Exp. No. 9

Date:

Classful Subnetting.

Aim:

Implementation of subnetting in cisco packet tracer

Procedure:

(1) Create the network using switch, router and PC's.

(2) The IP is as follows.

→ R1:

Gigabit ethernet 0/0 : 192.168.1.1

Gigabit ethernet 0/1 : 192.168.2.1

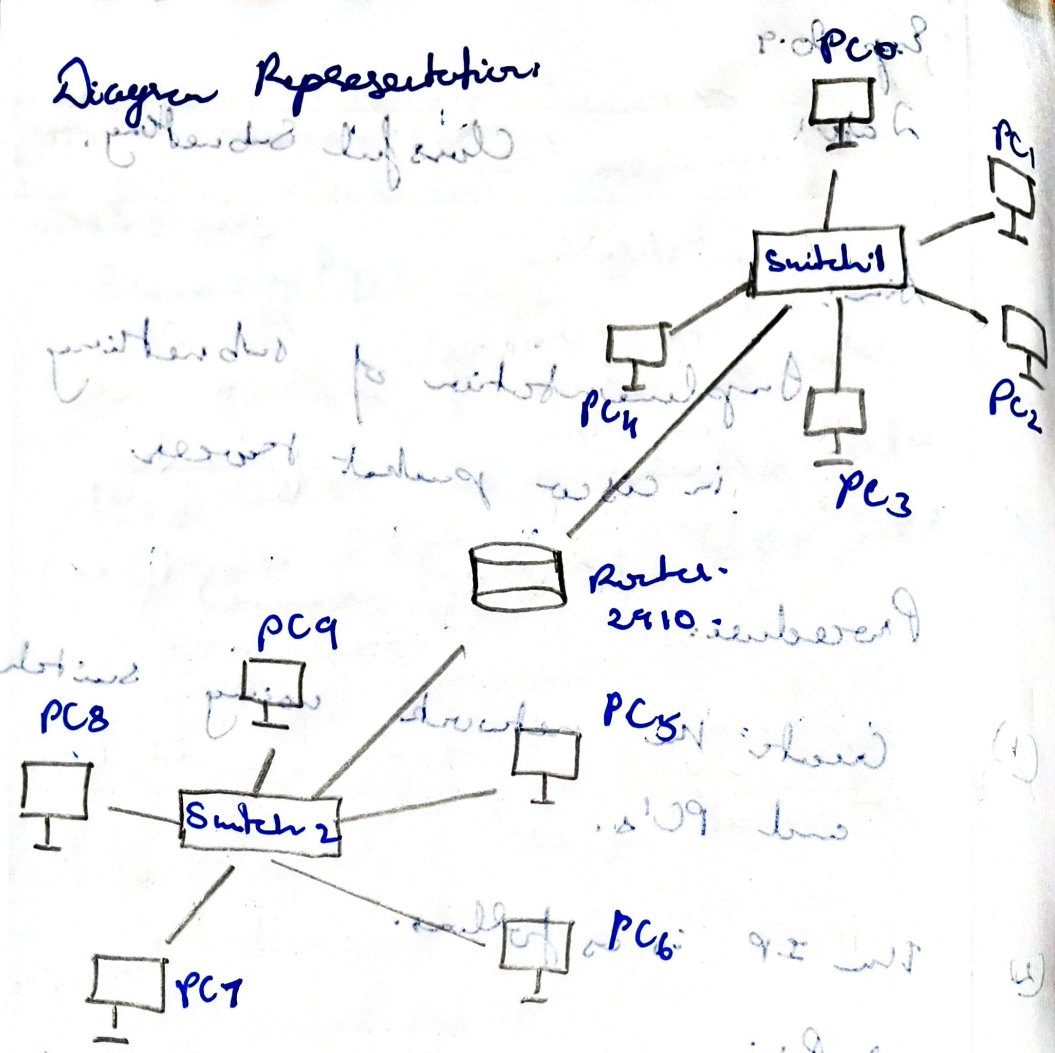
Likewise assign the IP's for all the PC's.

but not the switch.

(3) Gateway of switch S1 = 192.168.1.1
i.e. gigabit ethernet 0/0

(4) Gateway of switch S2 = 192.168.2.1
i.e. gigabit ethernet 0/1

Diagram Representation:



Output:

Sender: PC1 ; **Receiver:** PC7

Simulation:

Time	Last Device	
0.006	PC1	
0.008	Switch S_1	
0.0010	Router	
0.0101	Switch S_2	
⋮	⋮	

Last Status:

Successful

Destination:

PC 8

Source:

PC 2

Type:

ICMP

Color:

Time:

0.000

Periodic:

N

Num:

0

Student Observation:

Write down your understanding of subnetting.

=> It is the process of dividing a large IP address network

and manageable section called subnets.

(b) Ans:

Advantages:

(*) Efficient IP management based on requirement.

(*) Reduce network configuration limit broadcast traffic to individual subnets.

Results:

The subnetting is done successfully and verified.