EXPERIMENT – 4

<u>AIM:</u> - Setup and configure a LAN (Local area network) using a Switch and Ethernet cables in your lab.

How to set up a LAN:

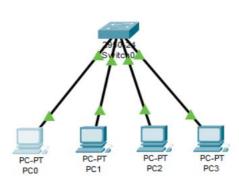
- Plan and Design Network Topology: Decide on network layout and equipment location.
- **Gather Equipment:** Use 4 computers, an 8/16/24-port switch, and 4 Ethernet cables.
- Connect Devices to Switch: Plug Ethernet cables from each computer into the switch.
- Assign IP Addresses:

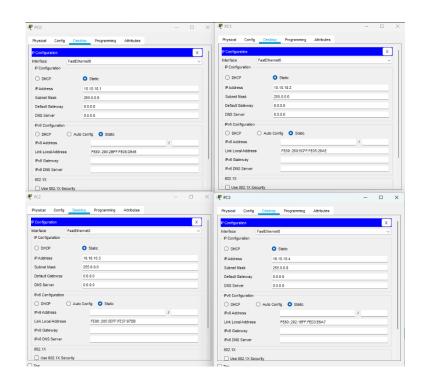
Log in as Administrator on each PC.

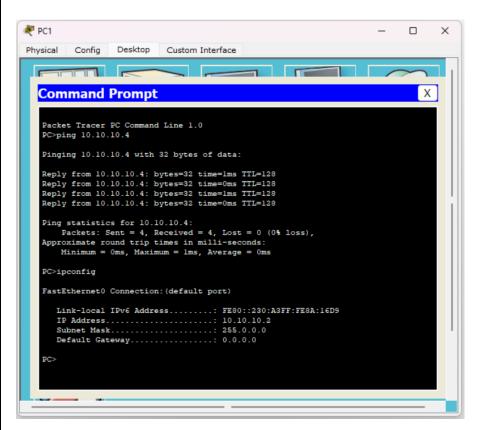
Go to Network and Internet Connections > Local Area Connection/Ethernet. Select Properties > TCP/IPv4 > Use the following IP address, then assign:

- o PC1: 10.1.1.1, Subnet Mask: 255.0.0.0
- o PC2: 10.1.1.2, Subnet Mask: 255.0.0.0
- o PC3: 10.1.1.3, Subnet Mask: 255.0.0.0
- o PC4: 10.1.1.4, Subnet Mask: 255.0.0.0
- Configure the Switch: Connect a computer to the switch and log in to its web interface. Set the switch's IP address to 10.1.1.5, Subnet Mask: 255.0.0.0.
- Verify Connectivity: Use the ping command to test connection between devices.
- **Share Folder:** Select a folder, go to **Properties** > **Sharing tab**, and share it with everyone on the LAN.
- Access Shared Folder: Try accessing the shared folder from other network computers.

OUTPUT: -







RESULT: -

LAN Configuration using Switch has been done and studied successfully.