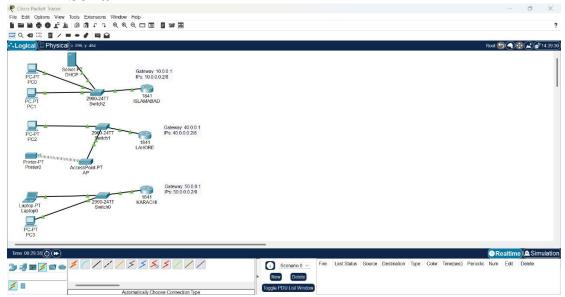
## **WAN Configuration**

#### **WAN with 3 LANs:**

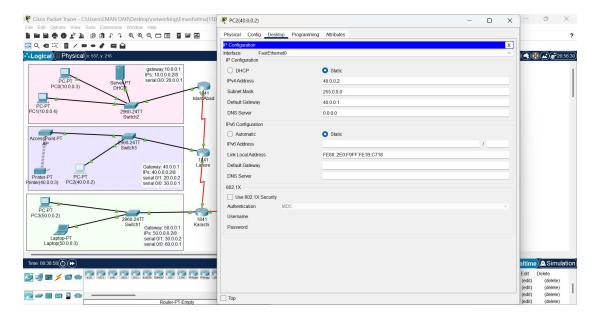
**Step 01:** Open a Cisco packet tracer, choose a new file and save it with the name **WAN-1**.

**Step 02:** Take 3 **1841-Routers**, 3 **Switches**, 4 PCs, a **Laptop** ,a **Printer**, a **Web server** and a **PT-Access point**. As;

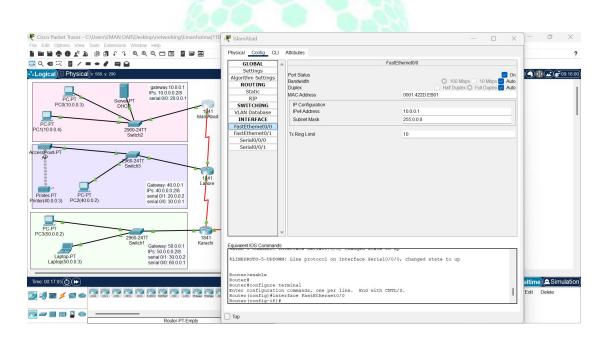
- ♦ Connect all devices with switches with an Automatic wire.
- ♦ Use copper straight through to connect all network switches with Routers.
- ♦ Use **Serial DTE** to connect all network Routers with each other.



♦ Assign IP addresses (IPv4) to all devices, as;

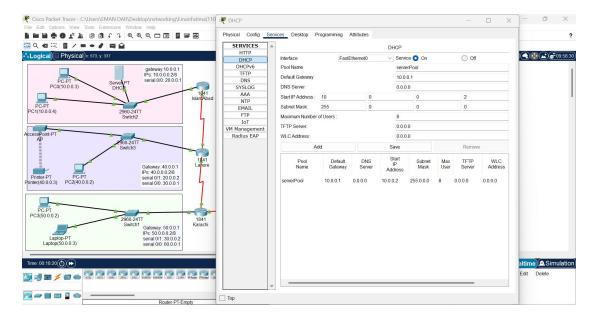


♦ Configure the Routers connected to each LAN as;



**Step 03:** Assign IP addresses to each device as mentioned in the above picture. Also assign gateway to each device according to its network.

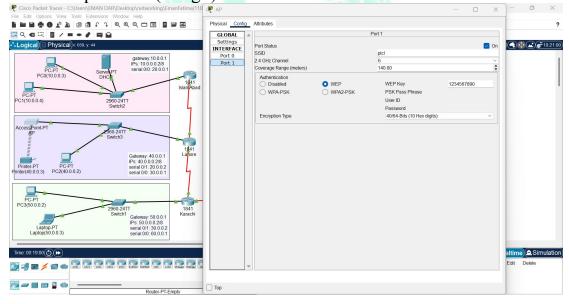
♦ Click on DHCP server and assign it an IP address and gateway then click on services and DHCP and turn on its services as;



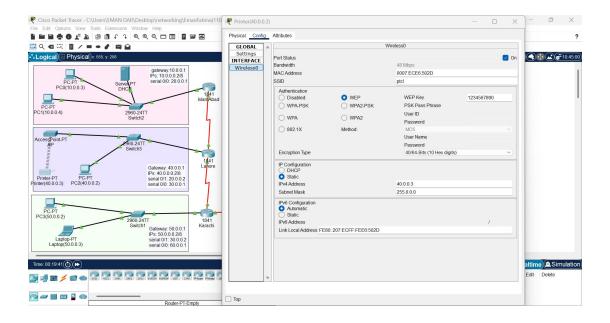
♦ Then go to each device in this network and click on DHCP which assign an automatic address to each device.

#### Step 04: Configure Access point as;

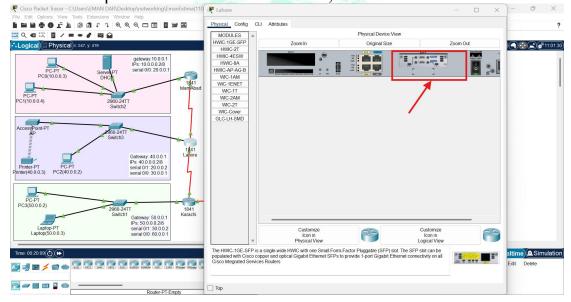
→ Turn on the port status, Give an SSID to the access point, Set a WEP password(9-digit).



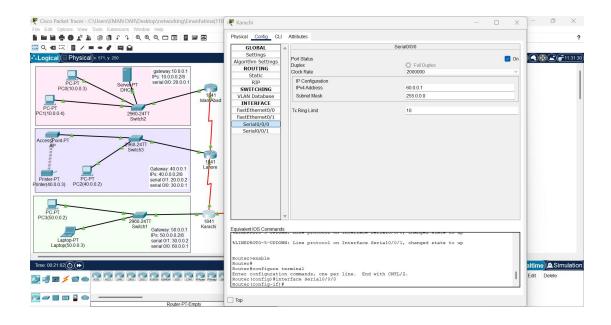
♦ Configure the printer by clicking on wireless then assign it all information about access point and also a static IP address. As;



**Step 05:** For Serial configuration go to Router click on physical and set a HWIC-2T port to connect serial DTE.As;

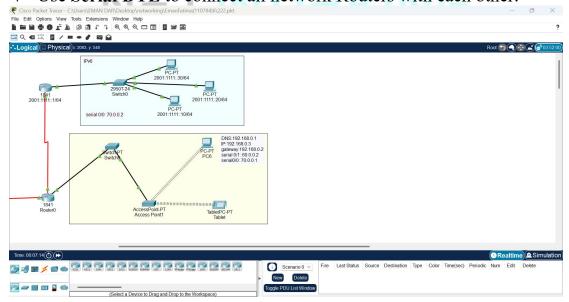


♦ Now configure each serial port by assigning IP address according to their networks as;

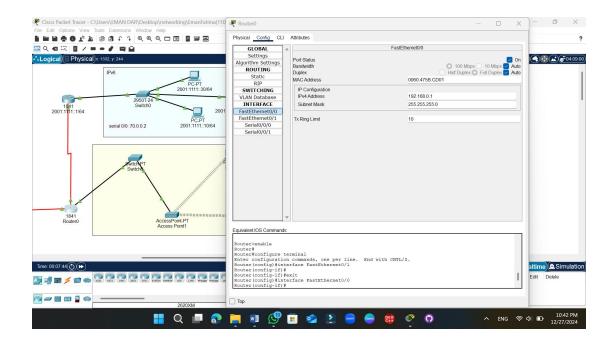


**Step 06:** Now again take 1 **1841-Router**, 1 **Switches**, 3 **PCs** for "IPv6", and 1 **1841 Router**, a **Tablet** and a **PT-Access point** for another LAN. As;

- ♦ Connect all devices with switches with an Automatic wire.
- ♦ Use copper straight through to connect all network switches with Routers.
- ♦ Use **Serial DTE** to connect all network Routers with each other.

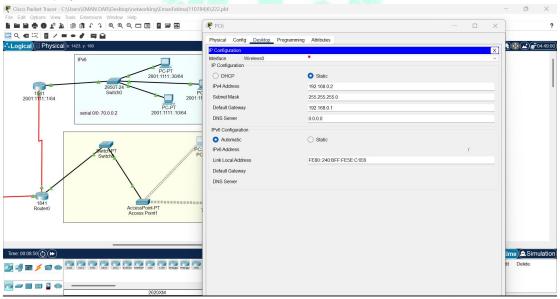


♦ Configure the Routers connected to each LAN as;

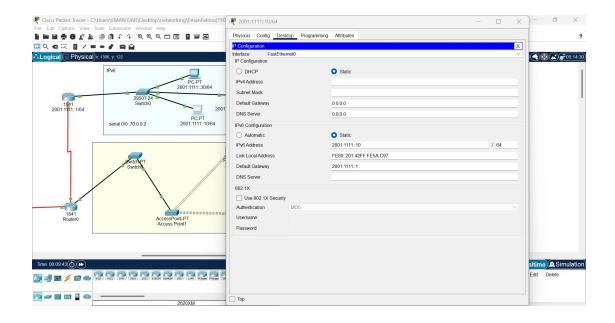


**Step 07:** Assign IP addresses to each device as mentioned in the above picture. Also assign gateway to each device according to its network.



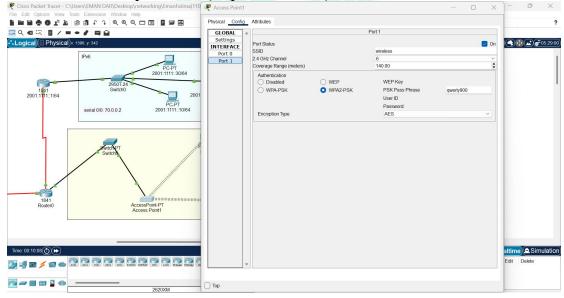


**♦ IPv6:** 

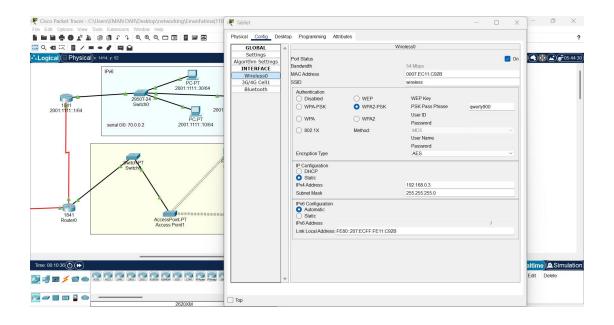


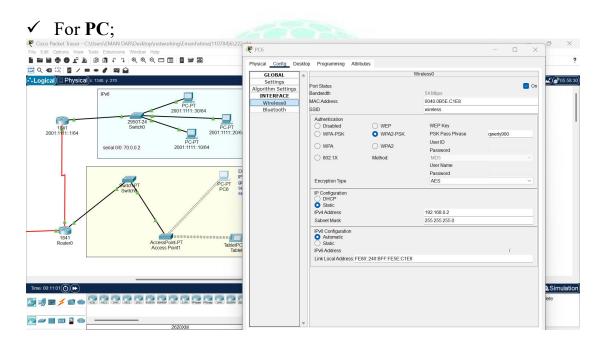
#### Step 08: Configure Access point as;

→ Turn on the port status, Give an SSID to the access point, Set a WPA2-PSK password(Alpha-numeric).

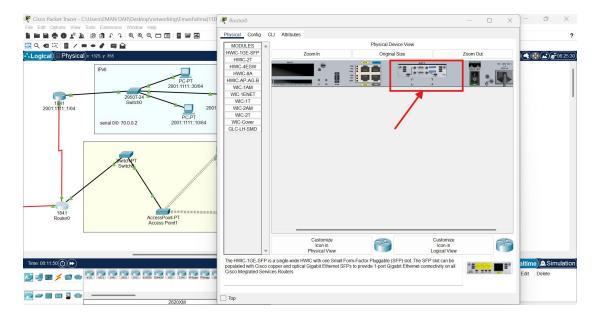


- ♦ Configure connected devices by clicking on wireless then assign it all information about access point and also a static IP address.
- ✓ For Tablet;

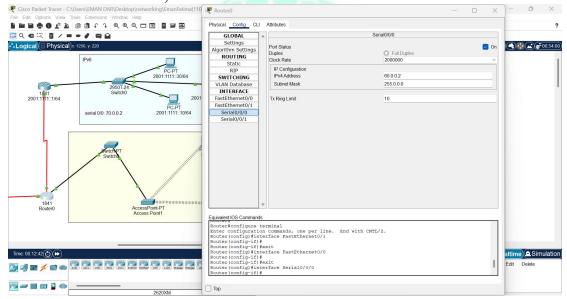




**Step 09:** For Serial configuration go to Router click on physical and set a HWIC-2T port to connect serial DTE.As;

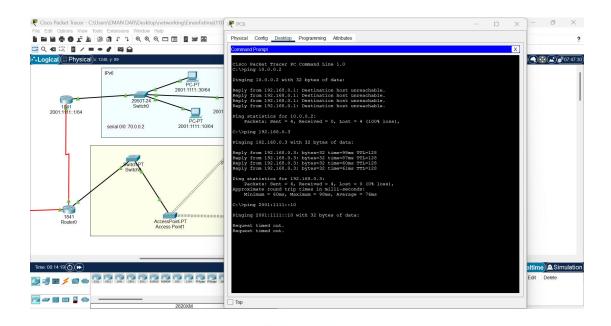


♦ Now configure each serial port by assigning IP address according to their networks as;



### Step 10:Ping your PC as;

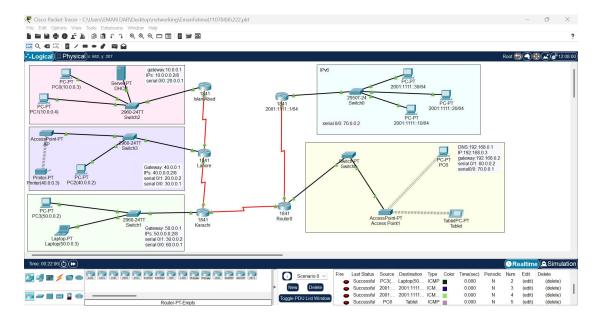
1. Click on PC0 go to desktop click on command prompt as;



Step 09: Hence connection is verified as ICMP successful.

# NETWORKING

WITH EMAN FATIMA



-----The End -----



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