INDEX

Harish Rayavendar. S. 220701087 Computer Network Observatio

NAME: _____ STD.: _____ SEC.: _____ ROLL NO.: _____ SUB.: _____

S. No.	Date	Title	Page No.	Teacher's Sign / Remarks
1.	13/7/2024	Basic Networking Commands.	1-8	24/7 8
2.	24/7/2024	Study of different types of network cables.	9-12	31/7 8
3.	31/7/2024	Study of Packet tracer tool & its user interface	13-14	31/7 8
4.	05/8/2024	Setup and configuration of LAN network using cable. (Cross)	15-17	7/8 8
5.	05/8/2024	Packet tracer tool : Wireshark	18	7/8 9
6.	21.8.2024	Implement error detection and correction using Hamming code, Code comp	19-24	21/8/24 9
7.	02.09.2024	Sliding Window Protocol.	25-28	18/9/24 9
8a.	9.10.2024	Virtual LAN		9/10
8b.	16.10.2024	Wireless LAN		
9.	18.10.2024	Subnetting in Cisco Packet Tracer		9/11
10.	30.10.2024	Internetworking with router in Cisco		9/11
11.	2.11.2024	Simulate static Routing.		9/11

Ex No: 04

Date: 05-08-24

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 device with a limited area, such as an office building, school or home. It enables users to share resources, including data, pointers and internet access. LAN connects devices to promote collaboration and transfer information between users such as computers, printers, servers and switches. Each directed connected device on a LAN switch can communicate directly with each other, allowing for fast and secure data transfer.

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 computers, a switch 8, 16 or 24 ports which is sufficient for networks of these sizes and 4 ethernet cables.

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

step 4: Assign IP address to your PCs.

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 to the switch using an ethernet cable.

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

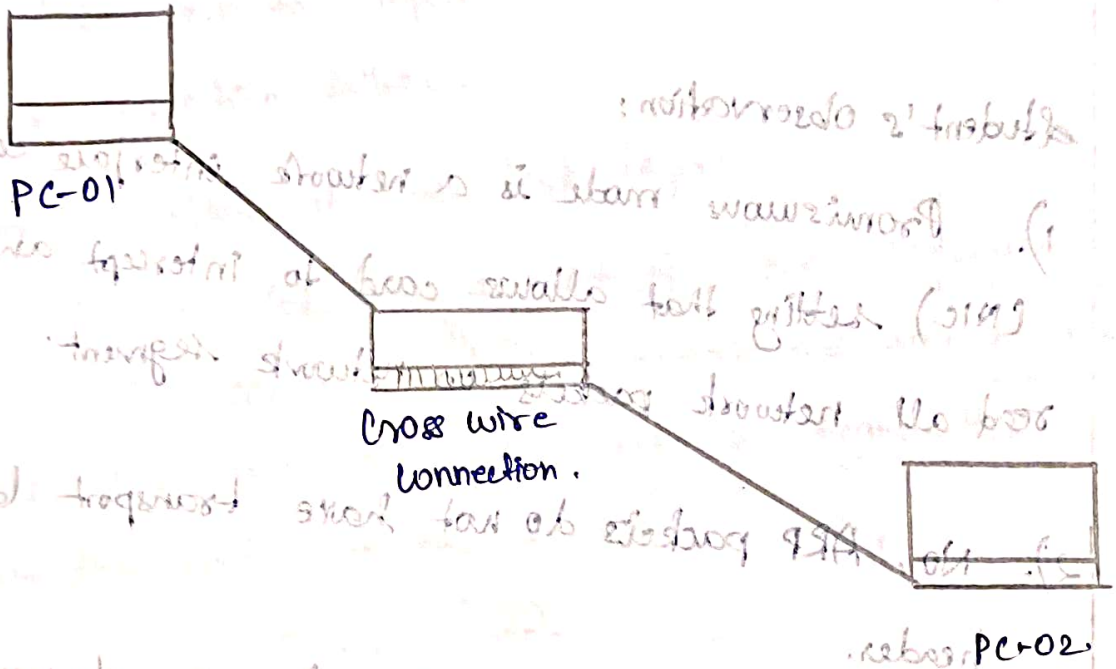
3. Assign IP address As: 10.1.1.5, subnet mask: 255.0.0.0;

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

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

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

Student observation.



Result:

Thus the setup and configure of LAN is studied and observed.

7/8/24