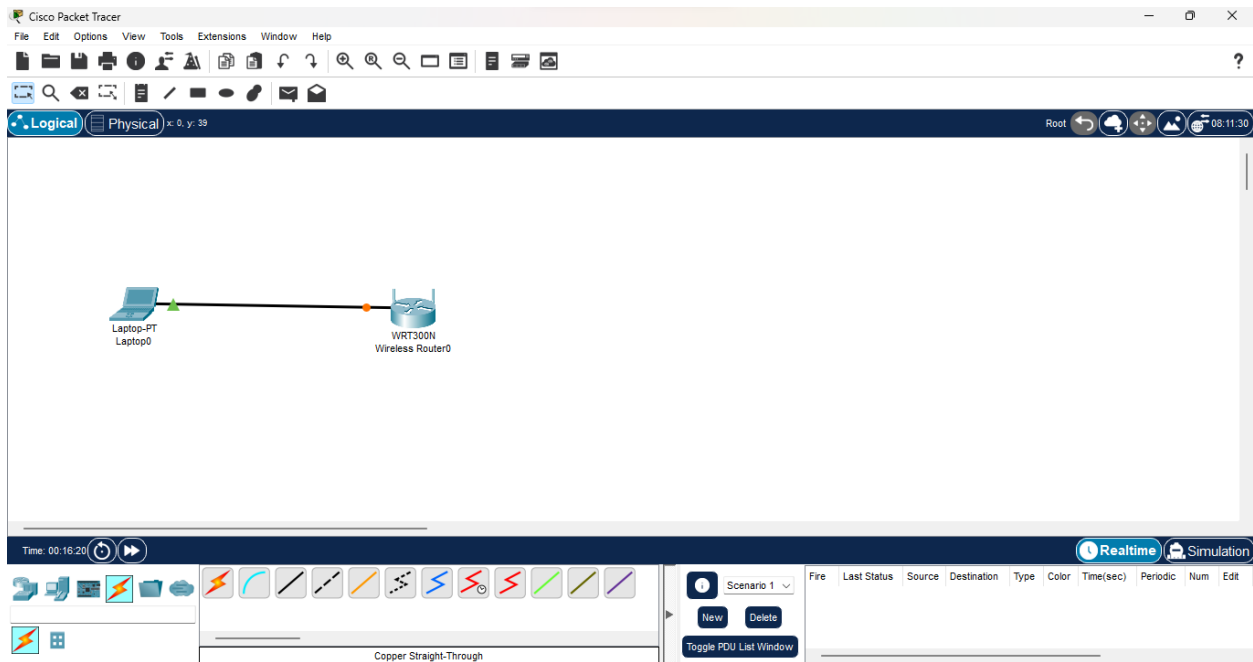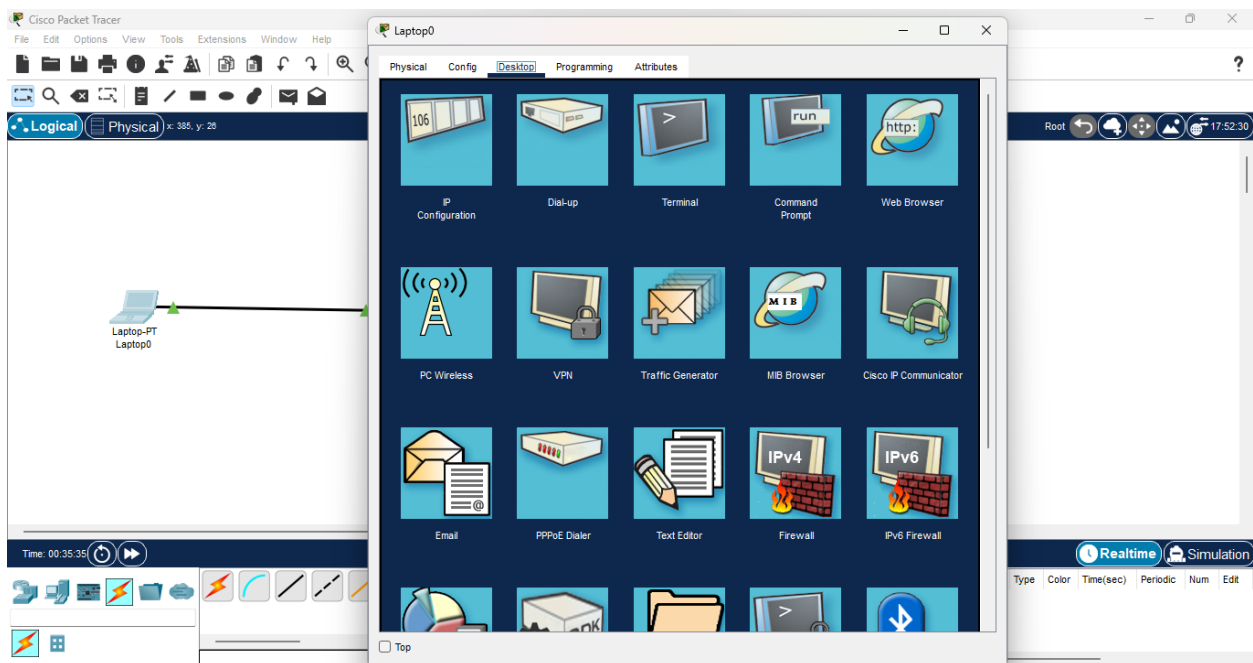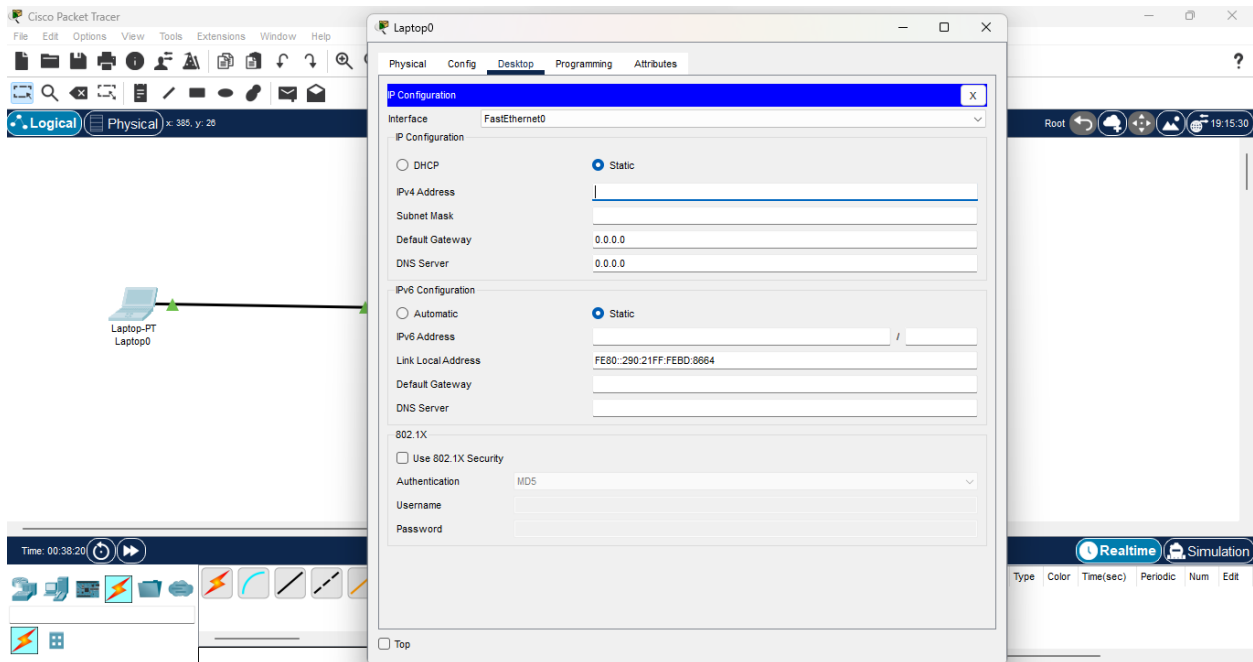1. First, I did drag and drop WRT300N(Router) and Laptop-PT and then made a connection between the two devices, with a cable. After that I clicked on router and chose Ethernet1 and on laptop side I chose fastEthernet.
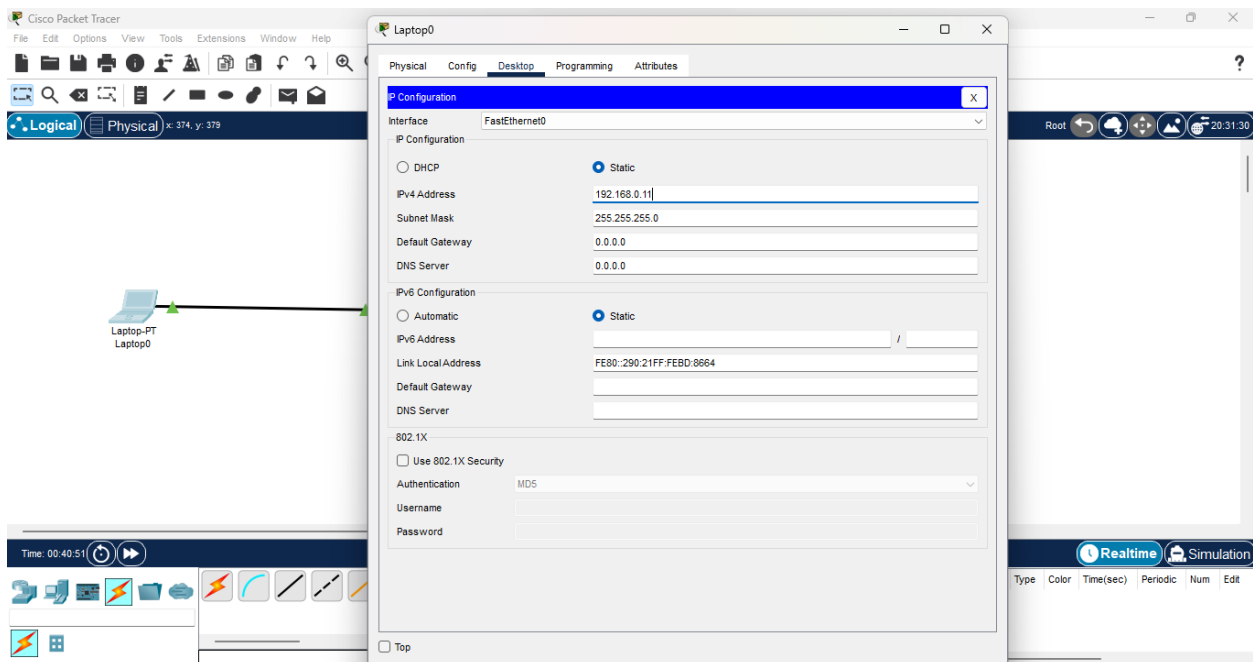

2. After clicking on laptop and in desktop option, I selected IP configuration.

3. After selecting the IP Configuration, the screen that is below would be displayed.
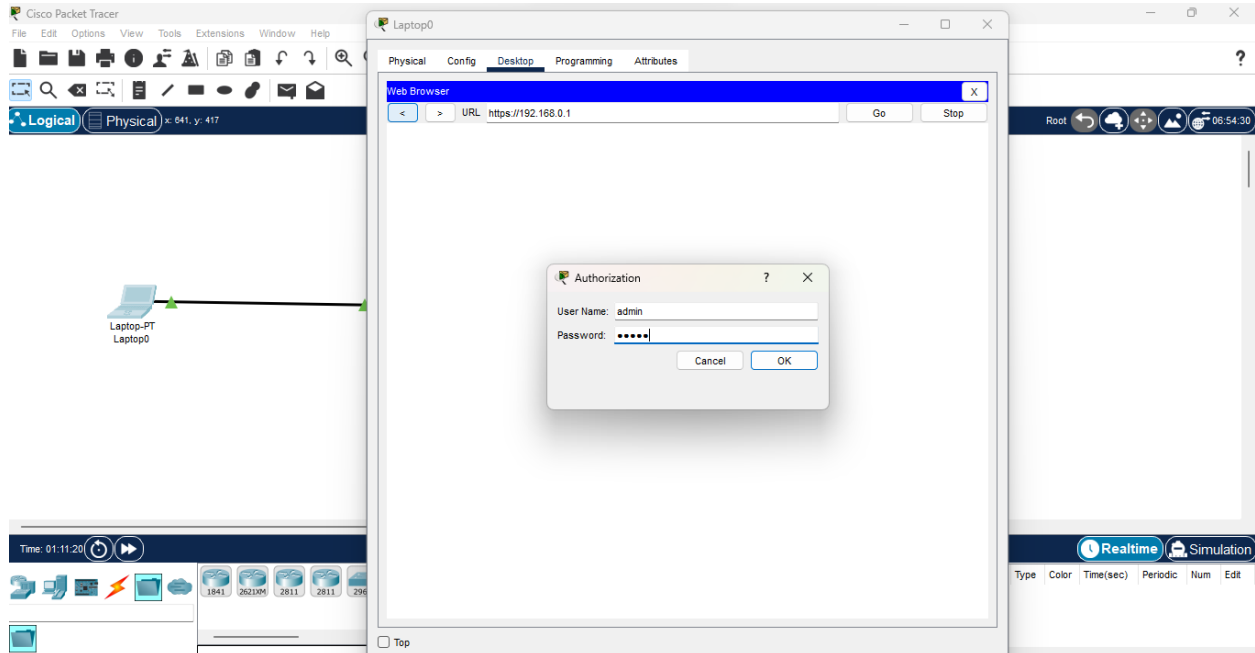

4. Here, I made the modifications like, entered the IPv4 Address and Subnet Mask.
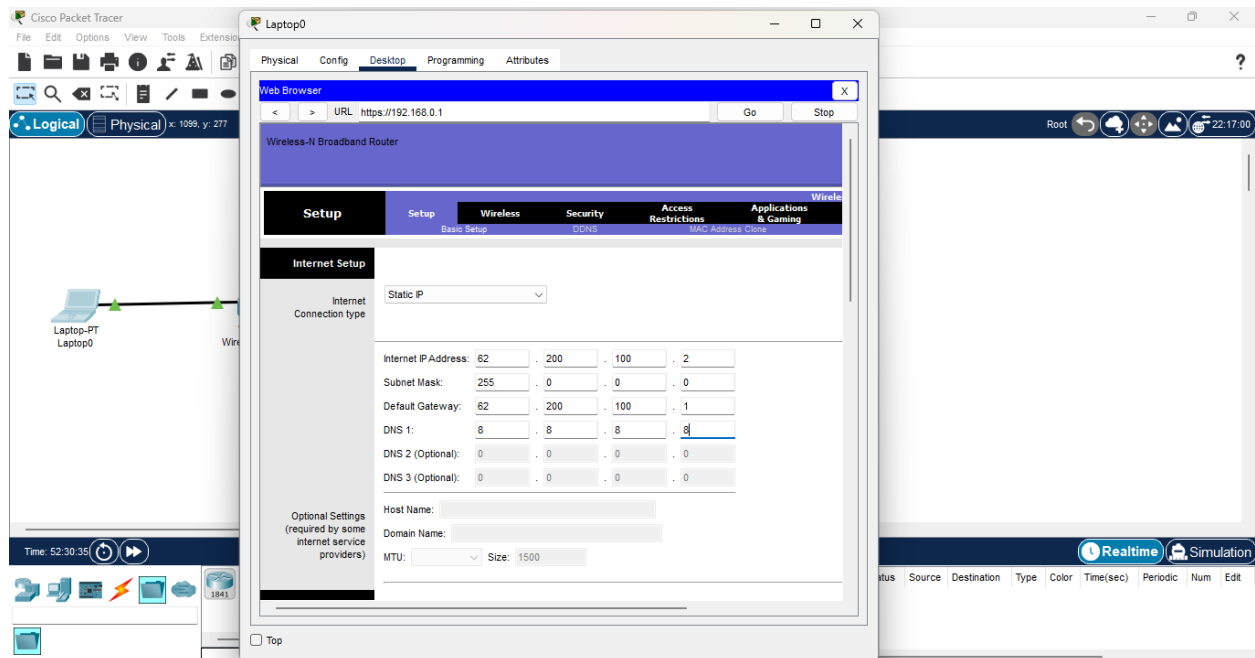
5. Again, from the desktop option, I selected the web browser and gave this URL https://192.168.0.1 and In the prompt I was asked to enter a Username and Password, which are default values:
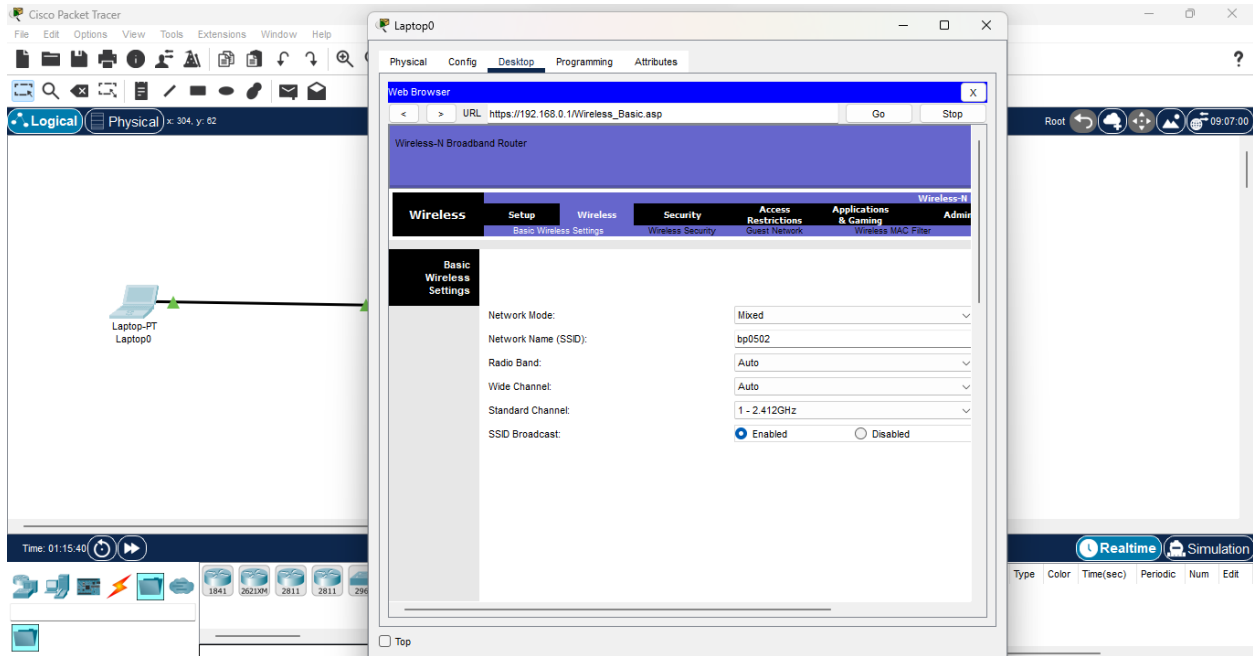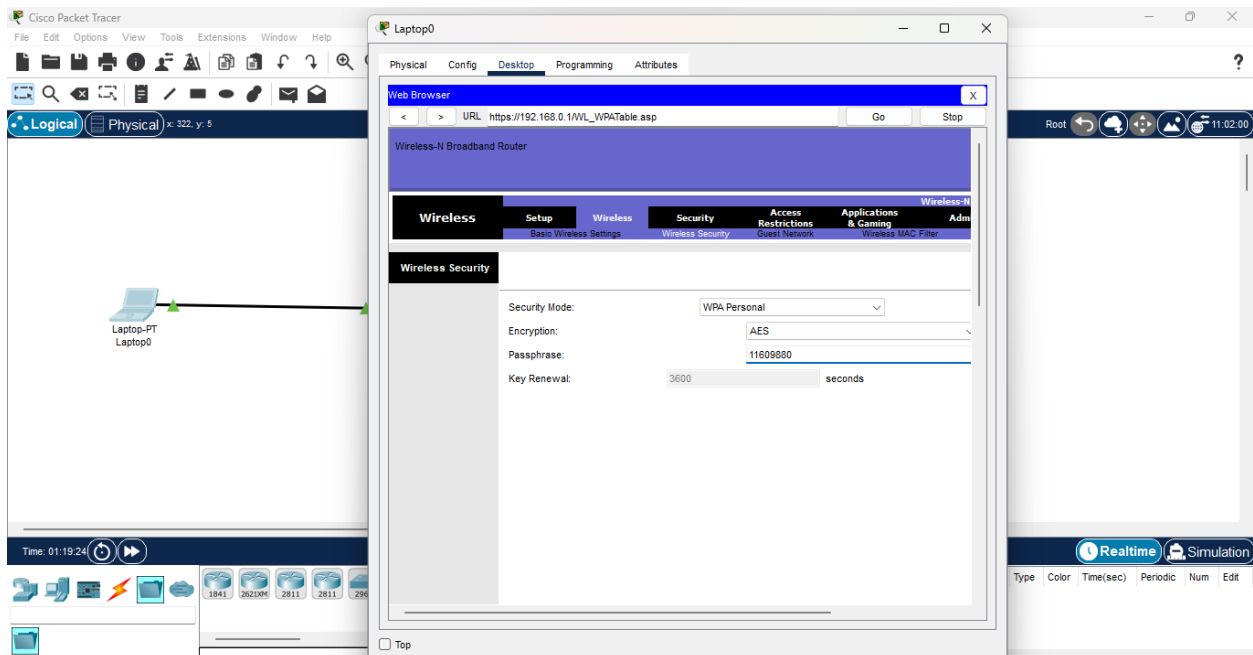Username: admin
Password: admin

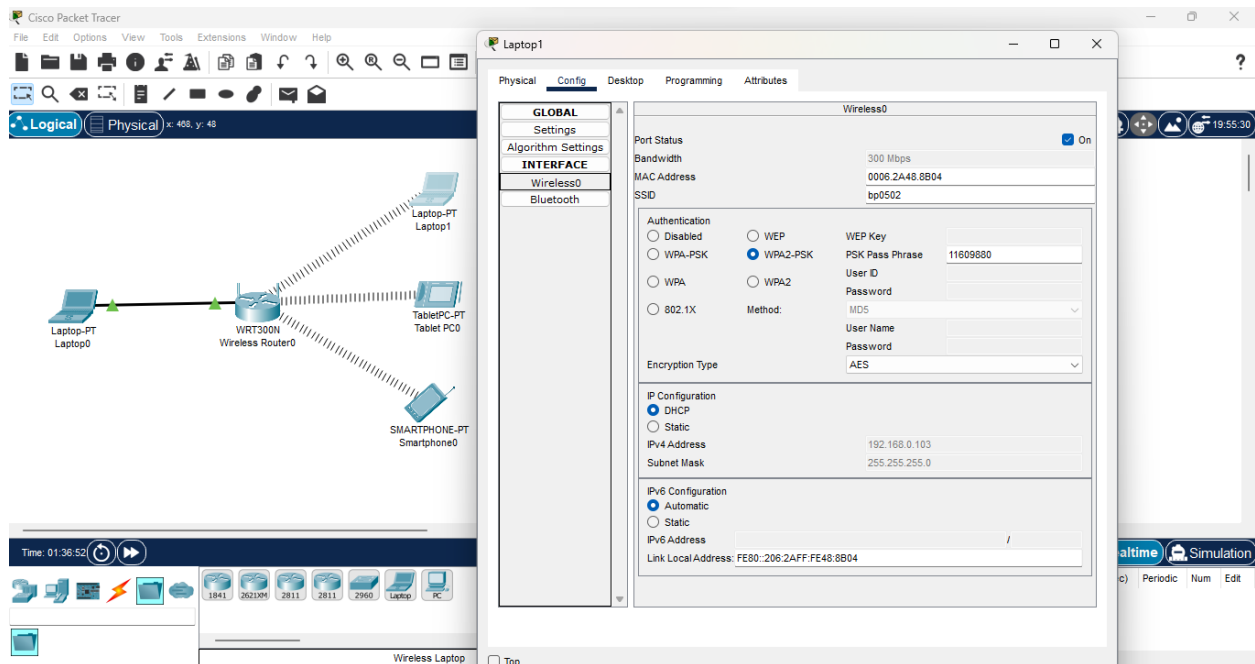6. In the setup, we gave the details that are in the below screenshot.

7. Now, I set the SSID and Password in wireless settings. Gave the network name (SSID) as my euid and then saved the changes.

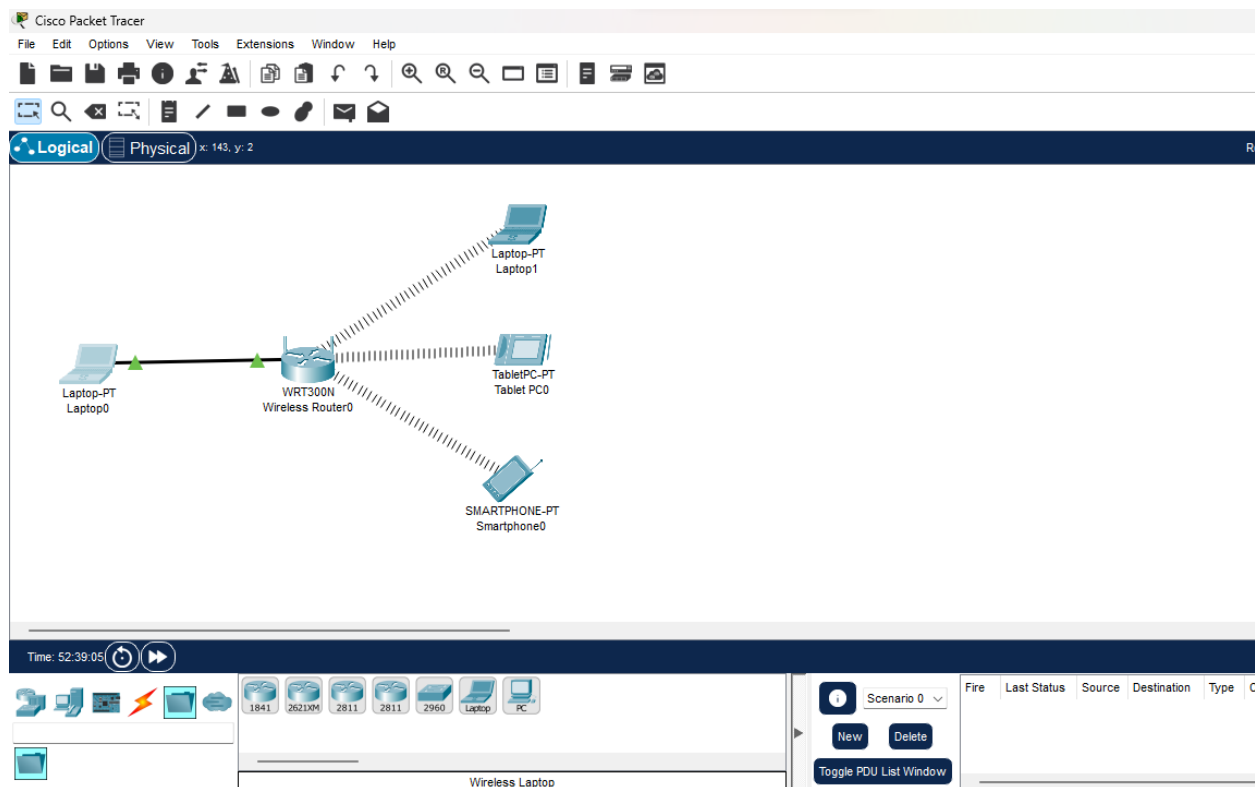8. I clicked on wireless security tab and selected security mode as WPA2 personal and gave the passphrase as my Student ID(11609880).

9. Added three devices i.e., laptop, tab and smart mobile. After clicking on the added laptop, tab, mobile and configured them so that each of them gets connected with the router. Here, I also entered my SSID and passphrase that I created in the above steps.

10. Below are the outputs.

Device Name: Laptop1
Custom Device Model: Wireless Laptop

Port	Link	IP Address	IPv6 Address	MAC Address
Wireless0	Up	192.168.0.103/24	<not set>	0006.2A48.8B04
Bluetooth	Down	<not set>	<not set>	00D0.BA4D.2C20

Gateway: 192.168.0.1
DNS Server: <not set>
Line Number: <not set>

Wireless Best Data Rate: 300 Mbps
Wireless Signal Strength: 64%

Physical Location: Intercity > Home City > Corporate Office > Laptop5

Device Name: Tablet PC0
Device Model: TabletPC-PT

Port	Link	IP Address	IPv6 Address	MAC Address
Wireless0	Up	192.168.0.100/24	<not set>	000D.BD8B.5B29
3G/4G Cell1	Up	<not set>	<not set>	0090.21B0.B86B
Bluetooth	Down	<not set>	<not set>	00E0.B086.B5D7

Gateway: 192.168.0.1
DNS Server: <not set>
Line Number: <not set>

Wireless Best Data Rate: 300 Mbps
Wireless Signal Strength: 88%

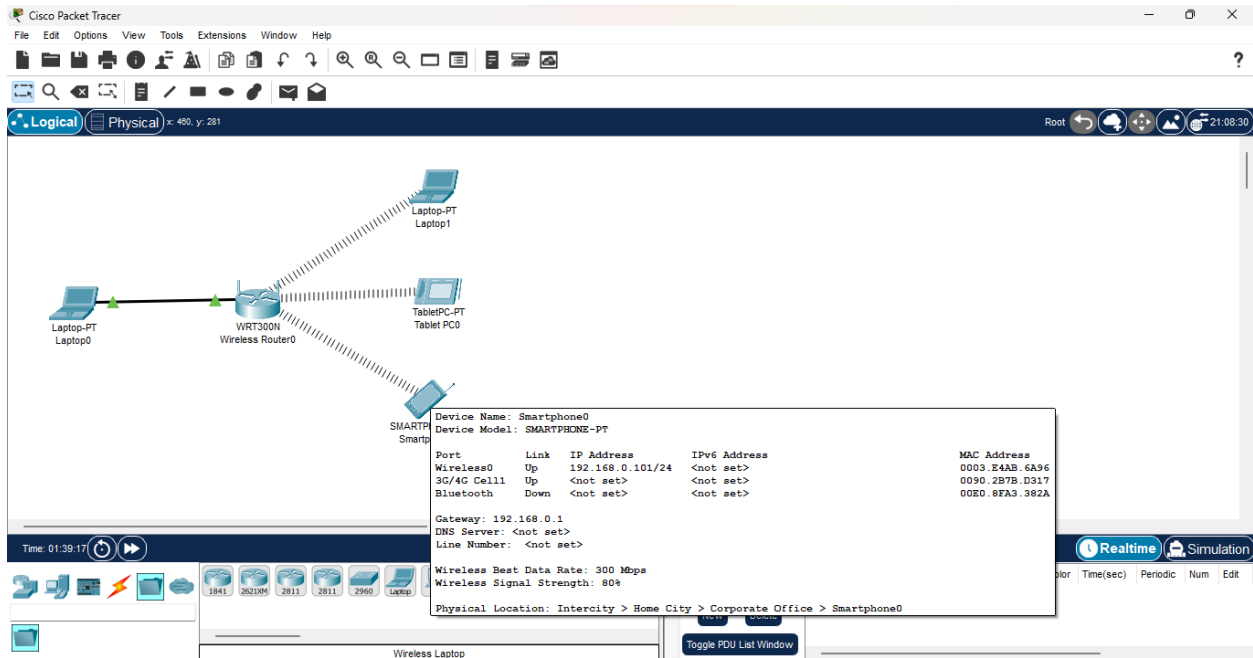Physical Location: Intercity > Home City > Corporate Office > Tablet PC0

11. The IP addresses of a laptop, tablet (tab), and smartphone in the above screenshots are as follows:

- Laptop: 192.168.0.103/24

- Tablet: 192.168.0.100/24

- Smartphone: 192.168.0.101/24

All three devices have IP addresses that belong to the same IP address range, which is 192.168.0.0/24. This uniformity in IP addressing across the laptop, tablet, and mobile devices indicates that they are interconnected within a common local network. This configuration aligns with typical setups in home and small office networks, facilitating seamless coexistence of multiple devices, shared network resource utilization, and internet connectivity through a single gateway.