Day 3 Lab Report

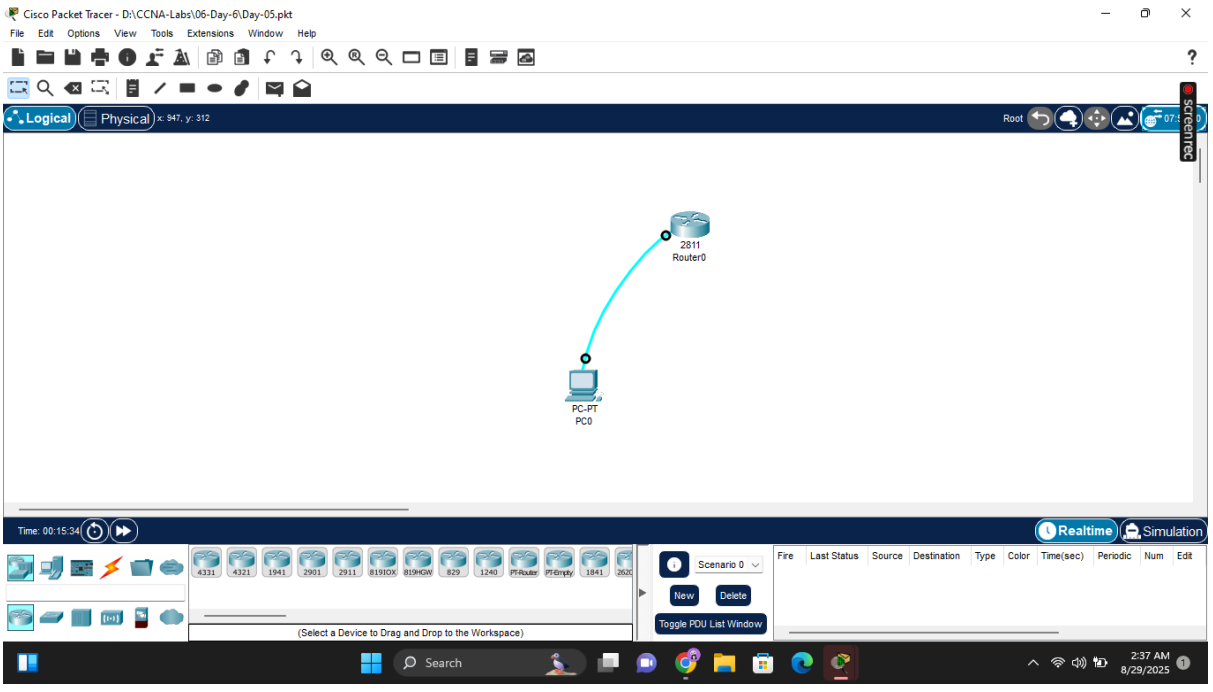
Lab Title
Router Configuration of Hostname, Passwords, Interface IP, and Configuration Verification.

Objective
To perform the initial configuration of a Cisco router using CLI. This includes setting the hostname, securing access through console and enable passwords, assigning an IP address to an interface, verifying the configuration in RAM and NVRAM, and saving it for persistent use.

Lab Setup Overview

This lab assumes that you are working in Cisco Packet Tracer. You will use a Cisco router with at least one Ethernet or with the Serial interface. A PC is optional but recommended to simulate console access or configurations via console. Connect the PC to the router using a console cable, then launch the Terminal application on the PC to access the router's CLI. This simulates how network engineers configure routers in real-world scenarios before any remote access is available. In real world networking, the first time the networking device is configured

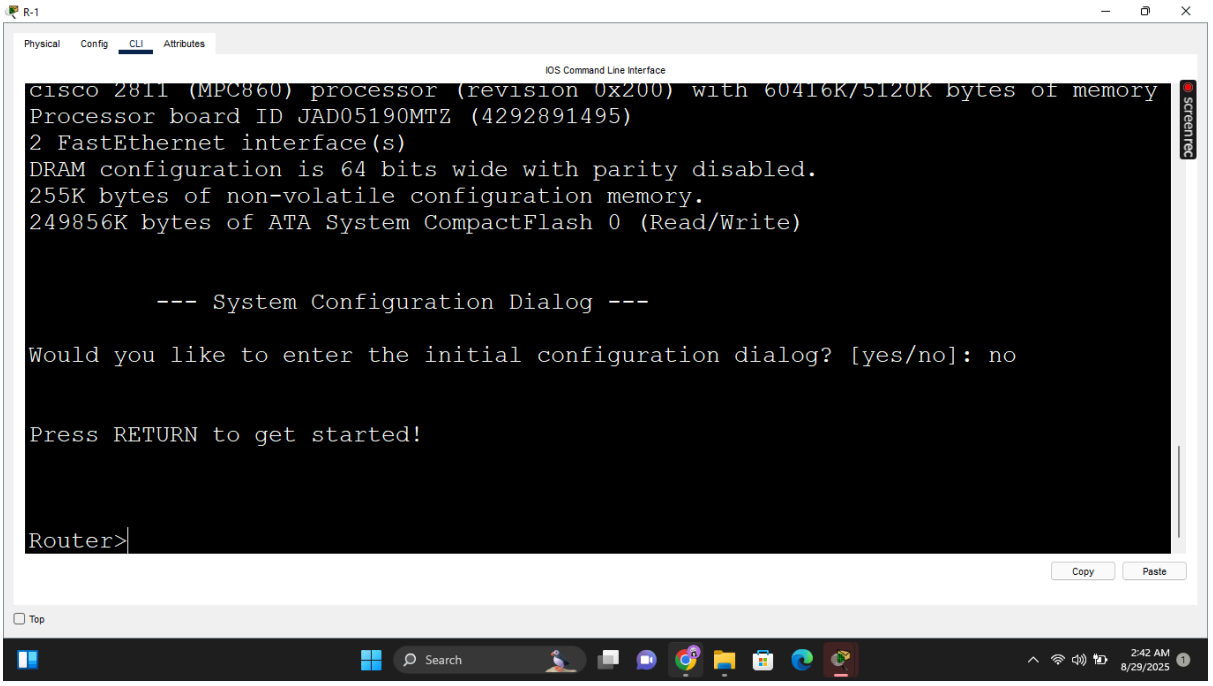
via console.



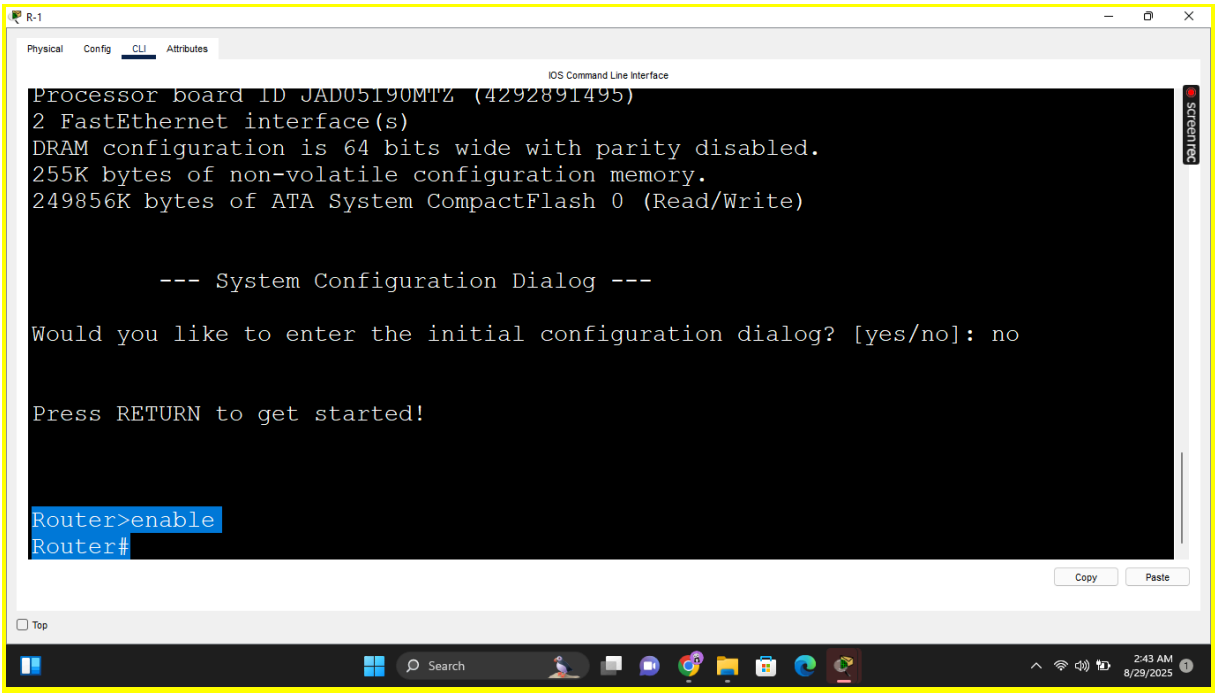
Configuration Steps

Step 1. Access the Router CLI

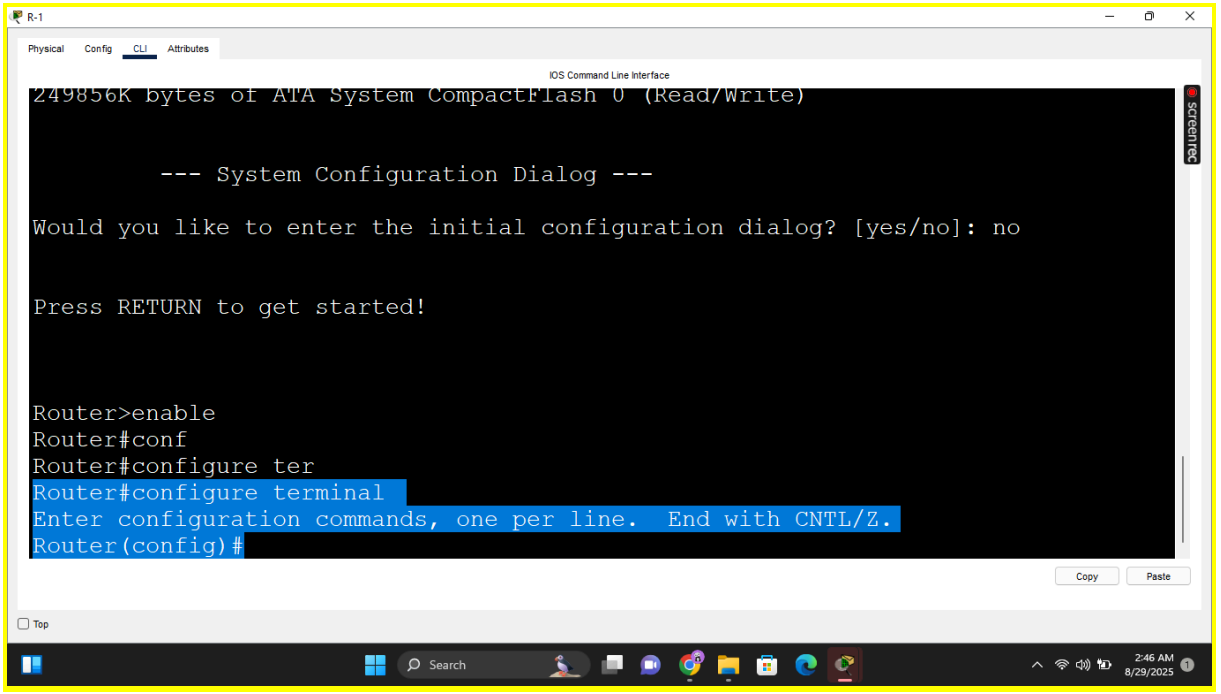
Click on the router, and go to the CLI tab. If you're simulating physical access, connect the PC to the router using a console cable and open the Terminal on the PC. Press Enter to begin.



Step 2 Enter Privileged EXEC Mode Type `enable` to move from user mode to privileged mode. Prompt changes from `Router>` to `Router#`.

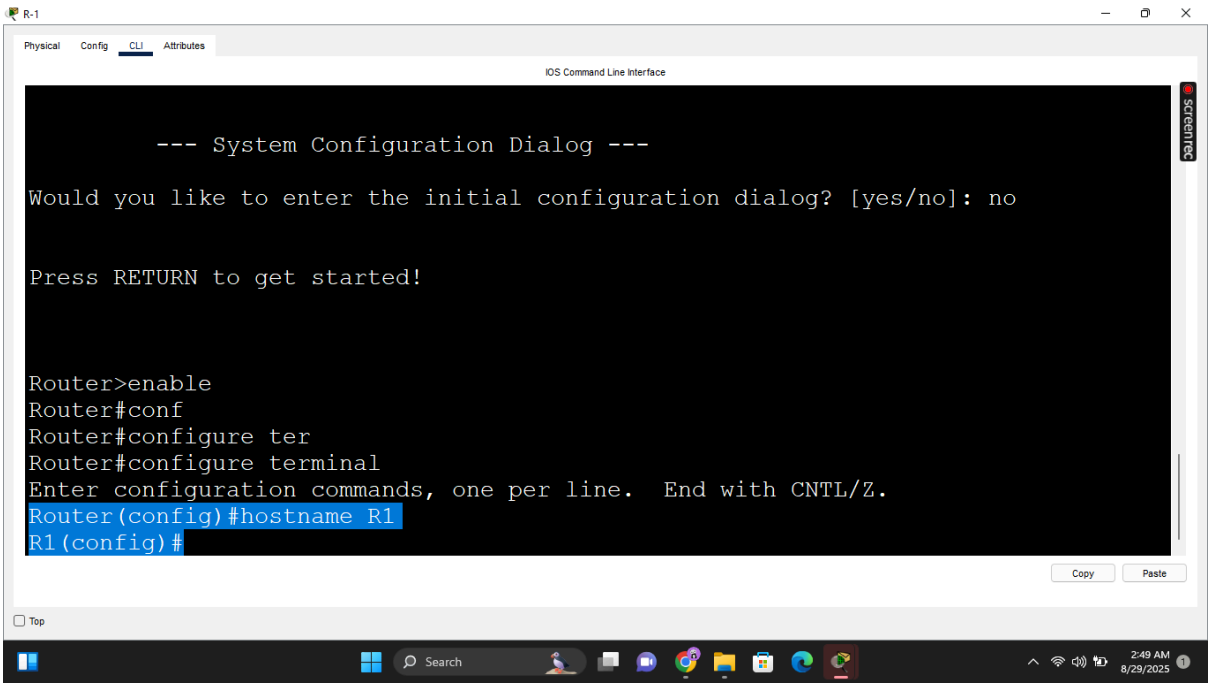


Step 3 Enter Global Configuration Mode Type `configure terminal` to enter global config mode. Prompt becomes `Router(config)#`.



Step 4: Set the Hostname

Type `hostname R1` to rename the router. Prompt updates to `R1(config)#`.



Step 5

Configure Console Password.

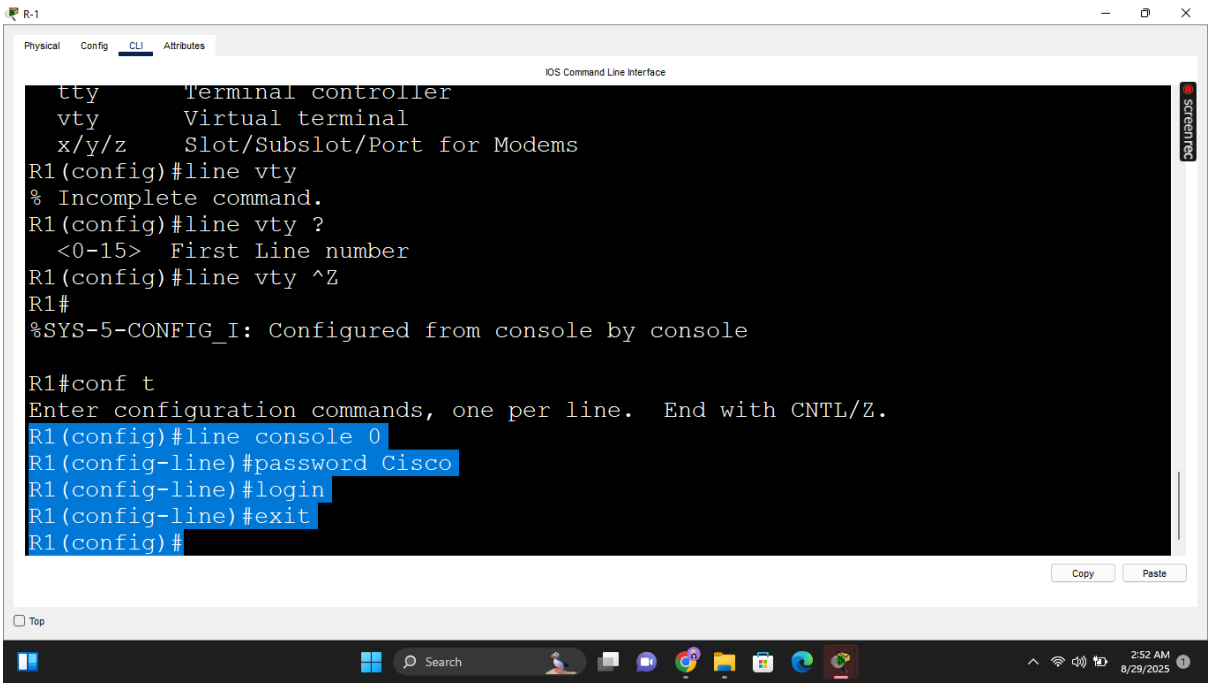
This secures physical access via the console cable. Enter the following commands one by one in the global configuration mode.

line console 0,

password Cisco,

login,

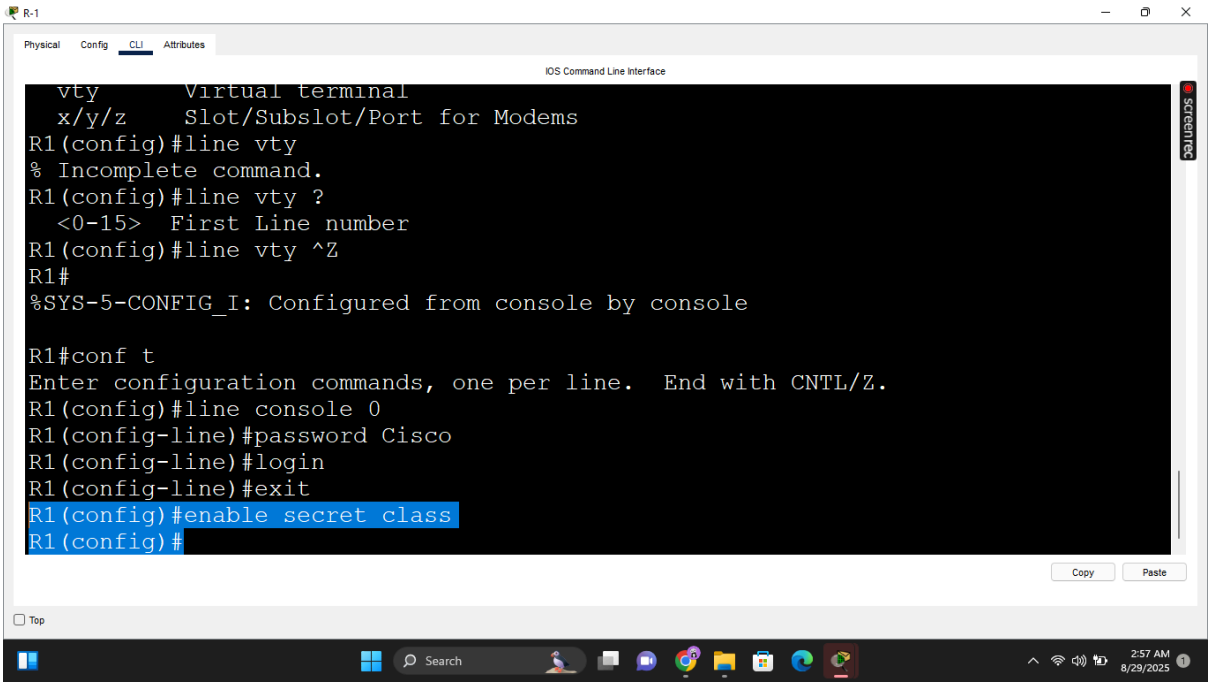
exit



Step 6: Set Enable Secret Password.

This protects privileged EXEC mode with encryption and sets the password for the privileged exec mode. Type the following command in the global configuration mode.

enable secret class



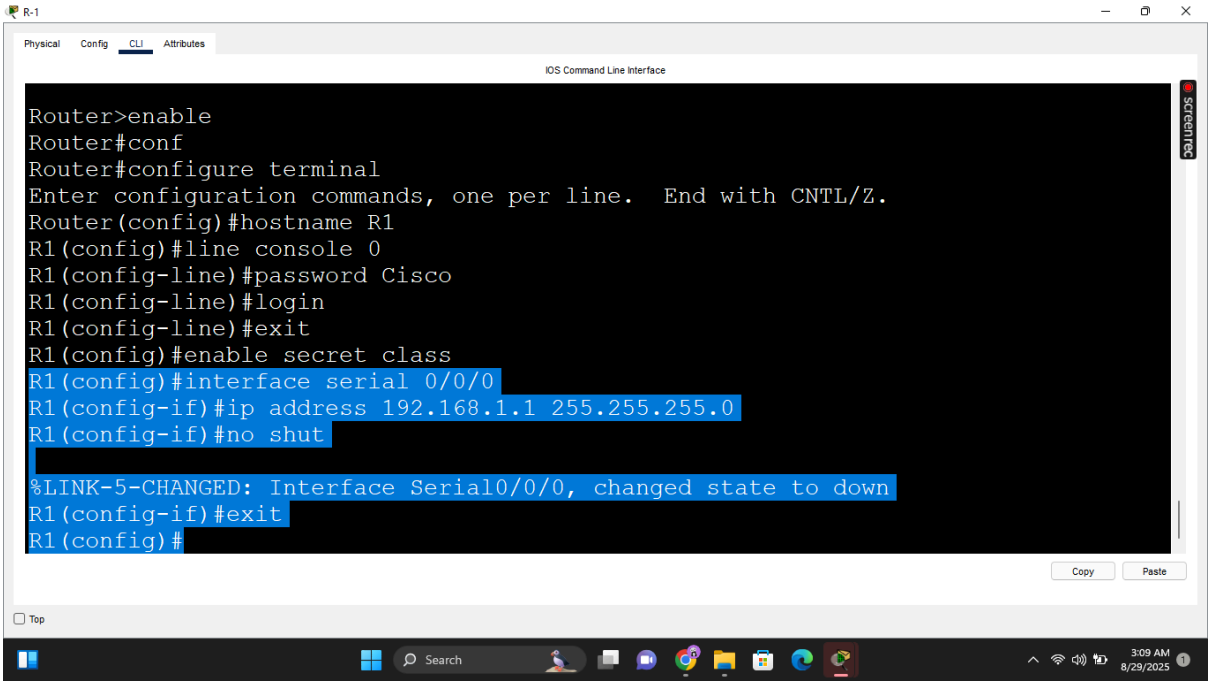
Step 7: Assign IP Address to an Interface Choose based on your router's available interface. In packet tracer first add the WIC-2T module from the modules section. For module addition , click on the router , go to the physical tab, click on the green light button and turn the router off, then from the module menu on the left side scroll down and select the WI-2T module and drag it to the blank portion and drop it there.Then turn the router on again by clicking the same button. Modules provide the serial interfaces.For Serial interface type the following commands in the global configuration mode.

interface serial0/0/0

ip address 192.168.1.1 255.255.255.0

no shutdown

exit



For FastEthernet interface

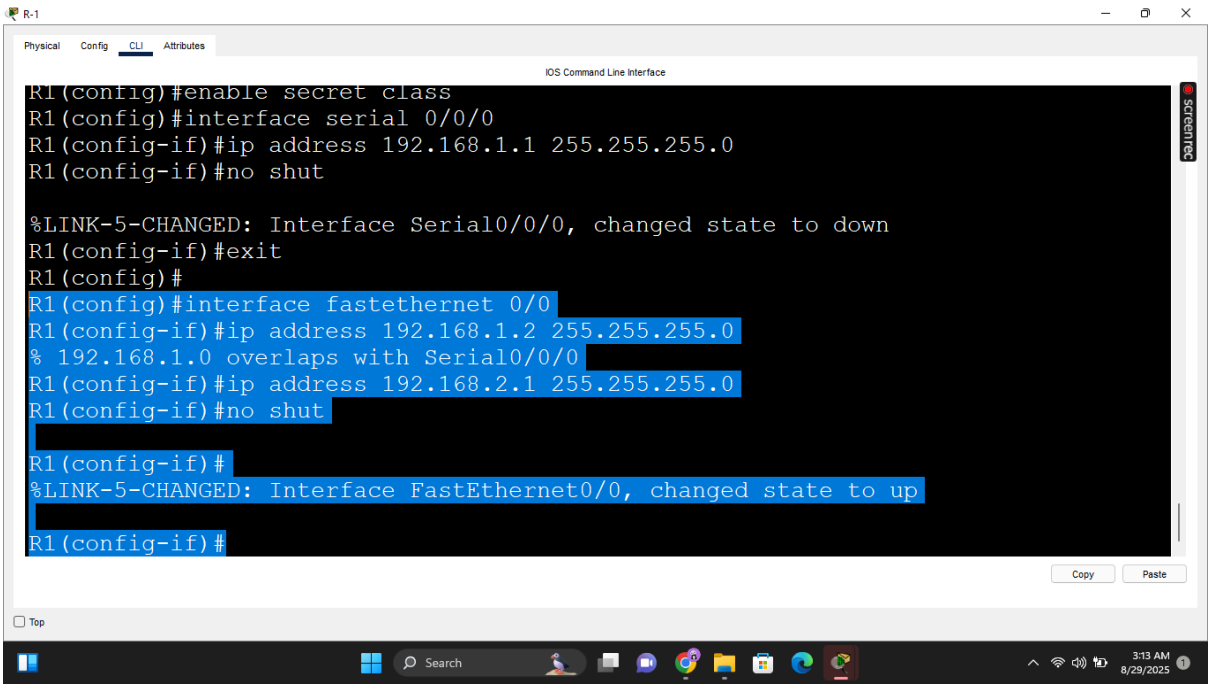
Type the following commands one by one in the global configuration mode to configure an IP address on the FastEthernet interface.

interface fastethernet0/0

ip address 192.168.2.1 255.255.255.0

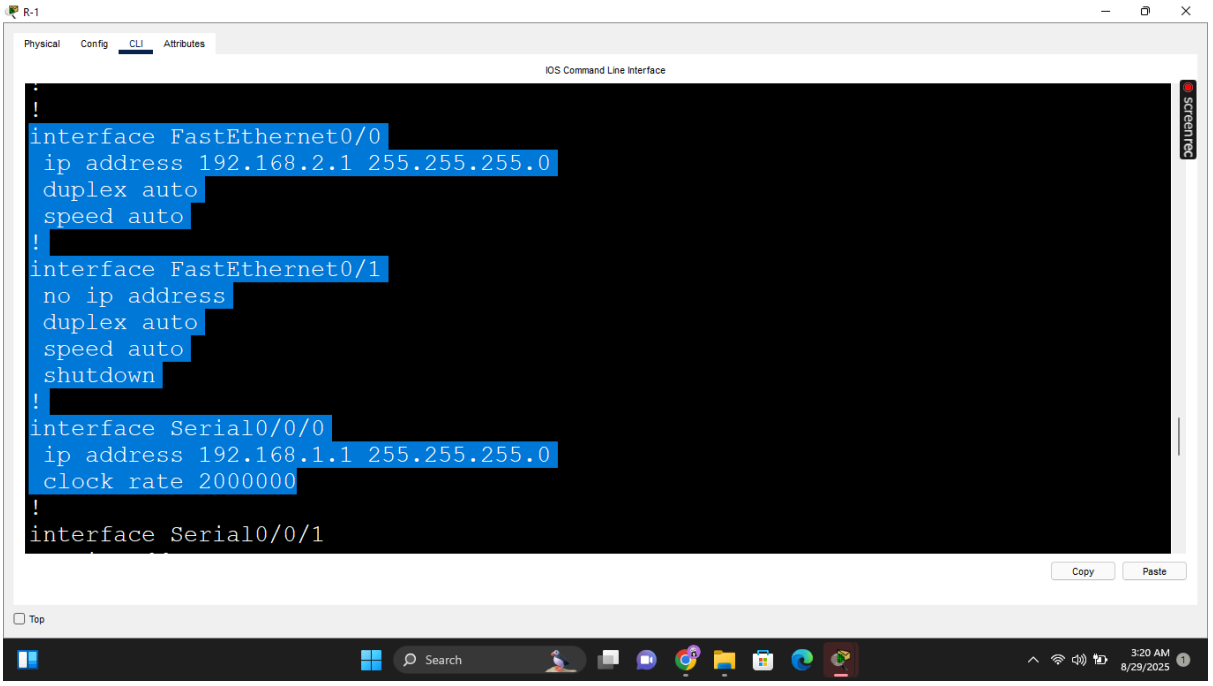
no shutdown

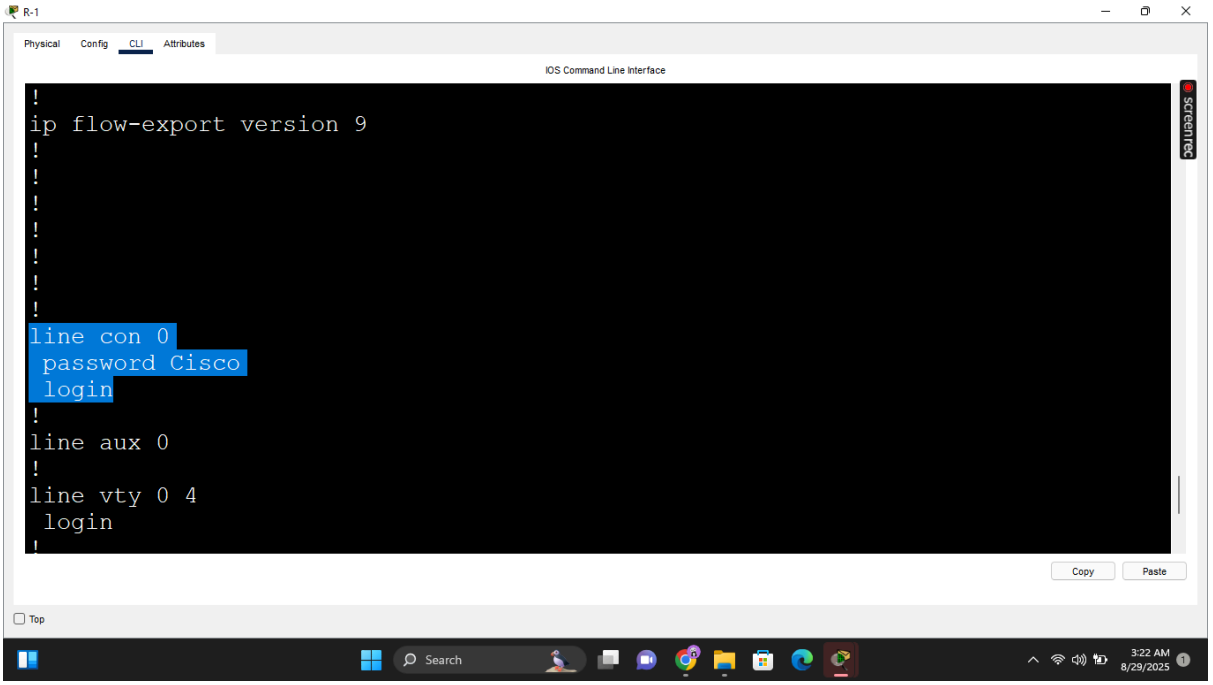
exit



Step 8: Go back to the privileged mode by “exit” and verify the Configurations in RAM. Use `show running-config` to view the active configuration. Type this command in the privilege mode

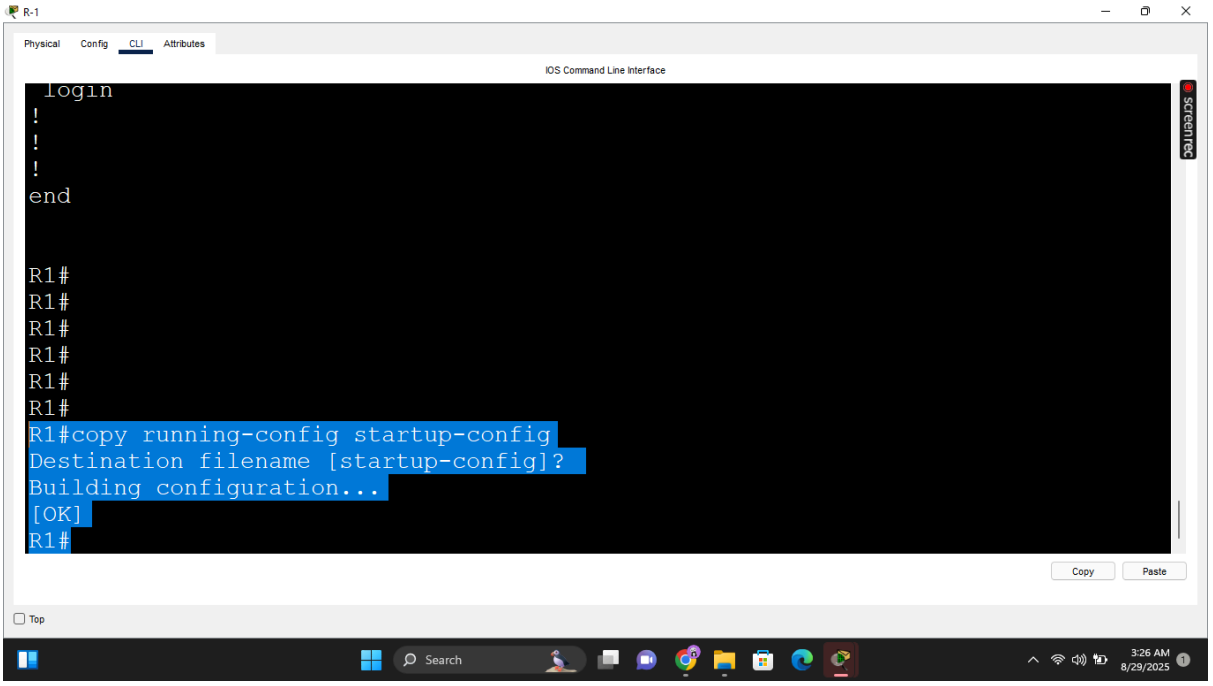
`show running-config` Verify configurations , hostname , ip addresses on the interfaces, console password





Step 9: Save Configuration to NVRAM

Use copy running-config startup-config command and press Enter to confirm the default filename. Configurations will be saved to NVRAM as the startup configurations.



Step 10: Verify Configuration in NVRAM

Verify that all the configurations are saved to NVRAM or not. Use `show startup-config` to confirm the saved configuration in NVRAM.

Conclusion

This lab walks through the foundational steps of router setup from accessing the device via console cable to securing it with passwords, assigning IP addresses, and ensuring configurations are saved. These are the first things any network engineer must master before diving into routing protocols or advanced services. Whether you're prepping for CCNA or deploying real infrastructure, this workflow builds muscle memory for reliable, secure configuration.