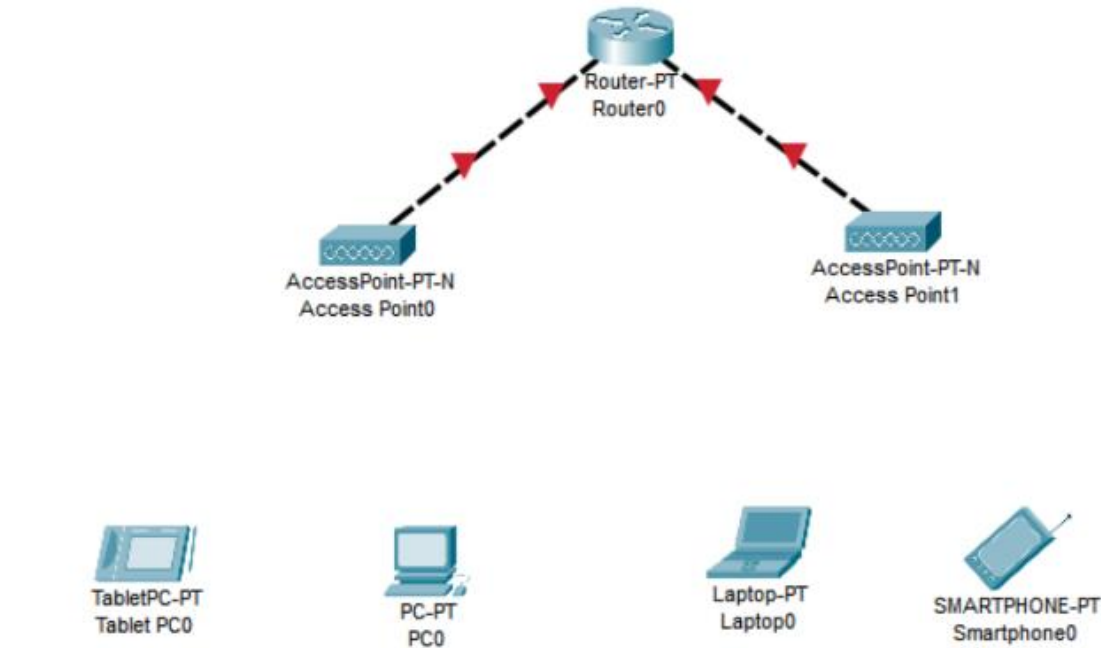
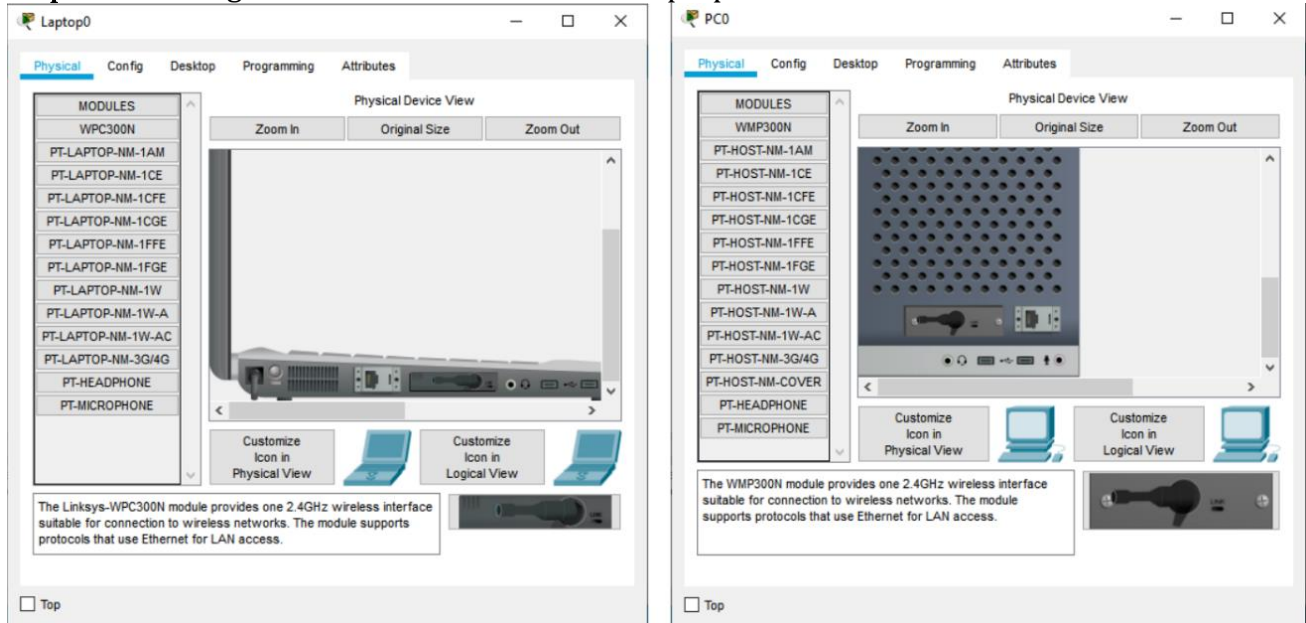


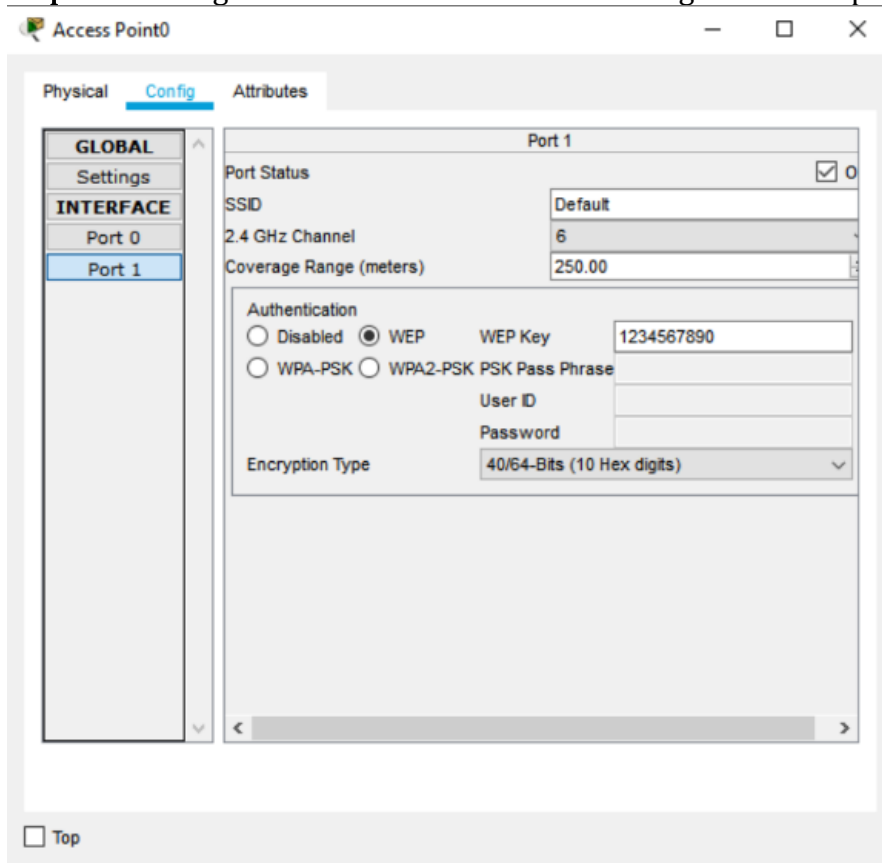
## PRACTICAL NO:05

**Step1:** Putting together all the end devices, Router and Access points.



**Step 2:** Switching on the wireless interface on Laptop and PC.

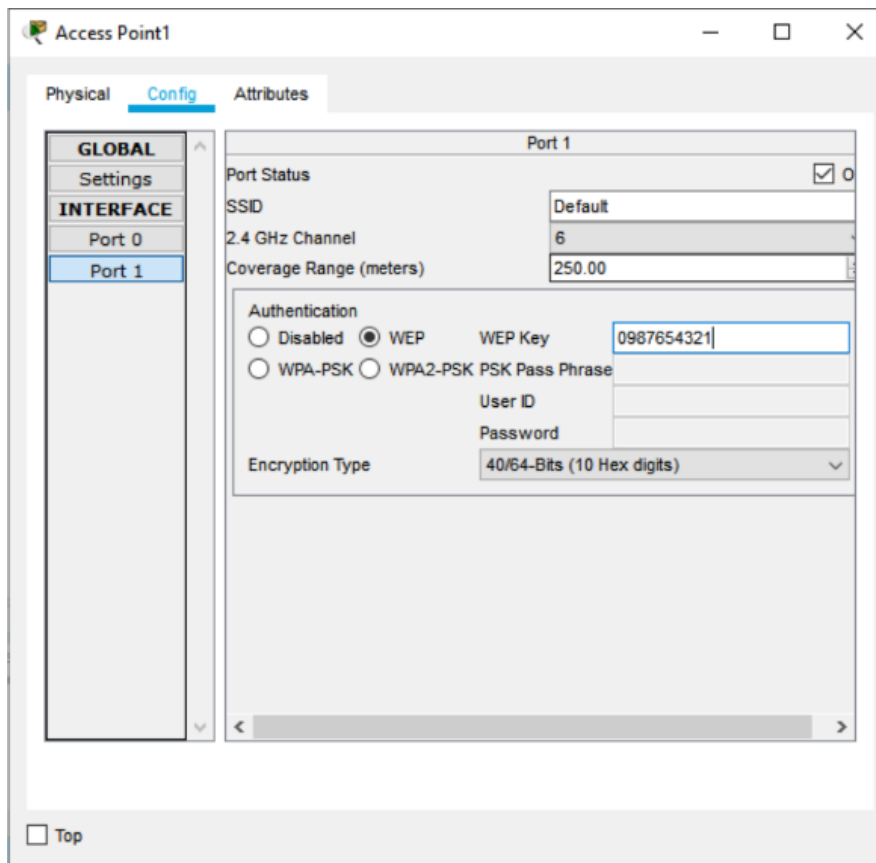


**Step 3: Enabling WEP Authentication and securing the Access points.**

The screenshot shows the configuration window for Access Point0. The 'Config' tab is selected. On the left, under 'INTERFACE', 'Port 1' is highlighted. The main configuration area for Port 1 shows the following settings:

- Port Status: ☒ On
- SSID: Default
- 2.4 GHz Channel: 6
- Coverage Range (meters): 250.00
- Authentication: ☒ WEP (Selected), ☐ Disabled, ☐ WPA-PSK, ☐ WPA2-PSK
- WEP Key: 1234567890
- User ID: (empty)
- Password: (empty)
- Encryption Type: 40/64-Bits (10 Hex digits)

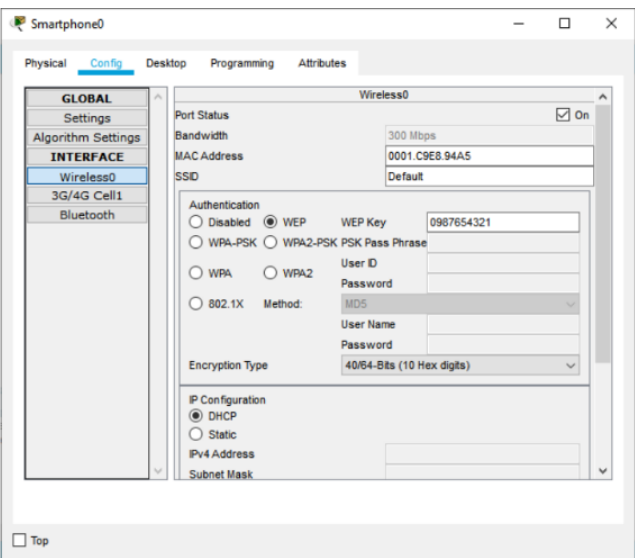
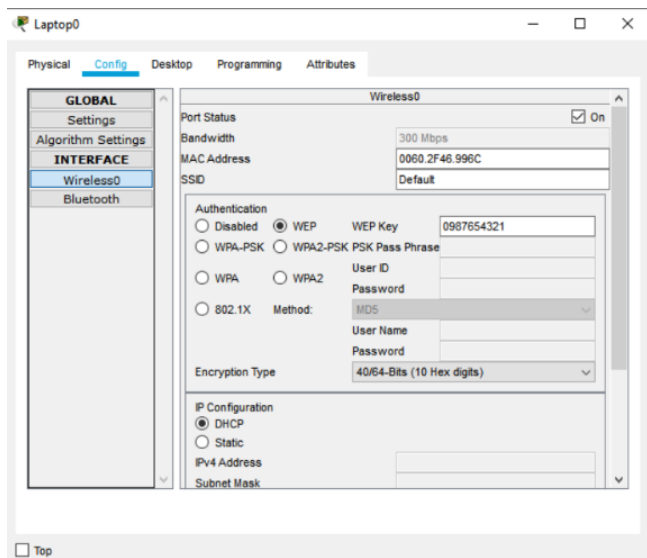
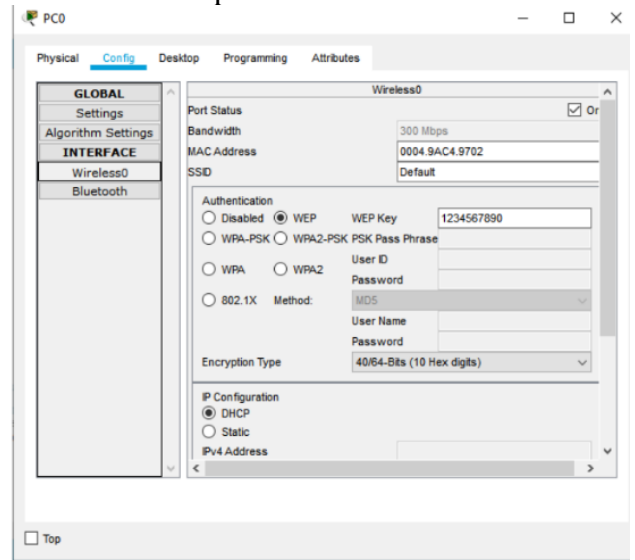
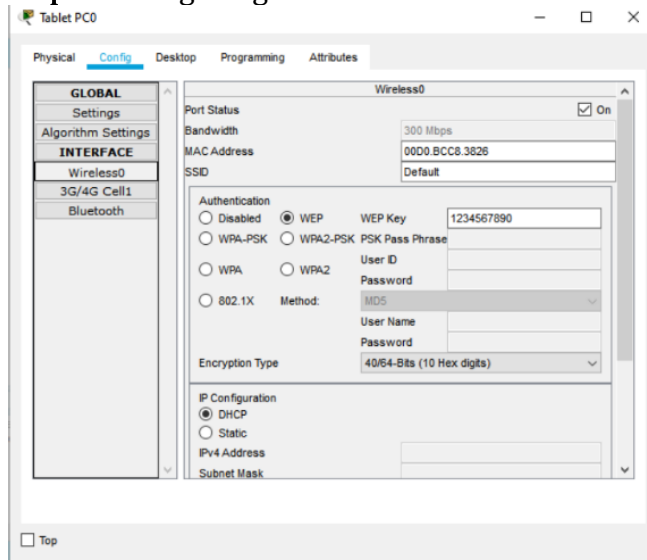
At the bottom left, there is a 'Top' button.



The screenshot shows the configuration window for Access Point1. The 'Config' tab is selected. On the left, under 'INTERFACE', 'Port 1' is highlighted. The main configuration area for Port 1 shows the following settings:

- Port Status: ☒ On
- SSID: Default
- 2.4 GHz Channel: 6
- Coverage Range (meters): 250.00
- Authentication: ☒ WEP (Selected), ☐ Disabled, ☐ WPA-PSK, ☐ WPA2-PSK
- WEP Key: 0987654321
- User ID: (empty)
- Password: (empty)
- Encryption Type: 40/64-Bits (10 Hex digits)

At the bottom left, there is a 'Top' button.

**Step 4: Configuring End Devices to connect to the Secure Access points.**

**Step 5: Configuring IP addresses on Router and switching it on.**

Router0

Physical **Config** CLI Attributes

**GLOBAL**

- Settings
- Algorithm Settings
- ROUTING**
- Static
- RIP
- INTERFACE**
- FastEthernet0/0
- FastEthernet1/0
- Serial2/0
- Serial3/0
- FastEthernet4/0
- FastEthernet5/0

**FastEthernet0/0**

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☒ Half Duplex ☐ Full Duplex ☒ Auto

MAC Address 0009.7C58.4098

IP Configuration

IPv4 Address 192.168.1.10

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0,
changed state to up

Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
```

☐ Top

Router0

Physical **Config** CLI Attributes

**GLOBAL**

- Settings
- Algorithm Settings
- ROUTING**
- Static
- RIP
- INTERFACE**
- FastEthernet0/0
- FastEthernet1/0
- Serial2/0
- Serial3/0
- FastEthernet4/0
- FastEthernet5/0

**FastEthernet1/0**

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☒ Half Duplex ☐ Full Duplex ☒ Auto

MAC Address 0007.ECA4.9970

IP Configuration

IPv4 Address 192.168.2.10

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
changed state to up

Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#
```

☐ Top

**Step 6: Configuring IP addresses on End Devices connected to Access Points.**

Tablet PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface Wireless0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.1

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.10

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::2D0:BCFF:FE08:3826

Default Gateway

DNS Server

☐ Top

PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface Wireless0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.10

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::204:9AFF:FE04:9702

Default Gateway

DNS Server

☐ Top

Laptop0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface Wireless0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.2.1

Subnet Mask 255.255.255.0

Default Gateway 192.168.2.10

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::260:2FFF:FE46:996C

Default Gateway

DNS Server

☐ Top

Smartphone0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface Wireless0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.2.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.2.10

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

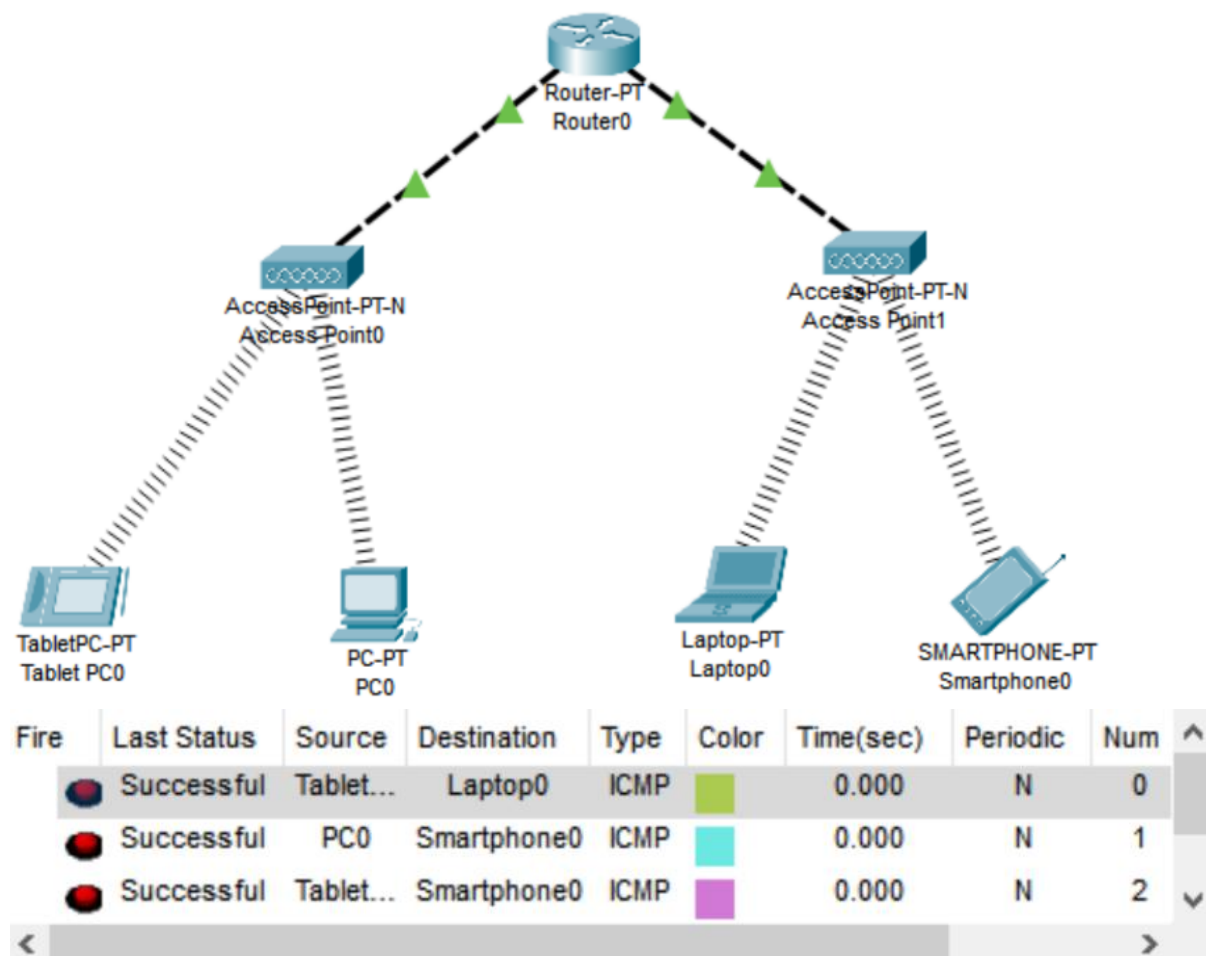
Link Local Address FE80::201:C9FF:FE08:94A5

Default Gateway

DNS Server

☐ Top

**Step 7:** Checking if all the end devices across the wireless network can communicate with each other.



All the end devices in the network can wirelessly communicate with each other.