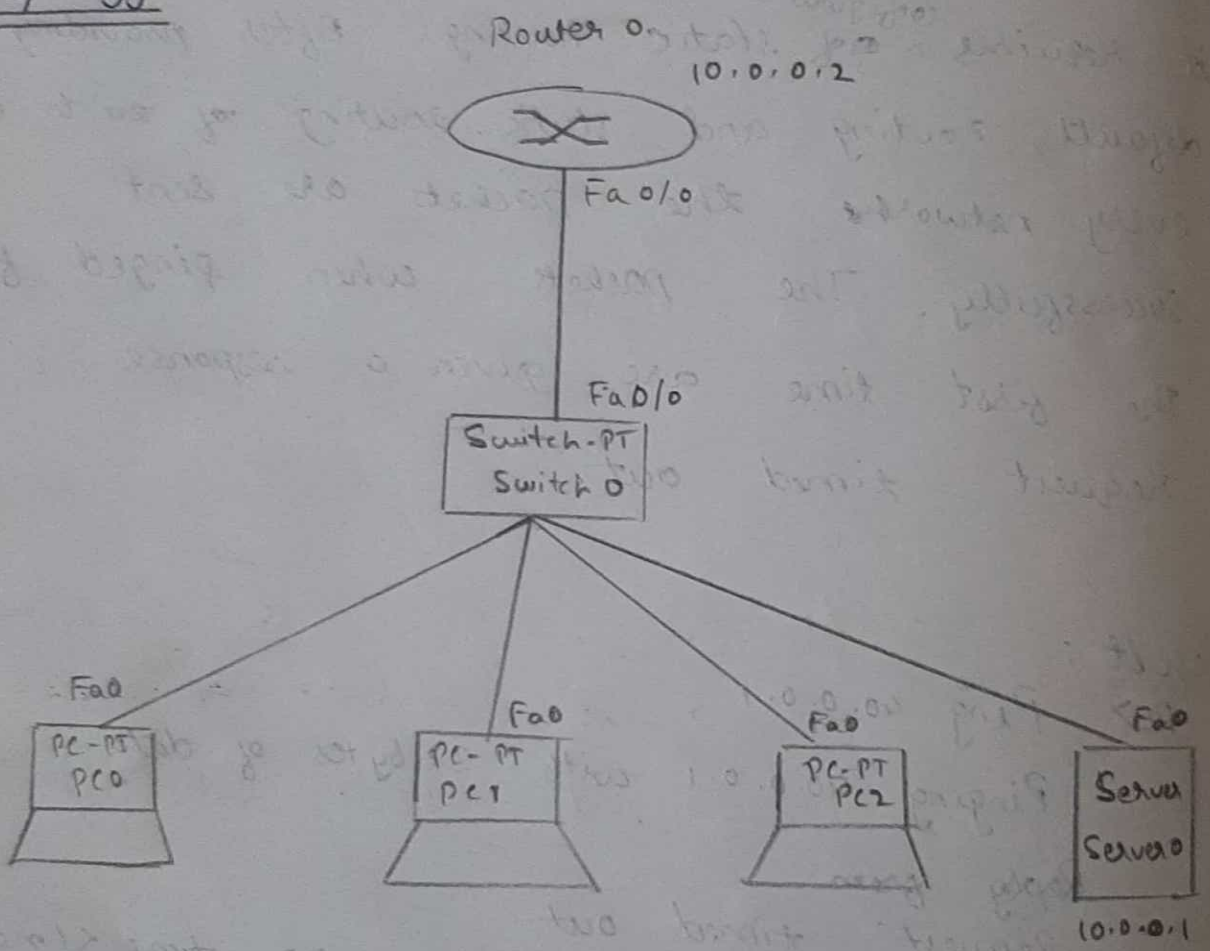
6/12/22

Lab 4

DHCP

Aim: Configuring DHCP within LAN in a Packet tracer

Topology:



Procedure:

- Add 3 PC's, 1 server, 1 switch and 1 router to workspace. Connect PC, server to switch by using copper straight-through wire.
- Configure the server by giving the IP address and gateway.
- Now go to router and open CLI and follow the commands

```
Router > enable
Router # config t
Router (config) # interface FastEthernet 1/0
Router (config-if) # ip address 10.0.0.2 255.0.0.0
Router (config-if) # no shut
Router (config-if) # exit
Router (config) # exit
Router # exit
Router >
```

- Now go to services in server 0 and go to DHCP. Change service from off to on. Now give start IP address 10.0.0.3 and give all servers as 10.0.0.1
- Now open IP configuration in desktop change IP configuration from static to DHCP. Follow the same for all other PC's
- Now ping can be performed.

Learning Outcome:

Server automatically provides IP address for all the PC's Follows below procedure

D - Discover
O - Offer
R - Request
A - Acknowledgement

Result: Ping 10.0.0.5

Pinging 10.0.0.5 with 32 bytes of data

Reply from 10.0.0.5 : bytes = 32 time = 0ms TTL = 12
Reply from 10.0.0.5 : bytes = 32 time = 0ms TTL = 12
Reply from 10.0.0.5 : bytes = 32 time = 0ms TTL = 12
Reply from 10.0.0.5 : bytes = 32 time = 0ms TTL = 12

Ping Statistics for 10.0.0.5

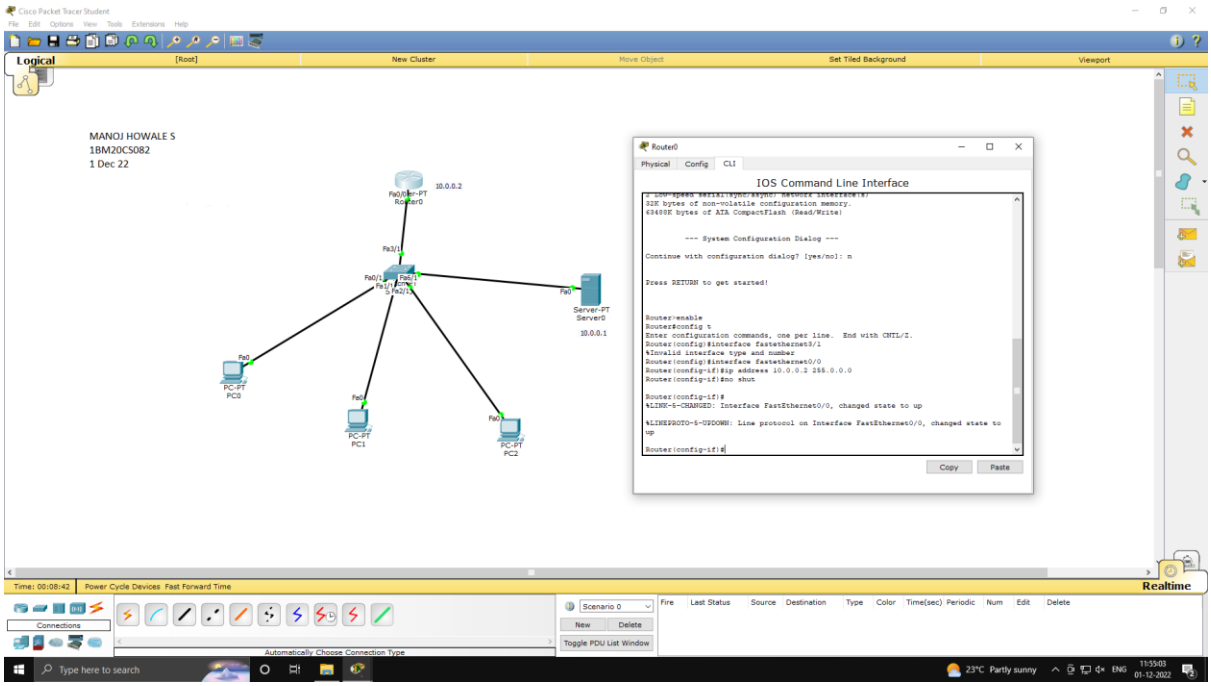
Packets : Sent = 4 , Received = 4, Lost = 0 (0% loss)

Approximate round trip time in milliseconds :

Minimum = 0 ms , Maximum = 0 ms , Average = 0ms

8/12/22

DHCP CLI



DHCP SIMULATION