Experiment-5.

Aim : Configue DHCP within LAN and outside
LAN

Topology :

Switch

Fa0   Fa3))

Fa0)   Fa2))
Fa1)

Server-PT
Server-0
10.0.0.1   Fa0   Fa0   Fa0

PC0   PC1   Laptop0

10.0.0.2   10.0.0.3   10.0.0.4
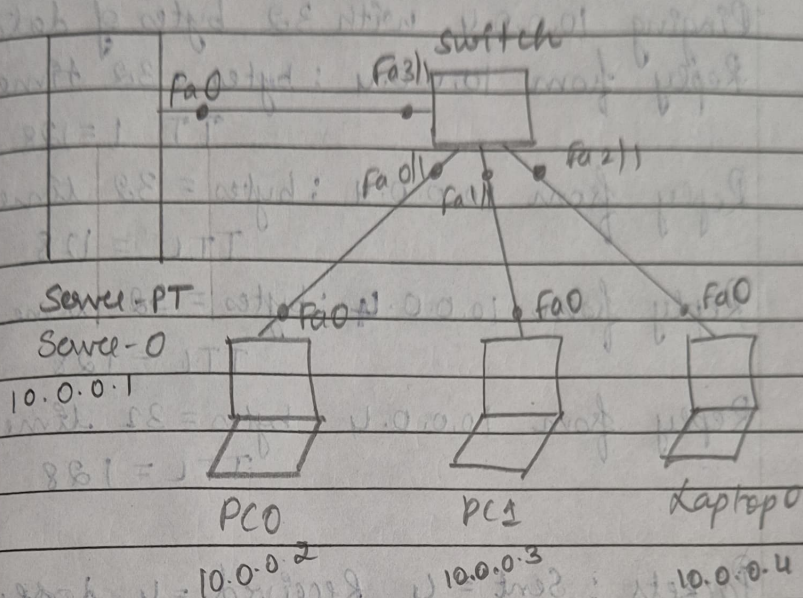
Procedure :

I Select generic server-PT

II Select generic PC0, PC9, Laptop-PT Laptop0,
~~18 Switches~~, ~~Laptop 1, Laptop2, Laptop 3 and~~
~~a router 0~~

III All are connected used Automatically choose
Connection Type

IV Click on server - PT and give the
IP address : 10.0.0.1
Subnet Mask : 255.0.0.0
Default Gateway : 10.0.0.0

V Select DHCP and set service as on. Set the
pool Name as switch one, default gateway
as 10.0.0.0, maximum number of uses as 100
and start IP address as 10.0.0.3. Click
Add.

VI Click on each PC, navigate to IP configuration and select DHCP.

VII Ping from one device to another

Observation :-

Pinging 10.0.0.4 with 32 bytes of data
Reply from 10.0.0.4 : bytes = 32 time = 1ms
$\qquad$ TTL = 128

Reply from 10.0.0.4 : bytes = 32 time = 0ms
$\qquad$ TTL = 128

Reply from 10.0.0.4 : bytes = 32 time = 0ms
$\qquad$ TTL = 128

Reply from 10.0.0.4 : bytes = 32 time = 0ms
$\qquad$ TTL = 128

Packets : Sent = 4, Received = 4, loss = 0 (0%)

Procedure :-

I Select server, set IP Address as 10.0.0.2, default gateway as 10.0.0.0, DNS server as 0.0.0.0.

II Navigate to config, select DHCP, modify default gateway as 10.0.0.1, start IP address as 10.0.0.0 (switch 1)

III Name a new pool as switch two, Set start IP as 20.0.0.3, default gateway as 20.0.0.1 Maximum number of user as 100 Set gateway in setting as 10.0.0.1

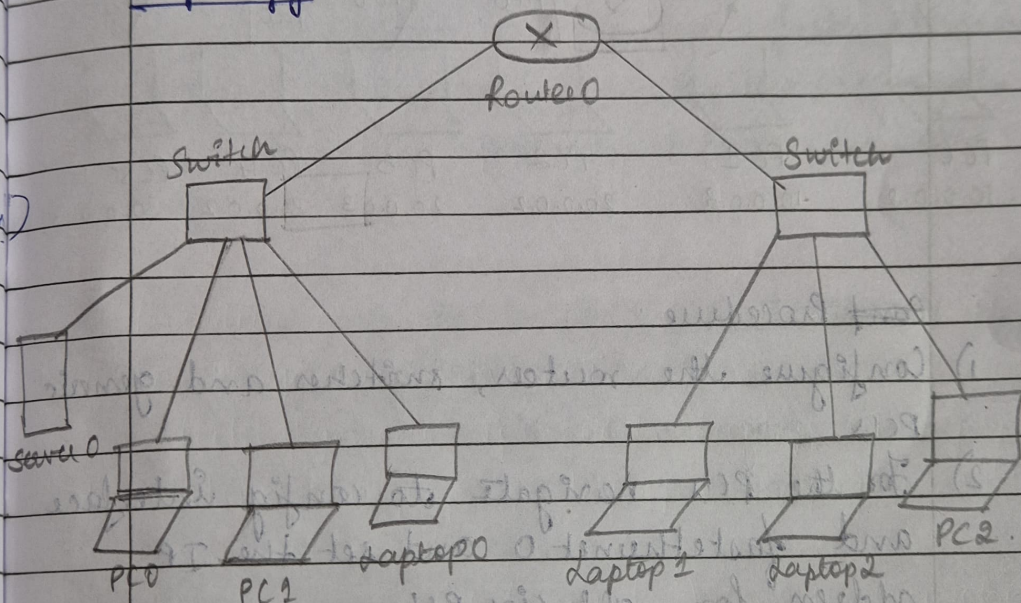**IV** Select router, navigate to CLI and enter the following commands.
no

enable

config terminal

interface fastethernet u/0

ip address 10.0.0.1 255.0.0.0

ip helper address 10.0.0.2

no shutdown

exit

Repeat the same

Observation

The IP address is set for /all/ exhd.

Topology

Observation

The IP address is set for all end devices.

20/11/24