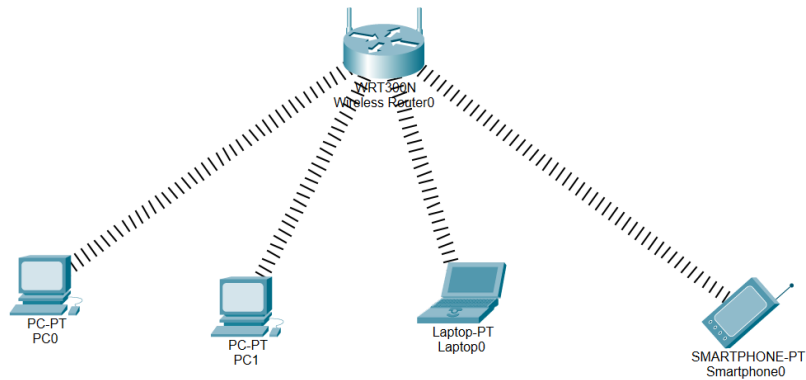


## **WSN Practical 7**

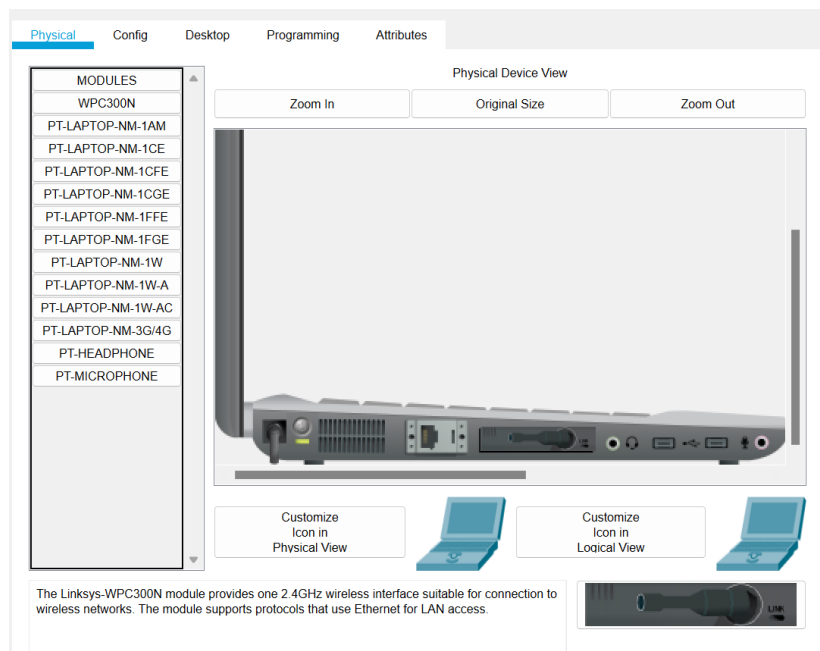
**Aim:** Create MAC protocol simulation implementation for wireless sensor Network.

**Steps:-**

1.Create the following network



2.Click on Every laptop and change the interface to WPC300n module.



3.Copy the MAC address of each component as follows.

Physical **Config** Desktop Programming Attributes

**GLOBAL**

Settings

Algorithm Settings

**INTERFACE**

Wireless0

Bluetooth

Wireless0

Port Status ☒ On

Bandwidth 300 Mbps

MAC Address 000C:CF8D:E7E0

SSID Default

Authentication

☒ Disabled ☐ WEP WEP Key

☐ WPA-PSK ☐ WPA2-PSK PSK Pass Phrase

☐ WPA ☐ WPA2 User ID

☐ 802.1X Method: MD5 Password

User Name

Password

Encryption Type Disabled

IP Configuration

☒ DHCP ☐ Static

IP Address 192.168.0.102

Subnet Mask 255.255.255.0

IPv6 Configuration

☒ DHCP

Physical **Config** Desktop Programming Attributes

**GLOBAL**

Settings

Algorithm Settings

**INTERFACE**

Wireless0

Bluetooth

Wireless0

Port Status ☒ On

Bandwidth 300 Mbps

MAC Address 0001:C567:9504

SSID Default

Authentication

☒ Disabled ☐ WEP WEP Key

☐ WPA-PSK ☐ WPA2-PSK PSK Pass Phrase

☐ WPA ☐ WPA2 User ID

☐ 802.1X Method: MD5 Password

User Name

Password

Encryption Type Disabled

IP Configuration

☒ DHCP ☐ Static

IP Address 192.168.0.104

Subnet Mask 255.255.255.0

IPv6 Configuration

☒ DHCP

Physical **Config** Desktop Programming Attributes

**GLOBAL**

Settings

Algorithm Settings

**INTERFACE**

Wireless0

Bluetooth

Wireless0

Port Status ☒ On

Bandwidth 300 Mbps

MAC Address 000D:8D14:DDCC

SSID Default

Authentication

☒ Disabled ☐ WEP WEP Key

☐ WPA-PSK ☐ WPA2-PSK PSK Pass Phrase

☐ WPA ☐ WPA2 User ID

☐ 802.1X Method: MD5 Password

User Name

Password

Encryption Type Disabled

IP Configuration

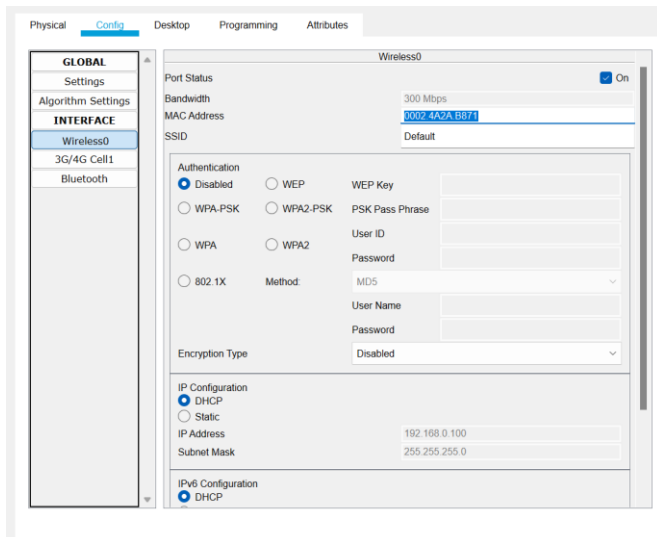
☒ DHCP ☐ Static

IP Address 192.168.0.103

Subnet Mask 255.255.255.0

IPv6 Configuration

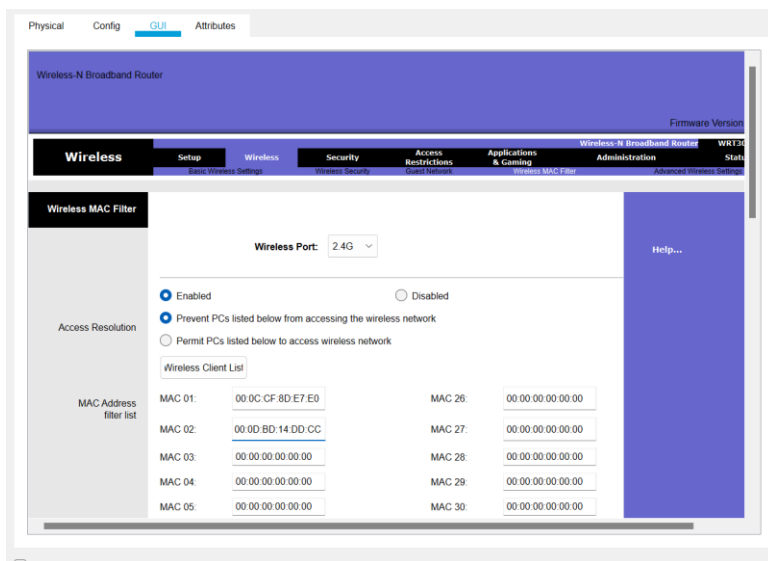
☒ DHCP



4. We note the following MAC address and convert them to the following form

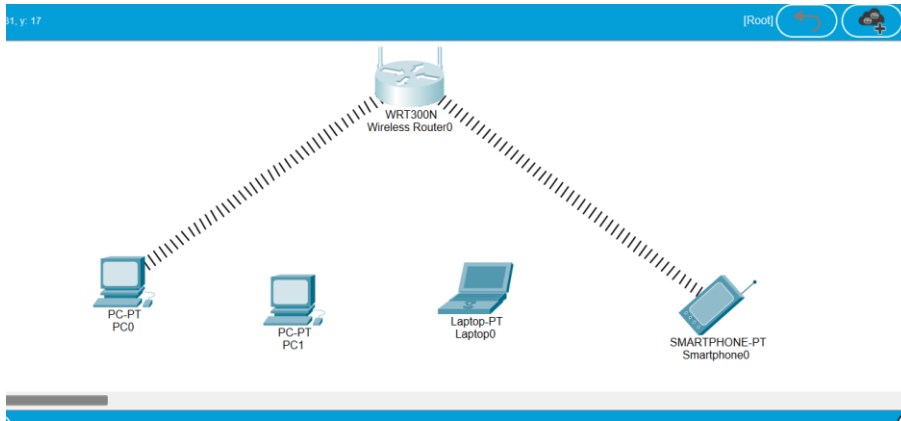
Component	MAC Address	Converted MAC Address
Laptop0	000C.CF8D.E7E0	00:0C:CF:8D:E7:E0
PC0	0001.C967.9504	00:01:C9:67:95:04
PC1	000D.BD14.DDCC	00:0D:BD:14:DD:CC
SmartPhone0	0002.4A2A.B871	00:02:4A:2A:B8:71

5. Now we add few address in the wireless MAC filter of the Wireless Router and then use the given options for either allow or deny the wireless access.

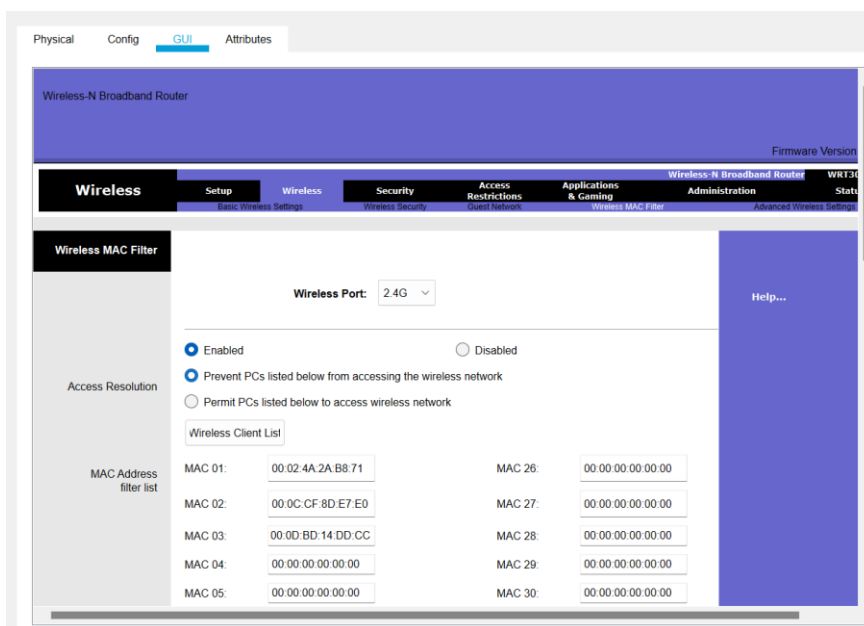


6. As seen in above screenshot we add the MAC address of Laptop0, TabletPC, SmartPhone0 in the list so as to deny them accessing the Wireless network and then save the settings.

The result so obtained is as shown, the three devices denied any wireless connectivity.



7. Similarly we can change the settings so that the above devices get wireless connectivity and the remaining devices do not get the wireless connectivity.



8. And save the setting and get the following.

