[2CEIT503 COMPUTER NETWORKS]

Practical: 2

AIM- Implementation of small network using HUB or SWITCH by which more than 2 PC's can communicate.

A. Design Peer to peer Network.

B. Design Star topology.

Ganpat University
॥ विद्यया समाजोत्कर्षः ॥
U.V. Patel College of Engineering

Department of Computer Engineering/Information Technology

EQUIPMENTS:

1.) Two laptops
2.) 2 lan cable
3.) Router

EXPLAINATION:

- Connecting 2 PC's with Hub or Switch:-
  2 straight through cables from 2 PC's are connected to 2 Normal Port of Hub or Switch and first their physical connectivity is checked by ping command with the IP add of other the PC's and if the IP of same PC is entered than it checks whether the NIC is working or not.
- Here we have created a small network between two PC's using switch.

Step-1

- ✓ Here in the below given figure we have physically connected two PC's using switch.
- ✓ Here by connecting two PC's we can access all files and folders from one PC to another PC.

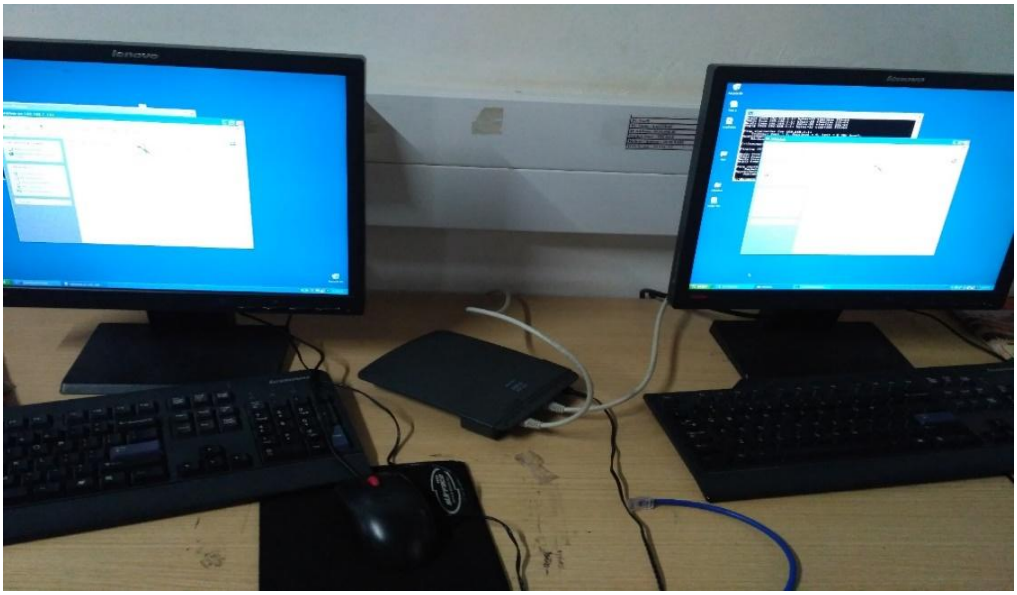

Figure 2.1

Step-2

- ✓ After connecting two PC's physically we'll now connect them through configuring.
- ✓ First goto the cmd prompt and know the ip address and subnet mask of the machine by writing cmd:-ipconfig

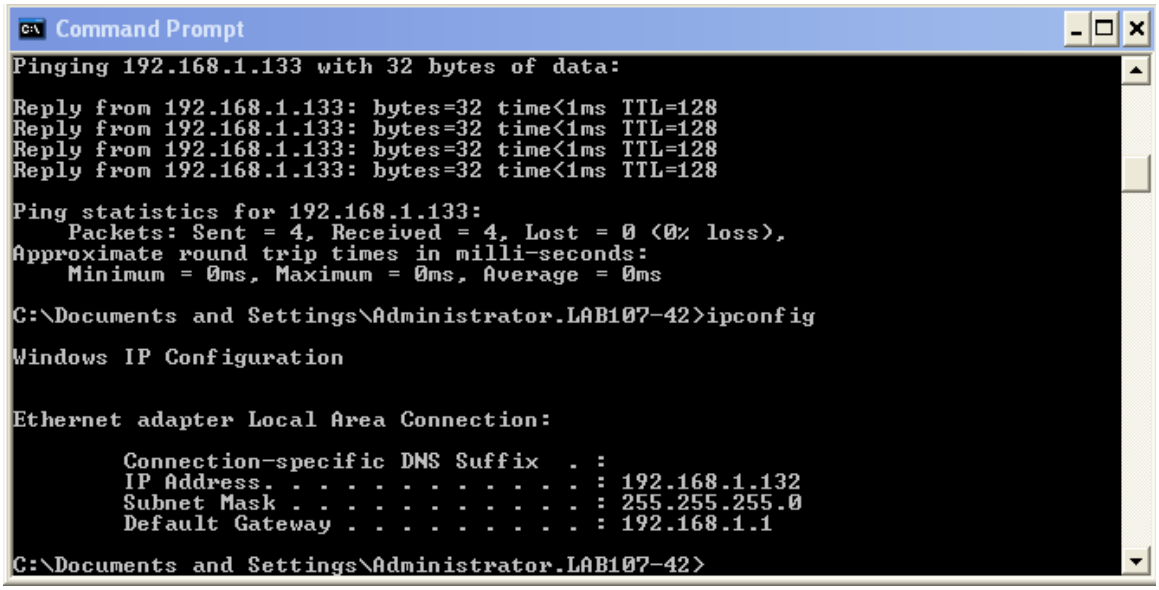

Figure 2.2

Step-3

✓ Goto Local Area Connection Status→General→Properties and add ip and subnet mask of the PC.

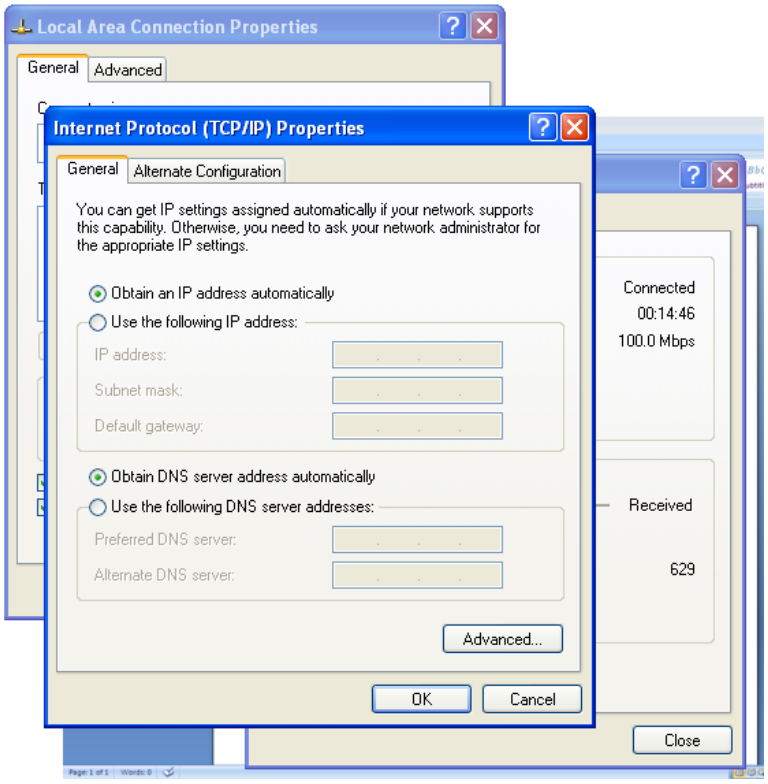

Figure 2.3

Step-4

- ✓ Doing same on the another PC.

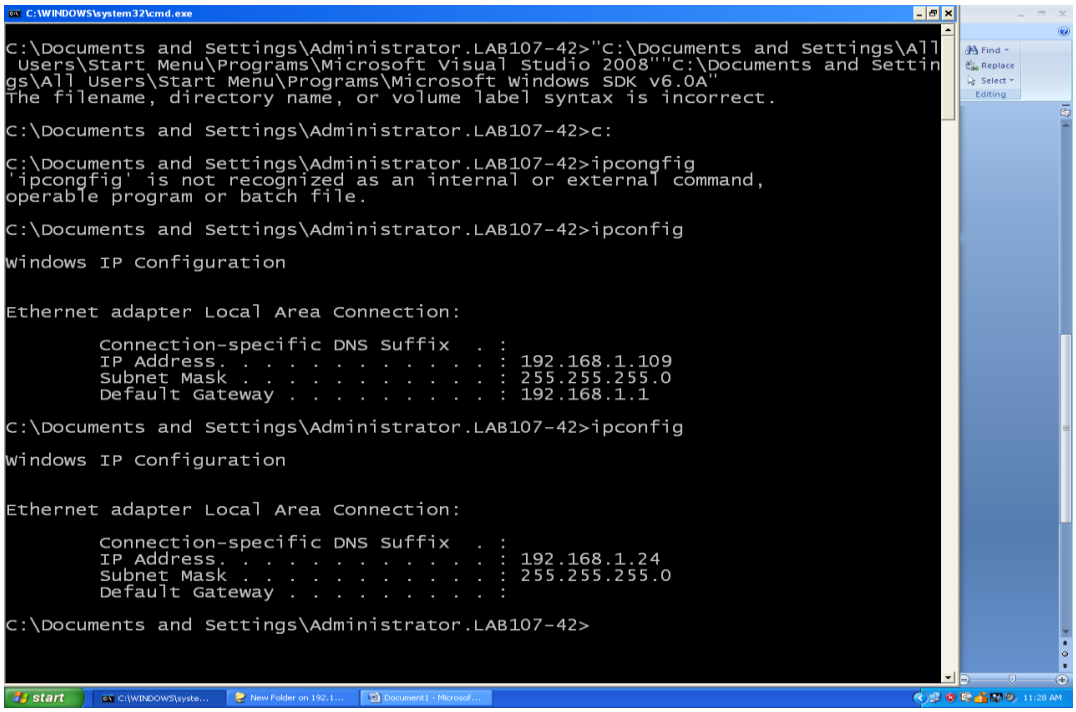

Figure 2.4

Step-5

- ✓ Now by using ping command we will communicate with another PC.
- ✓ Eg.:- ping 192.168.1.1
- ✓ If lost=0 then we have successfully connected with the other PC and now we can access other PC's files and folders.
- ✓ Also doing same on the another PC.

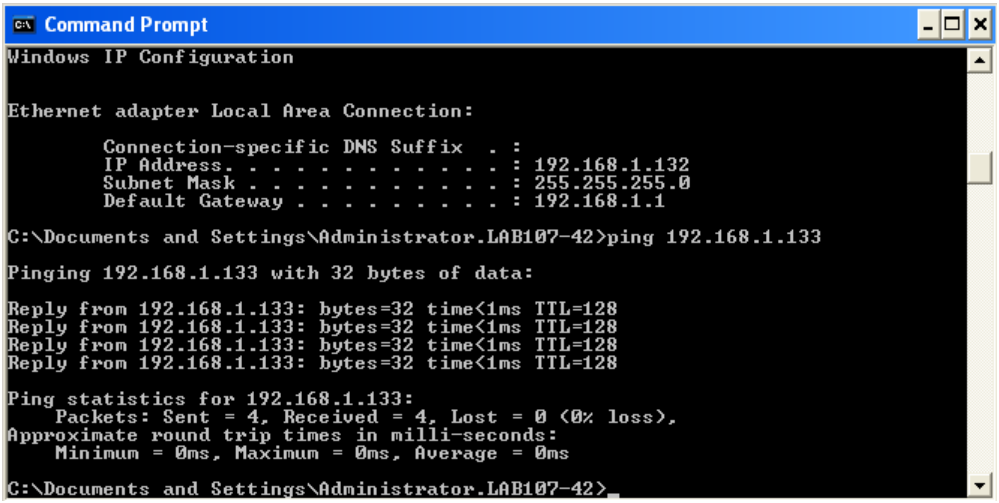

Figure 2.5

Solution:

A. http://vlabs.iitb.ac.in/vlabs-dev/labs_local/computer-networks/labs/exp1/exp1.html
B. http://vlabs.iitb.ac.in/vlabs-dev/labs_local/computer-networks/labs/exp2/index.php)