

EX: 09

Date: 21/9/24

Implementation of

Subnetting in

Cisco Packet Tracer.

Aim:

Implementation of subnetting
in Cisco Packet Tracer simulator.

Procedure:

1. Create the network using Router, Switches & PCs
2. Configure IP address on PCs as follow:

Router R1:

Gigabit 0/0 : 192.168.1.1

Gigabit 0/1 : 192.168.2.1

[Enable 'on' option for both Gigabit
Ethernet 7.]

Switch S1:

Fast Ethernet 0/1 : 192.168.1.0

PC0 : 192.168.1.11

PC1 : 192.168.1.12

PC2 : 192.168.1.13

PC3 : 192.168.1.14

PC4 : 192.168.1.15

Implementation of Subnetting in Cisco Packet Tracer.

ation of subnetting
traces simulator.

the network using
& PCs

IP address on

0 : 192.168.1.1
1 : 192.168.2.1

for both gigabit

: 192.168.1.0

1.11

1.12

1.13

1.14

1.15

Fast Ethernet 0/2 : 192.168.2.0

PC5 : 192.168.2.11

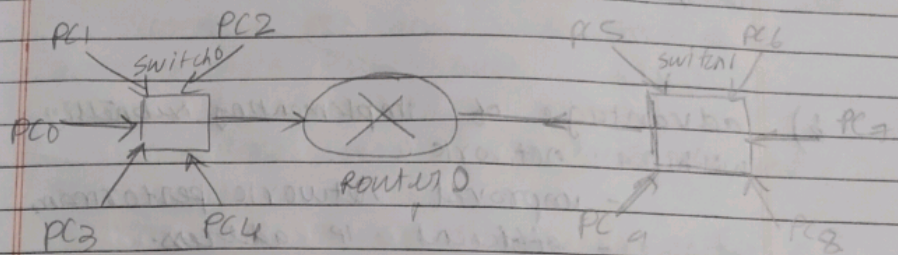
PC6 : 192.168.2.12

PC7 : 192.168.2.13

PC8 : 192.168.2.14

PC9 : 192.168.2.15

Diagrammatic Representation:



Let us assume PC0 is sender and
PC7 is receiver.

Output:

File	status	Src	Dst	Type	Time	Packet Num
0	successful	PC0	PC7	ICMP	0.000	N 0

Student observation:

a) write down your understanding of subnetting

- Subnetting is the process of dividing a large network into smaller network called as 'Subnets'.
- Subnet is like smaller group within large network.

b) advantage of implementing subnetting within network:

- improved network performance.
- efficient IP address utilization.
- Enhanced security.
- simplified network management.
- Reduced collision domains.

Result:

Implementation of subnetting is successfully implemented & the dp is verified.

10 a)

Date: 25/4/2

Aim:

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routers in

Procedure:

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Diagramm

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