# PRACTICAL- 4

**Aim :** Setup and configure a LAN using a switch and Ethernet cable in your lab.

## What is LAN ?

A LAN refers to a network that connects devices to a limited area such as office building, school or home. It enables users to share resources, including data, printers and int access. LAN connects devices to promote collaborations and transfer information between users, such as computers, printers, servers and switches.

## How to step setup LAN ?

**Step 1:** Plan and design an appropriate network topology taking into account network requirements and equipment location.

**Step 2:** you can take 4 computers, a switch with 8, 16 or 24 parts, which is suff. for these sizes and 4 Eth cable.

**Step 3:** Connect your computers to network switch via ean Eth cable, which is as simple as plugging one end of the Eth cable into your computer.

**Step 4:** Assign IP address to your PCs

1. Log on to the client comp as Admin
2. Click Network and Internet connection
3. Right click Local Area Connect → Go to properties

Select Internet Protocal → click on properties
select use the following ip address option and
assign ip address.

Similarly assign IP address to all the PCs
connected to switch.

PC1 - IP address: 10.1.1.1, subnet mask: 255.0.0.0
PC2 - IP address: 10.1.1.2, subnet mask 255.0.0.0
PC3 - IP address 10.1.1.3, subnet mask 255.0.0.0
PC4 - IP address 10.1.1.4, subnet mask 255.0.0.0

Step 5: configure a network switch

1. Connect your computer to the switch: To access the
switch's web interface, you will need to connect
your computer.

2. Log in to the web interface. Open a web browser
and enter the IP address of the switch in the
address bar This should bring up the login page
for the switch's web interface

3. Configure basic settings: Once you logged in, you
will be able to configure basic settings for the
switch.

4. Assign IP address as 10.1.1.5, subnet net mask
255.0.0.0

Step 6: check the connectivity between switch and
other machine by using ping command in the
command prompt of the device.

Step 7: Select a folder → go to properties → click sharing tab → share it with everyone on the same LAN

Step 8: Try to access the shared folder from other computers of the network

Result: Thus LAN network was setup successfully in the LAB.

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