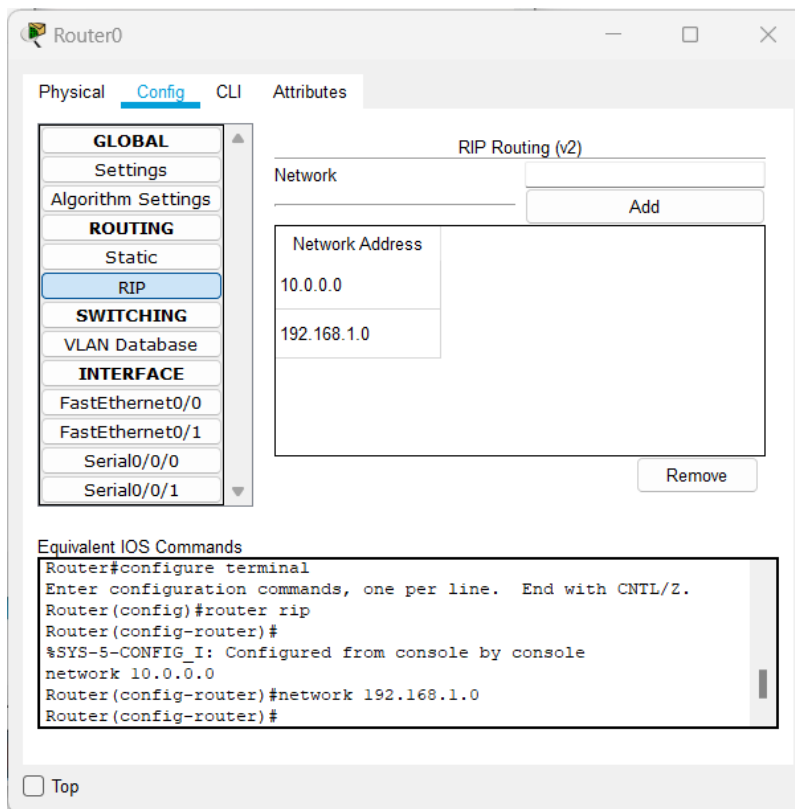
Step 7: Click on Router1 > Config > Serial 0/0/0 > set IPv4 Address and On the Port Status.  
Clock Rate = 64000.



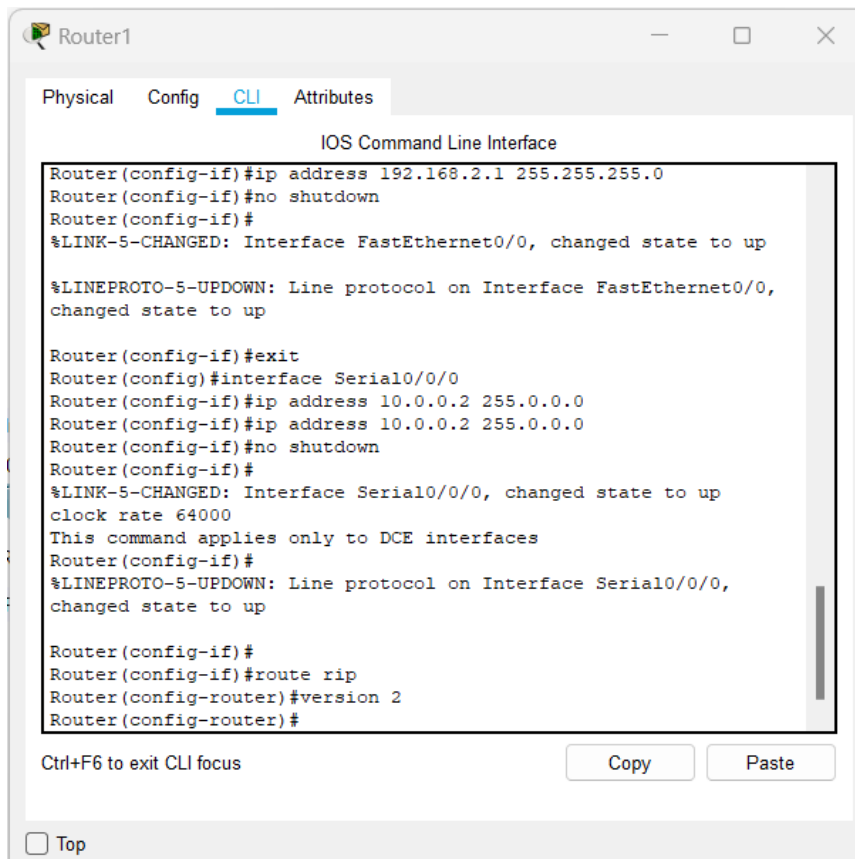
Step 8: Click on Router0 > CLI > router rip and version 2



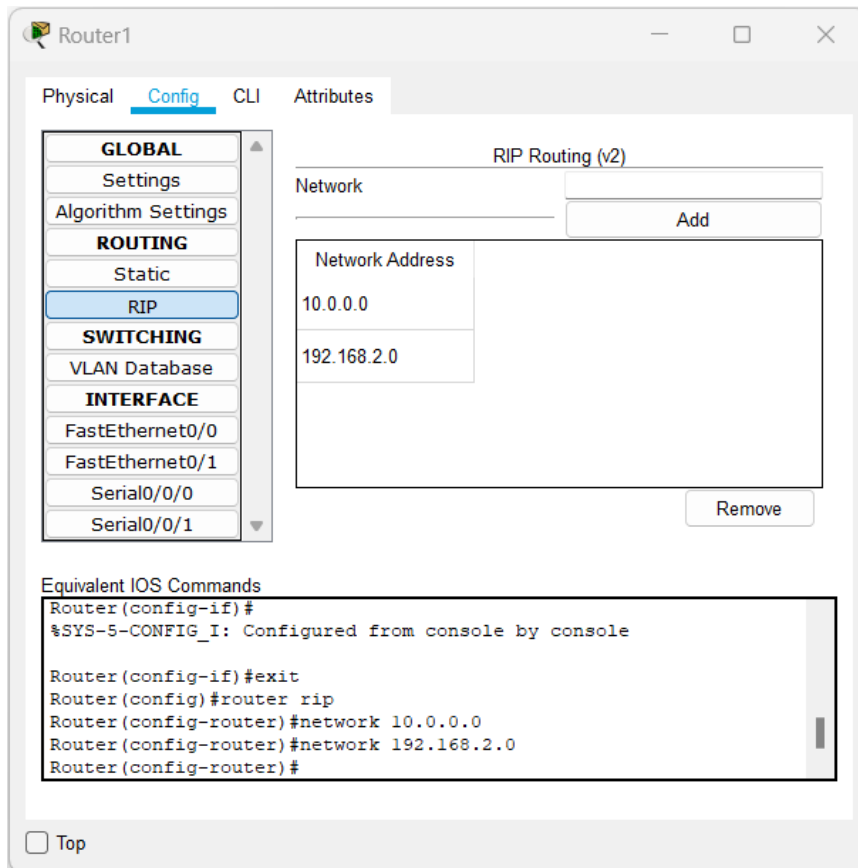
Step 9: Click on Router0 > Config > RIP > Add Network Address.



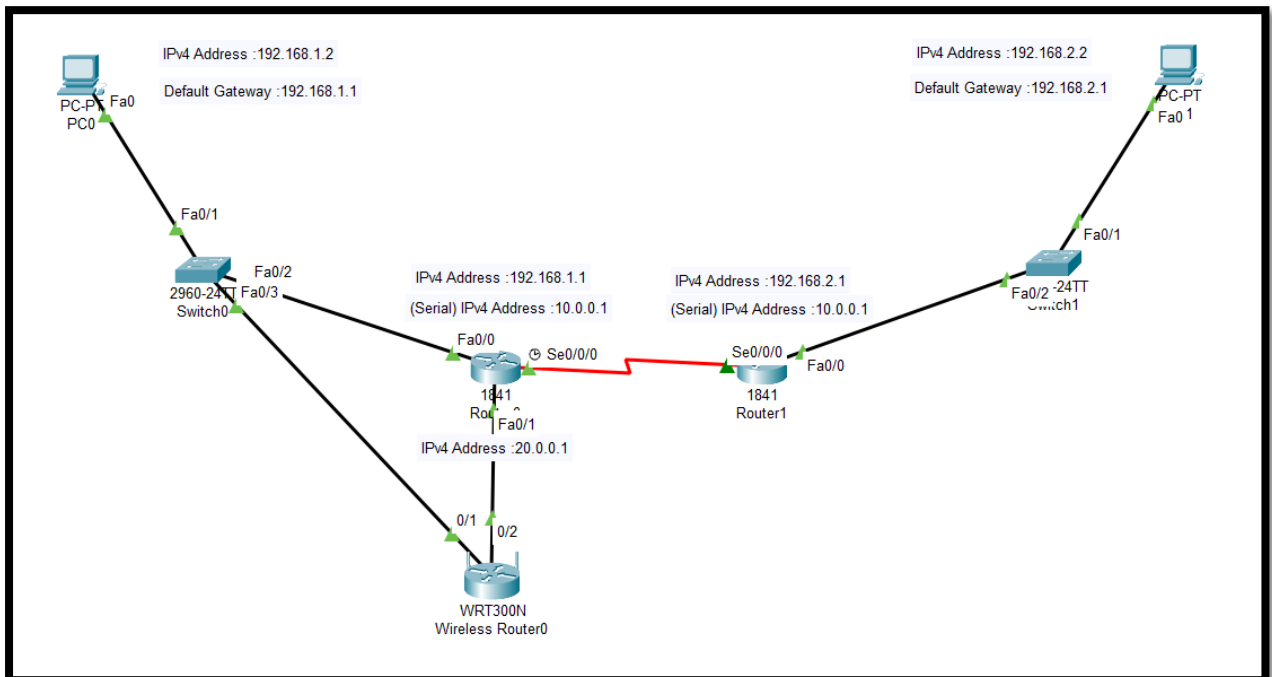
Step 10: Click on Router1 > CLI > router rip and version 2



Step 11: Click on Router1 > Config > RIP > Add Network Address.



Step 12: Make changes in above connection like this.



Step 13: Click on Router0 > Config > FastEthernet 0/1 > set IPv4 Address and On the Port Status

The screenshot shows the configuration window for Router0. The 'Config' tab is selected, and the 'FastEthernet0/1' interface is chosen from the left sidebar. The main configuration area shows the following settings:

- Port Status:** ☒ On
- Bandwidth:** ☒ 100 Mbps ☐ 10 Mbps
- Duplex:** ☐ Half Duplex ☒ Full Duplex
- MAC Address:** 0001.C70C.8402
- IP Configuration:**
  - IPv4 Address: 20.0.0.1
  - Subnet Mask: 255.0.0.0
- Tx Ring Limit:** 10

Below the configuration area, the 'Equivalent IOS Commands' section displays the following commands:

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to up

Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#
```

A 'Top' button is located at the bottom left of the window.

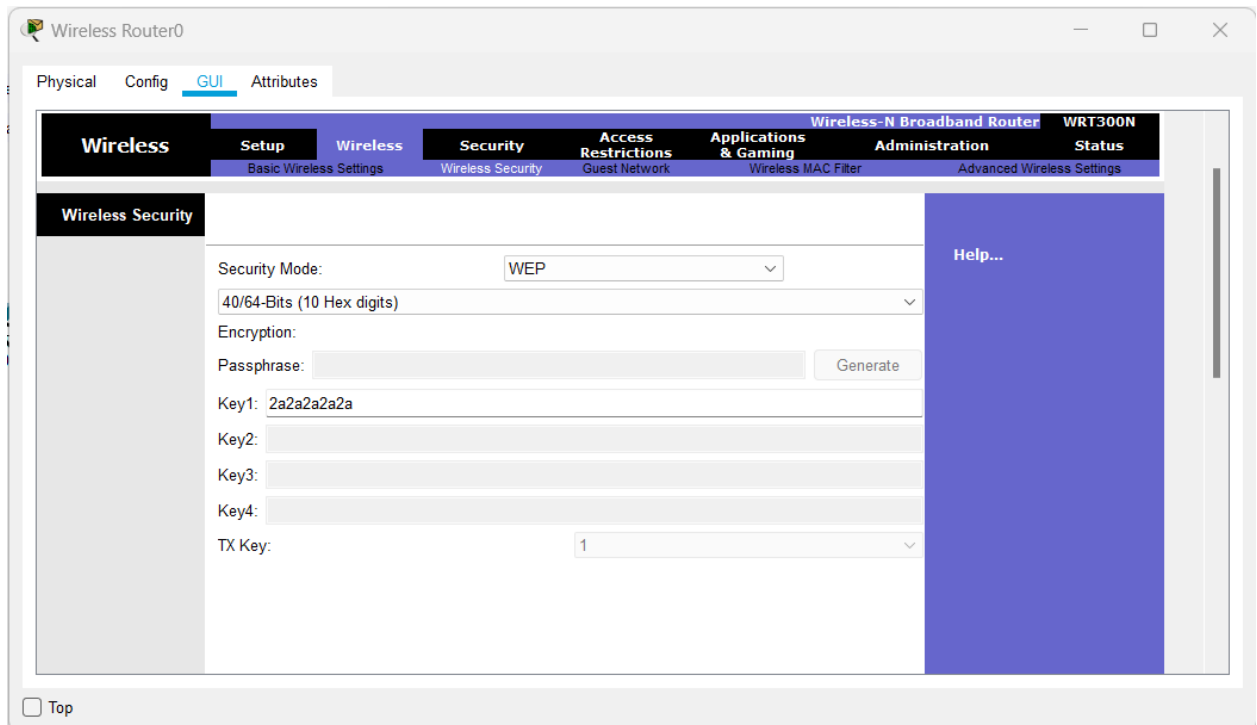
Step 14: Click on the Wireless Router 0 > Setup > Basic Setup > Change IP Address and Save Changes

The screenshot shows the configuration window for Wireless Router0. The 'Setup' tab is selected, and the 'Network Setup' section is active. The following settings are visible:

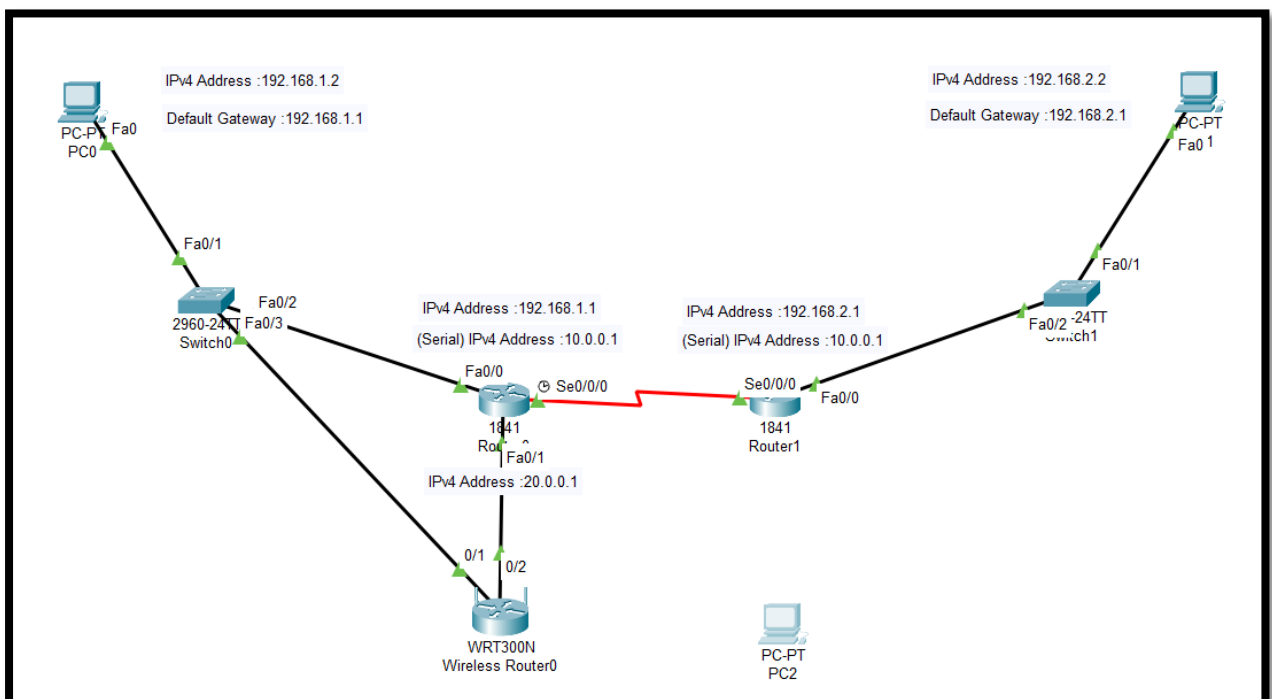
- Domain Name:** (empty field)
- MTU:** 1500
- Router IP:**
  - IP Address: 192.168.1.1
  - Subnet Mask: 255.255.255.0
- DHCP Server:** ☒ Enabled ☐ Disabled
- DHCP Reservation:** (button)
- Start IP Address:** 192.168.0.100
- Maximum number of Users:** 50
- IP Address Range:** 192.168.0.100 - 149
- Client Lease Time:** 0 minutes (0 means one day)
- Static DNS 1:** 0.0.0.0
- Static DNS 2:** 0.0.0.0
- Static DNS 3:** 0.0.0.0
- WINS:** 0.0.0.0

A 'Top' button is located at the bottom left of the window.

Step 15: Click on the Wireless Router 0 > Wireless > Wireless Security > Security Mode = WEP and Key1 = 2a2a2a2a2a

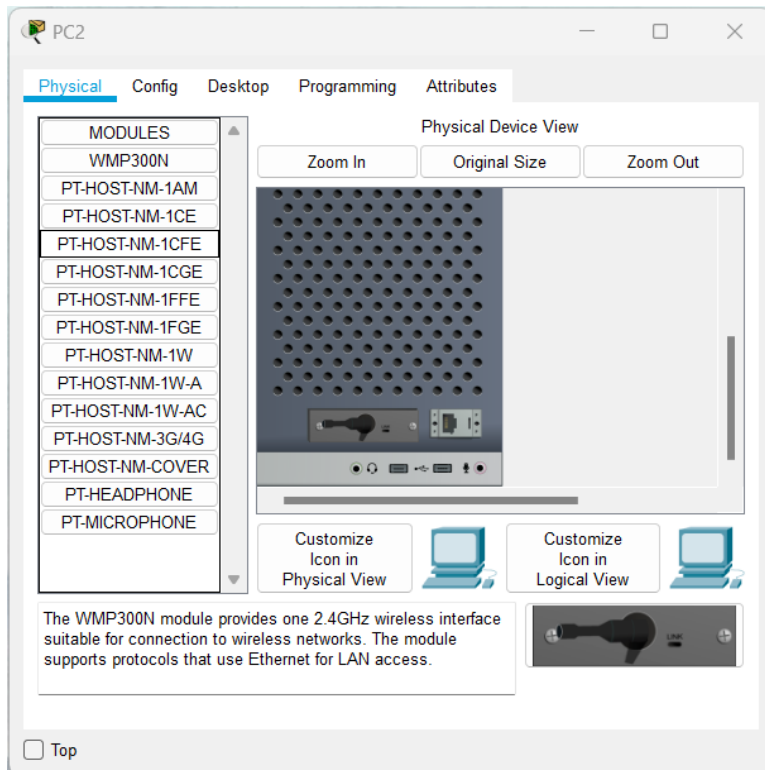


Step 16: Add 1 PC to connection

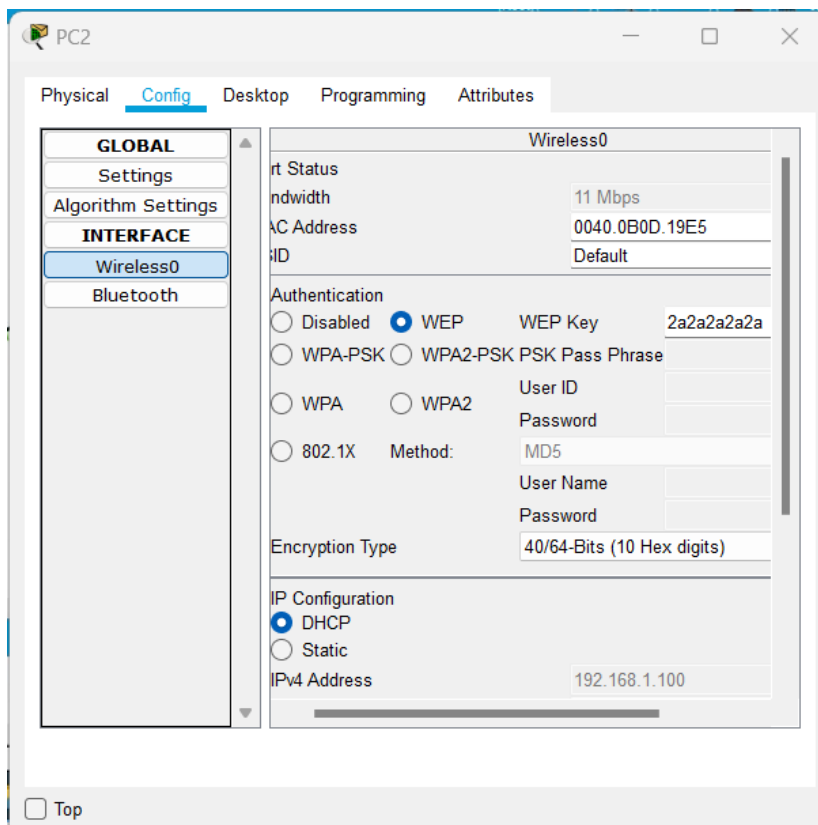




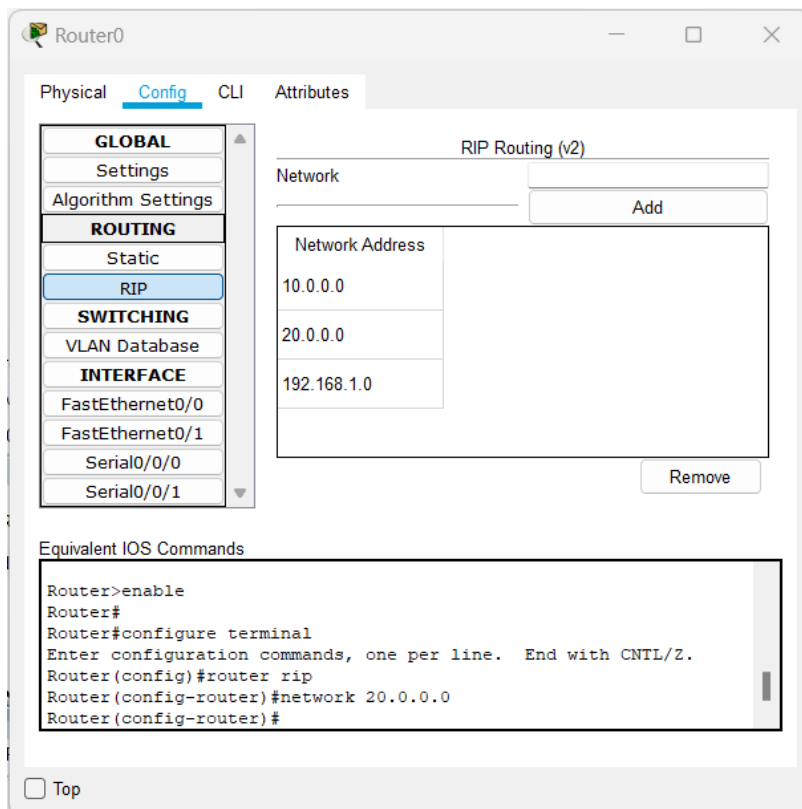
Step 17: Click on PC0 > Physical > Turn OFF the PC > remove previous component and replace with WMP300N.



Step 17: Click on PC0 > Config > Wireless0 > In Authentication Click on WEP and WEP Key = 2a2a2a2a2a



Step 18: Click on Router0 > Config > RIP > Add New Network Address.



Output:

