

Ex: A
#19/25

Setup and Configure a LAN

Aim:

Setup and Configure a LAN (Local Area Network) using a switch and ethernet cables in your lab.

What is LAN?

A Local Area Network (LAN) refers to a network that connects devices within a limited area such as an office building, school or home. It enables users to share resources, including data, printers and internet access. LAN connects devices to promote collaboration and transfer information between users, such as computers, printers, servers and switch.

How to setup a LAN?

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

Step 2: You can take 4 computer, a switch with 8, 16 or 24 ports which is sufficient for networks of these sizes & 4 ethernet cables.

Step 3: Connect your computers to network switch via an ethernet cable, which is as simple as plugging one end of the ethernet cables into your computer and the other end into network switch.

Step 4: Assign IP address to your PCs

1. Log on to the client computer as Administrator or as owner.

2. Click network and internet connection.

3. Right click Local Area Connection/ ethernet.

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:

1. Connect your computer to the switch to access the switch's web interface, you will need to connect your computer to switch using an ethernet cable.

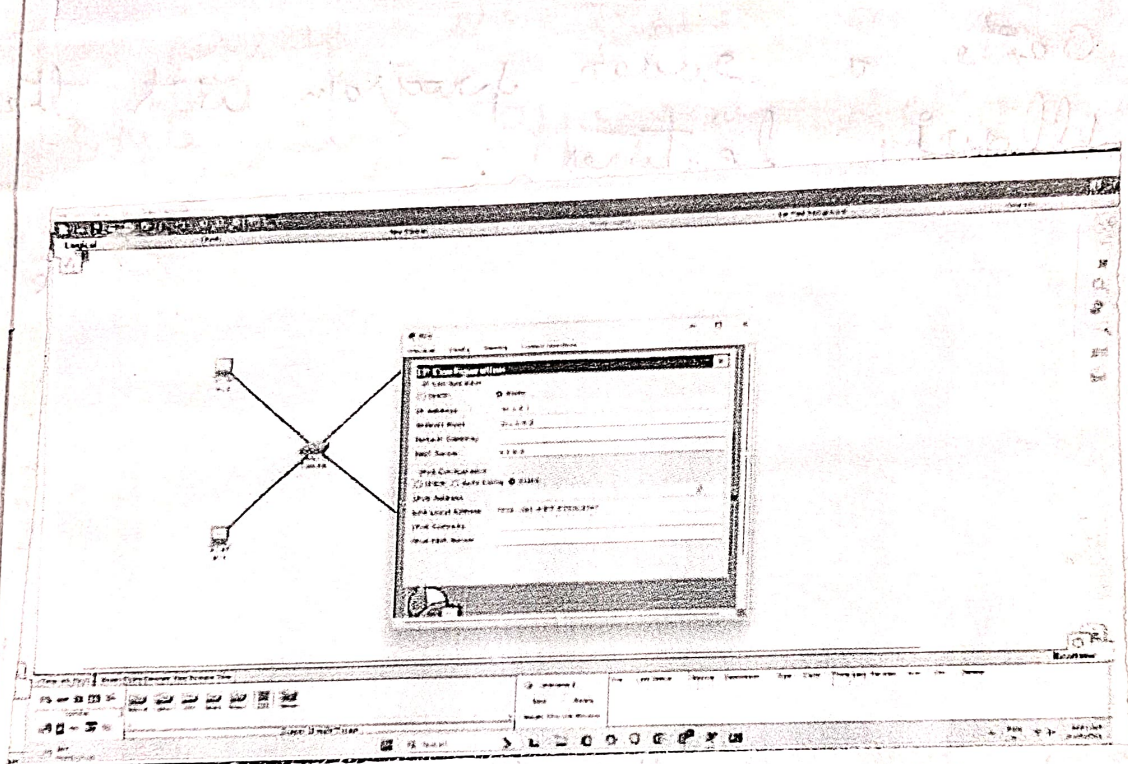
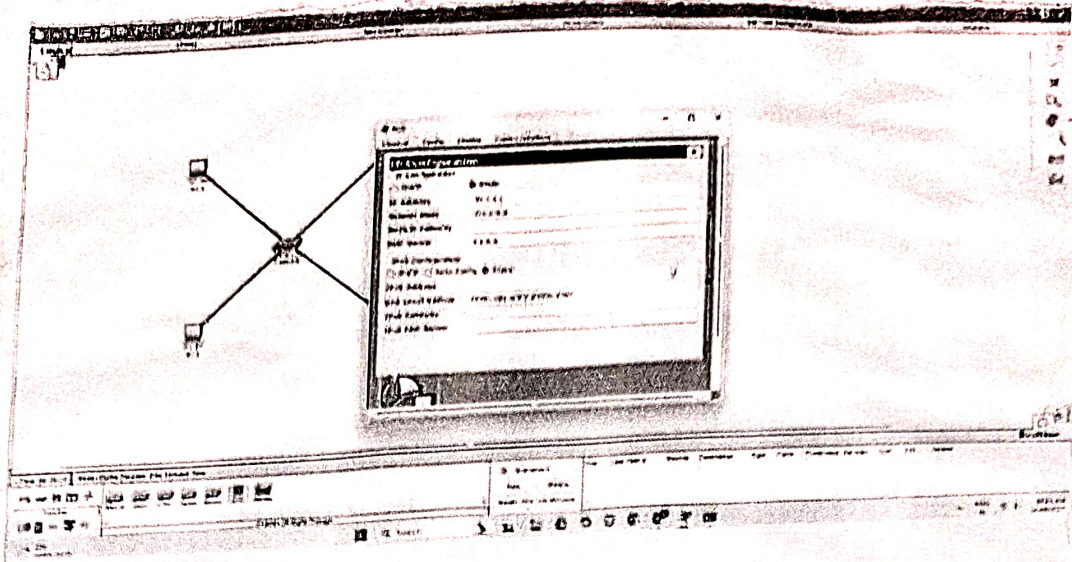
2. Login to the interface

3. Configure basic settings.

4. Assign IP address as 10.1.1.15
Subnet mask 255.0.0.0

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 computer of the network.



Result:

Thus the above experiment is
 successfully executed.

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