SETUP AND CONFIGURE A LAN USING A
SWITCH AND ETHERNET CABLES

AIM:

Setup & configure a LAN using a switch & Ethernet cabel in your lab.

WHAT IS LAN?

A local Area Network refers to a network that connects devices within a limited area, such as an office building, school. It enables users to share resources, printers & internet access. A local area network switch serves as the primary conn - ecting device and directing communications within the local network. Each connected device on a LAN switch can communicate directly with each other, allowing for fast & secure data transfer.

HOW TO SET UP LAN:

1) Plan & design an appropriate network topology taking into account network requirements & location

2) you can take 4 computers, a switch with 8,16 ports & 4 ethernet cables.

3) connect your computers to network switch via an Ethernet cable, which is as simple as pluggin one end of cable to computer & other end to your network switch.

4) Assign IP address to your PCs
   ⇒ Log on to the client computer as owner
   ⇒ click Network & Internet Connections
   ⇒ Right click Local Area Connection → Go to Properties → select Internet → Properties
   → Select ip address

5) Configure a network switch:

→ Connect computer to the switch : To access the switch's web interface , connect computer to switch using Ethernet cable.

→ Log in to the web interface : Open web browser & enter the IP address of the switch in the address bar.

→ configure basic settings

→ Assign IP address as : 10.1.1.5
   subnet mask 255.0.0.0

6) Check the connectivity between switch & other machine by using ping command in the command prompt

7) Select Folder → go to properties → click sharing tab
   → Share on same LAB

8) Try to access the shared folder from other Computers of the network.

RESULT:

Setup & configuration of LAN using a switch & Ethernet cabel has been done successfully