Exp 9 classfull Subnetting

Aim
Implementation of Subnetting on Cisco Packet Tracer Simulator

Procedure:
1) Create the network using switches routers and PCs
2) The ip address will be as follows

→ Router R1
GigabitEthernet 0/0: 192.16.8.1.1
GigabitEthernet 0/1: 192:168.2.1

Switch S1
x no ip

Also enable the 'on' option for both gig ethernet on the page

PC0:
IPaddress: 192.168.1.1,
Gateway: 192.168.1.1

PC4:
IP: 192.168.1.12
Default

PC2
IP: 192.168.1.13

PC3:
IP: 192.168.14

PC4 :

Ip : 192.168.1.15

Gateway : 19.169.1.1

Switch S2

No Ip

Lan-2

PC5

ipaddress : 192.168.2.11

ip gateway default

PC6

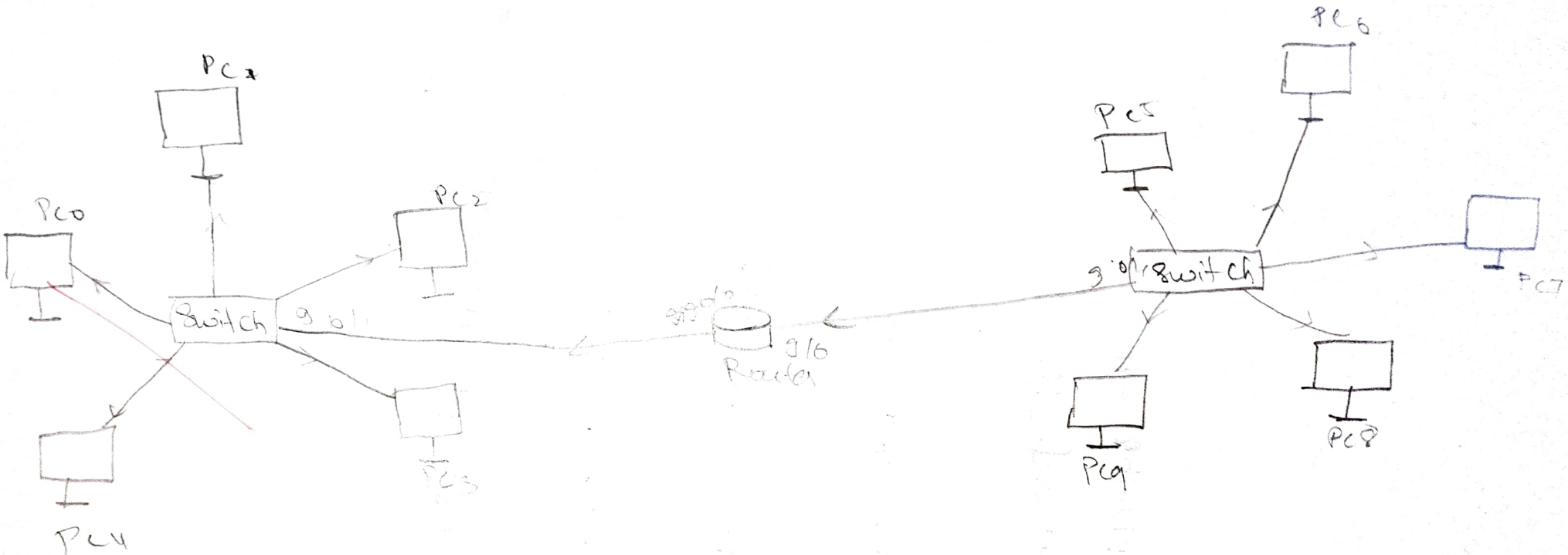
ipaddress : 192.168.2.12

PC7

ipadress : 192.168.2.13

PC8 ipaddress : 192.168.2.14

PC9 ipaddress : 192.168.2.15


PC1
PC0
PC2
Switch
PC3
PC4
9/6
Router
PC6
PC5
Switch
PC7
PC8
PC9

Output

Now Lets assume the Sender is PC1 and receiver is PC7

While Simulating & observing we get the Simulation Pannel

Simulation pannel
event list
Vis

	Time	Last device
	0.000	--
	0.003	PC1
	0.005	Switch2
	0.008	router1
	0.0010	Switch1
	0.018	PC9
	0.020	Switch2
	0.023	Switch1

Reset Simulation ⇨ Constant delay

Play Controls

|◁ ▷ ▷||

Fire	Last Status	Source	Destination	type	Color	Time	Predicted	Num
✱	Successful	PC1	PC9	ICMP	⊡	0.000	N	0

Ex Student observation

a) write down your understanding of Subnet

Ans:

Subnetting is the process of dividing a large IP network and management function called subnets each subnet acts as independent network & allows

b) Advantage of implementing Subnetting with a network

Ans

efficient IP management - based on requirement

Reduce network congestion - Limit broadcast

c) Subnetting in your college

Result:

The implementation of Subnetting in college has been done successfully