Aim

Set up and configure a Lan (Local area Network) using a switch and ethernet cable in your Lab

What is Lan

A local area Network (LAN) refers to a network that connect device within a limited area such as an office building, school or home. It enables user to share resources including data, printer and internet access

How to set up a Lan

Step 1 : plan and design an appropriate network topology talking into account network requirement and equipment location

Step 2: you can talk 4 computer, a switch 8,16, or 24 port which is sufficient for network of these size and a 4 ethernet cable

Step 3: connect your computer to network switch via an Ethernet cable which is as simple as plugging one end of the Ethernet cable into your computer and the other end into your network switch

Step 4: Assign IP address to your PC

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

2) click network and internet connection

3) Right click LAN/ ethernet →go to a properties →, Select internet protocol (IPV4 /TCP) →click on Properties → select use the following IP address option and assign IP address

→ Similarly assign IP address to all the pc's 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 255.00.0

Step 5: configure a network switch
1) connect your computer to the switch to auess the switch '3 web interface, you will need to connect your computer to switch using a ethernet cable

2) Log in to web interface : open a web browser and enter the IP address of the switch in the the address bar This should being up the login page for the switch 's web interface Enter the username and password to los in

3) configure basic settings once you logged in you will able to configure basic settings for the switch
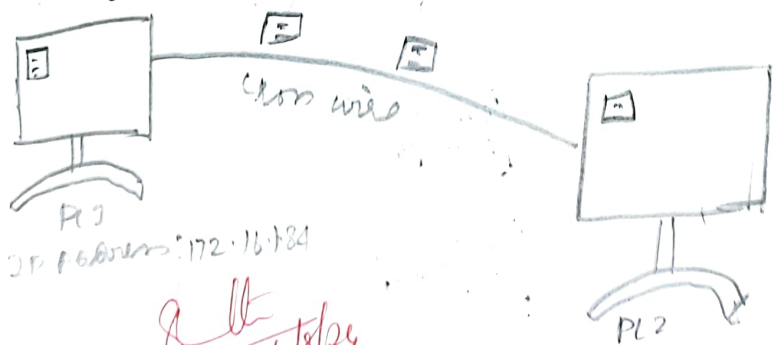
4) Assign Ip address as: 10.1.1.3,
subnet mask 255.0.0.0

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 computer of the network

Student observation:

Draw a neat diagram of the LAN in configuration of observation book that you have implemented in your lab. write the the IP configuration of each and every device write the outcome. and challenge faced while configuration of the lan.

PC J
Ip address: 172.16.184

8 ll
6/8/24

PC 2
Ip address: 172.16.1.25

RESULT
Thus setup and configure a LAN Choral network using a switch and Ethernet cable in connected