AIM :- Configuring DHCP within a LAN in a packet tracer.

Topology :-

router 0

10.0.0.2   Fa 4/0

fa 4/1

switch

fa 0/1   fa 3/1

fa 1/1

fa 2/1

Fa 0   Fa 0   Fa 0

PC0   PC1   PC2   server
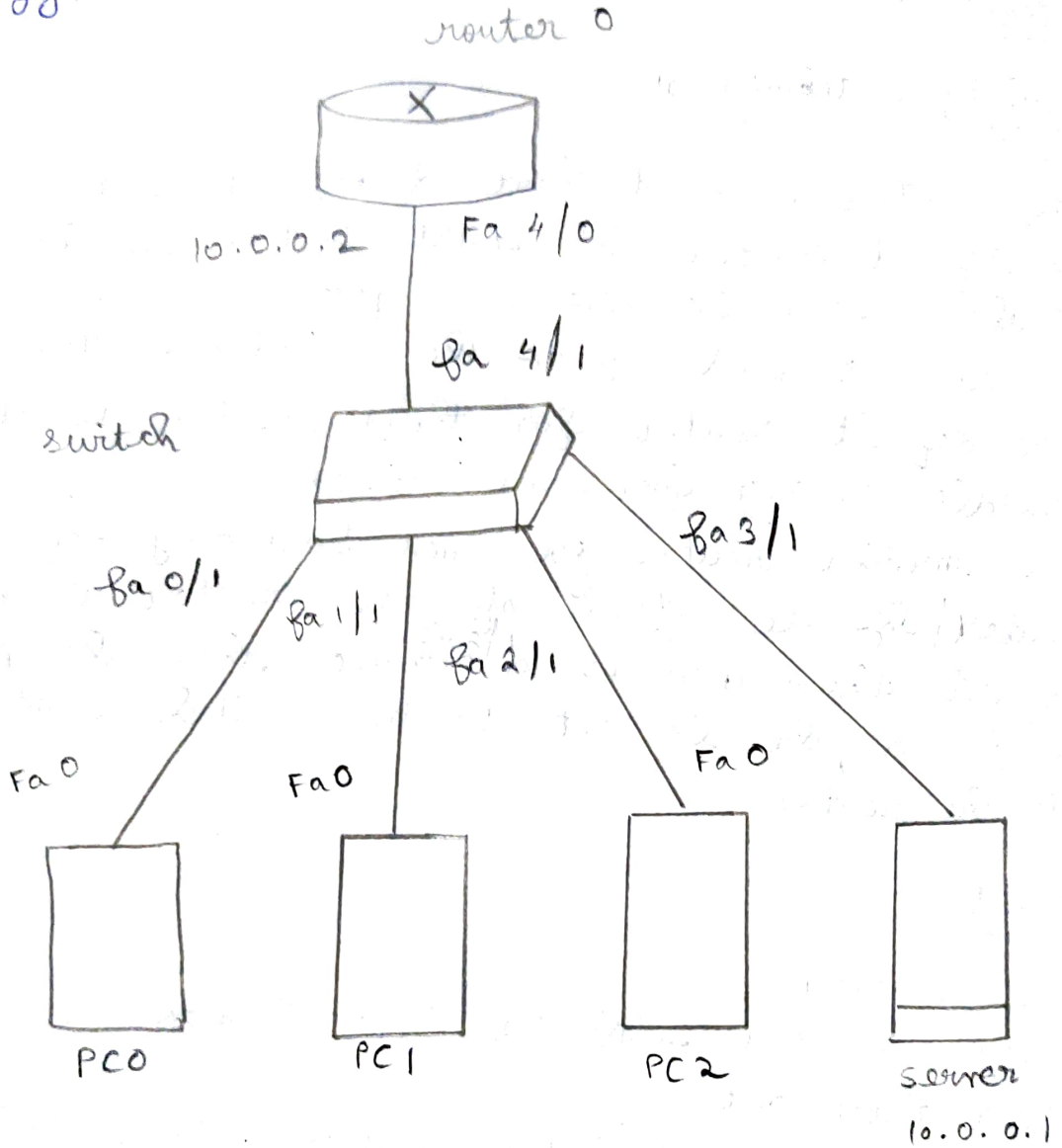
10.0.0.1

Procedure :-

* Place 3 PC's , one router , one generic switch, one server and connect everything with copper straight wire.

* Place note 10.0.0.2 for router indicating gateway and 10.0.0.1 for server indicating its IP address.

* Interface the corresponding fastethernet interface for router using CLI :-
→ enable
→ config t
→ interface fastethernet 3/0
→ ip address 10.0.0.2 255 0.0.0
→ no shut

* Now configure server by clicking services tab in server :
→ set default gateway
→ set DNS server
→ set starting IP address as 10.0.0.3
→ Max . no of users is 8
→ TFTP server as 10.0.0.1
→ Then click on save.

* Then click on PCO, go to desktop , click on IP configuration and you click on DHCP.

Observations :-
When we select DHCP mode , it automatically fetches , gateway from server for which we had configured already.

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 = 1ms   TTL = 128
Reply from 10.0.0.5 , bytes = 32   time = 0ms   TTL = 08
Reply from 10.0.0.5 , bytes = 32   time = 0ms   TTL = 12
Reply from 10.0.0.5 , bytes = 32   time = 0ms   TTL = 128

ping statistics for 10.0.0.5 :-
    packets sent = 4 , Received = 4 , Loss = 0 (0% loss)

8/12/22