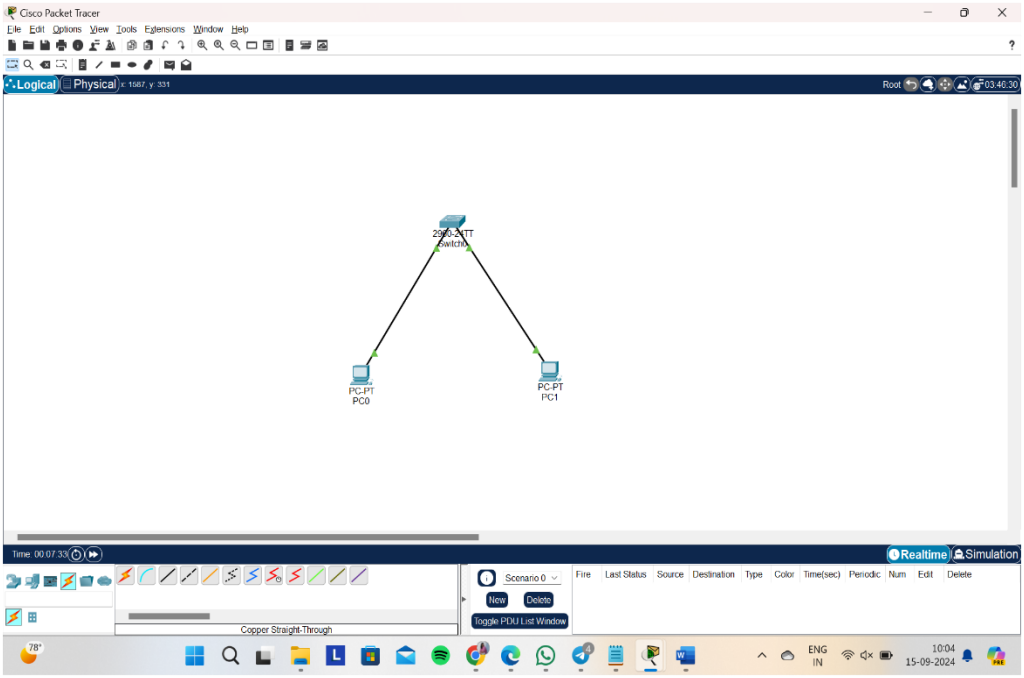
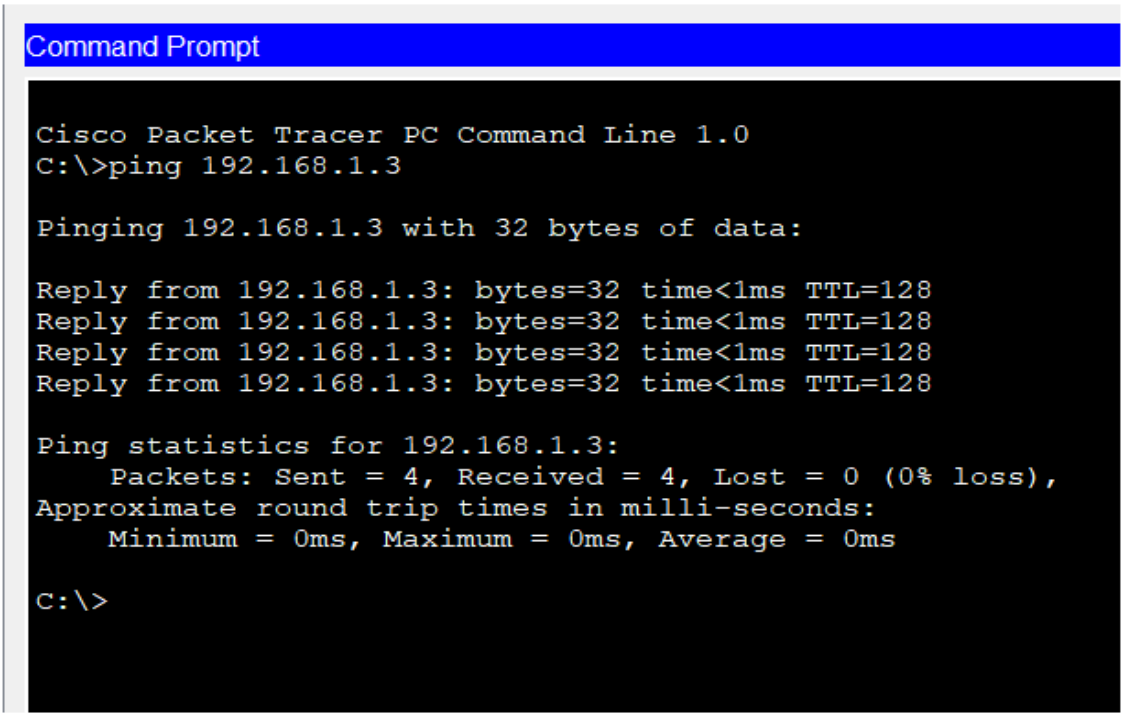
Exp.no-3: Configuration of basic switch setup using Huawei/Cisco network switch

Diagram:



Output:



Actions for Exp.no-3: Configuration of Basic Switch Setup Using Huawei/Cisco Network Switch

1. Set Up the Network Topology:

- I started by creating a simple network in Cisco Packet Tracer, which includes two PCs and a switch.

- I connected the two PCs to the switch using copper straight-through cables. This forms the basic network setup for testing switch configuration.

2. Assign IP Addresses to PCs:

- On PC1, I assigned the IP address `192.168.1.2`, and on PC2, I set the IP address to `192.168.1.3`.

- Both devices were configured with the subnet mask `255.255.255.0`, so they are part of the same network and can communicate with each other.

3. Configure the Switch:

- I accessed the switch's CLI and started by giving it a hostname to make it easier to identify later.

- I then configured each switch port to be in access mode, connecting them to the correct devices.

- I didn’t need VLANs for this simple setup, so I kept the default VLAN 1 for now.

4. Testing Connectivity:

- Once the configuration was complete, I opened the command prompt on PC1 and pinged PC2 using the command `ping 192.168.1.3`.

- The ping was successful, and I received replies from PC2 with 0% packet loss and minimal round-trip times, indicating that the switch was functioning correctly.

5. Verification and Troubleshooting:

- To ensure the switch ports were working as expected, I ran the `show interface` command, which confirmed that all connected ports were up and running.

- I also checked the MAC address table with the command `show mac address-table` to verify that the switch had learned the correct MAC addresses of both PCs.

- Since everything was working as expected, there was no need for further troubleshooting.

6. Save the Configuration:

- Finally, I saved the switch's configuration using the `write memory` command.