PRACTICAL NO: 4

AIM: Configure DHCP server and client for DHCP service

Steps to perform practical:

Step 1 : Add router, switch and end user clients to the switches.
Step 2 : Connect all the devices with straight through cable.
Step 3 : Give IP to each port of router
   enable
   configure terminal
   interface gig0/0/0
   ip address 192.168.10.1 255.255.255.0
   no shutdown
   exit
Step 4 : Apply DHCP to the router
   configure terminal
   ip dhcp pool pool_name
   network 192.168.10.0 255.255.255.0
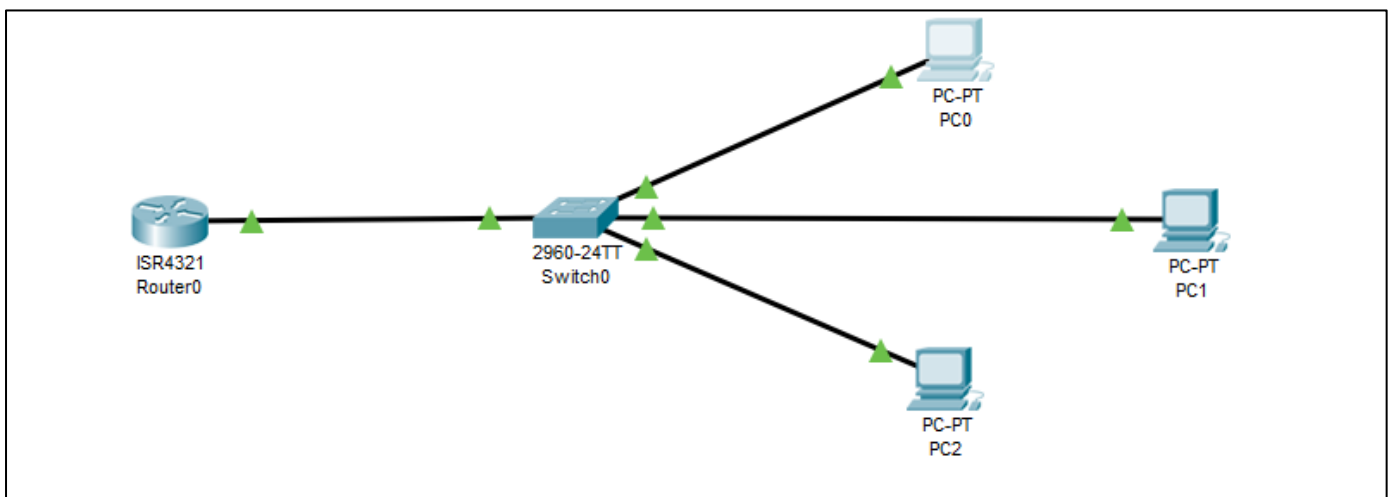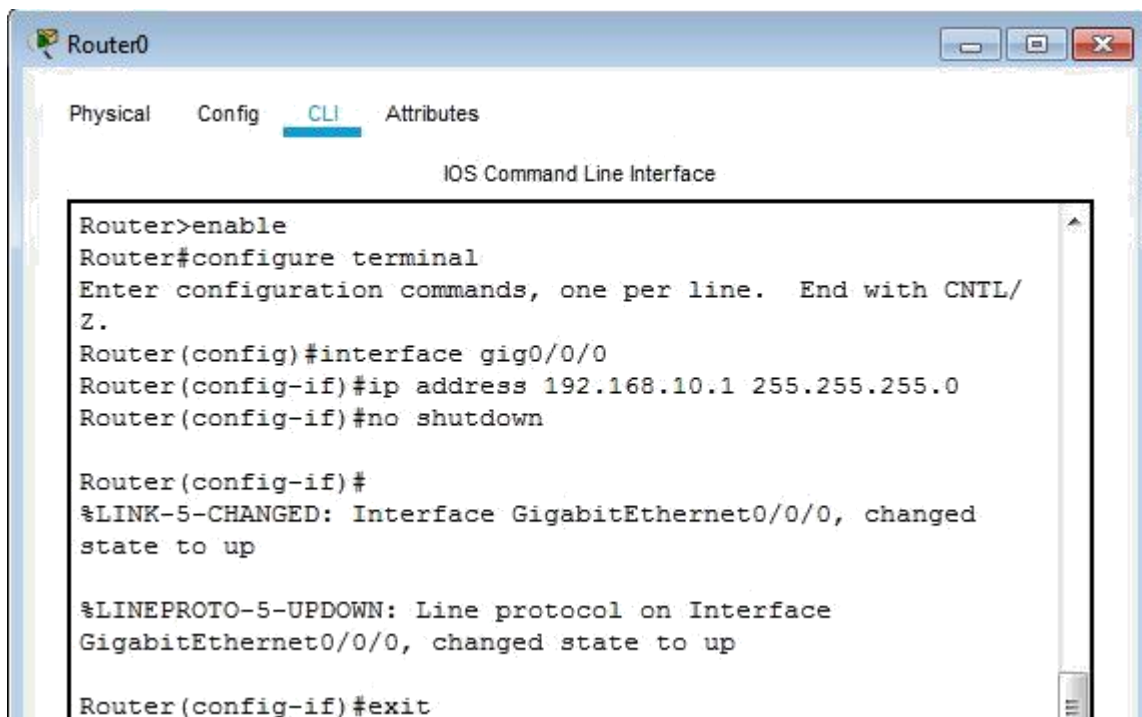   default-router 192.168.10.1
   exit
   ip dhcp excluded-address 192.168.10.2 192.168.10.10 exit
Step 5 : Show DHCP ip address to each end user clients.
   System > Desktop tab > ip configuration > select dhcp.
   DHCP automatically assign ip address to each client.
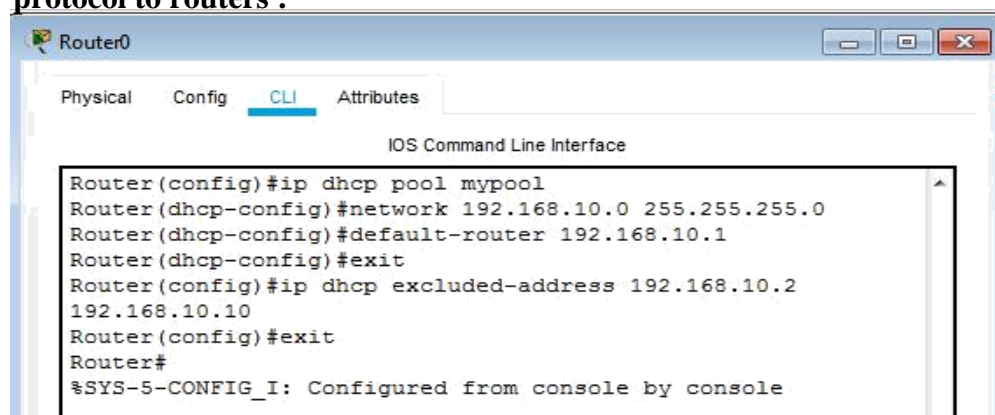
NETWORK TOPOLOGY:

Advanced Networking Concepts

i) Router Configuration:-
Set IP addresses to routers:-

ii)End User Client Configuration :
a)Set Gateway to end user client:
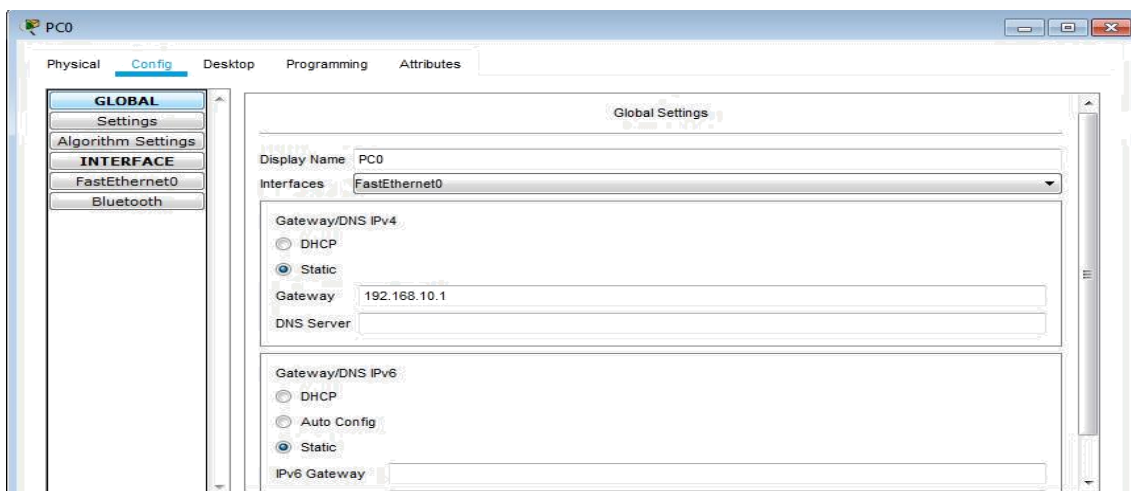
Set Gateways to all remaining end user client.

Set DHCP protocol to routers :

Advanced Networking Concepts

Show DHCP ip address to each end user clients.
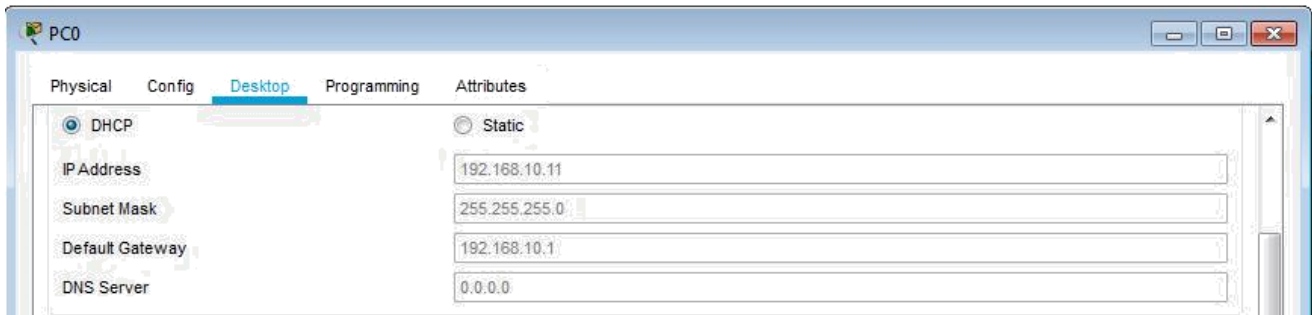
Show DHCP ip address to all remaining end user clients as shown above.

FINAL TOPOLOGY:
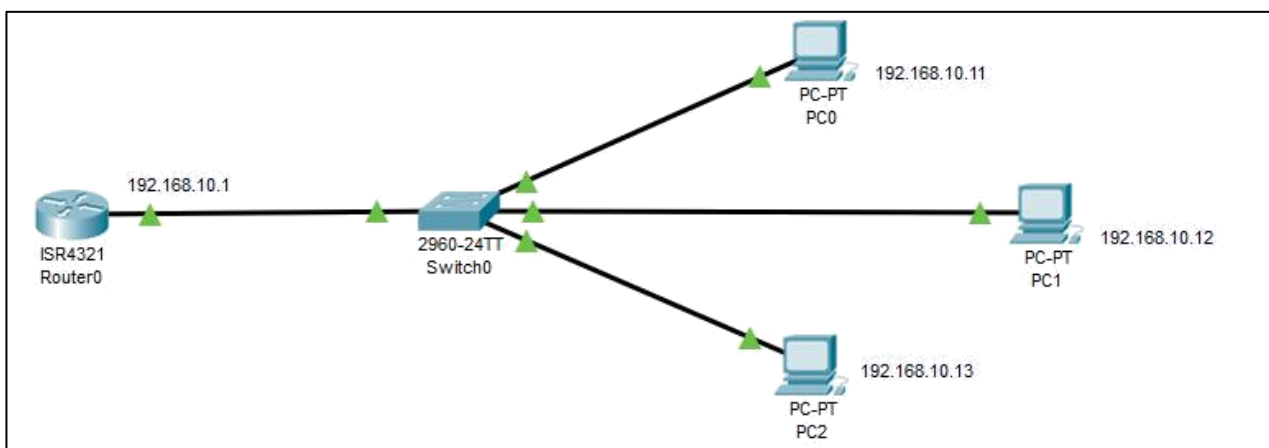
Conclusion:- We have learnt to create DHCP server with client service as shown above.