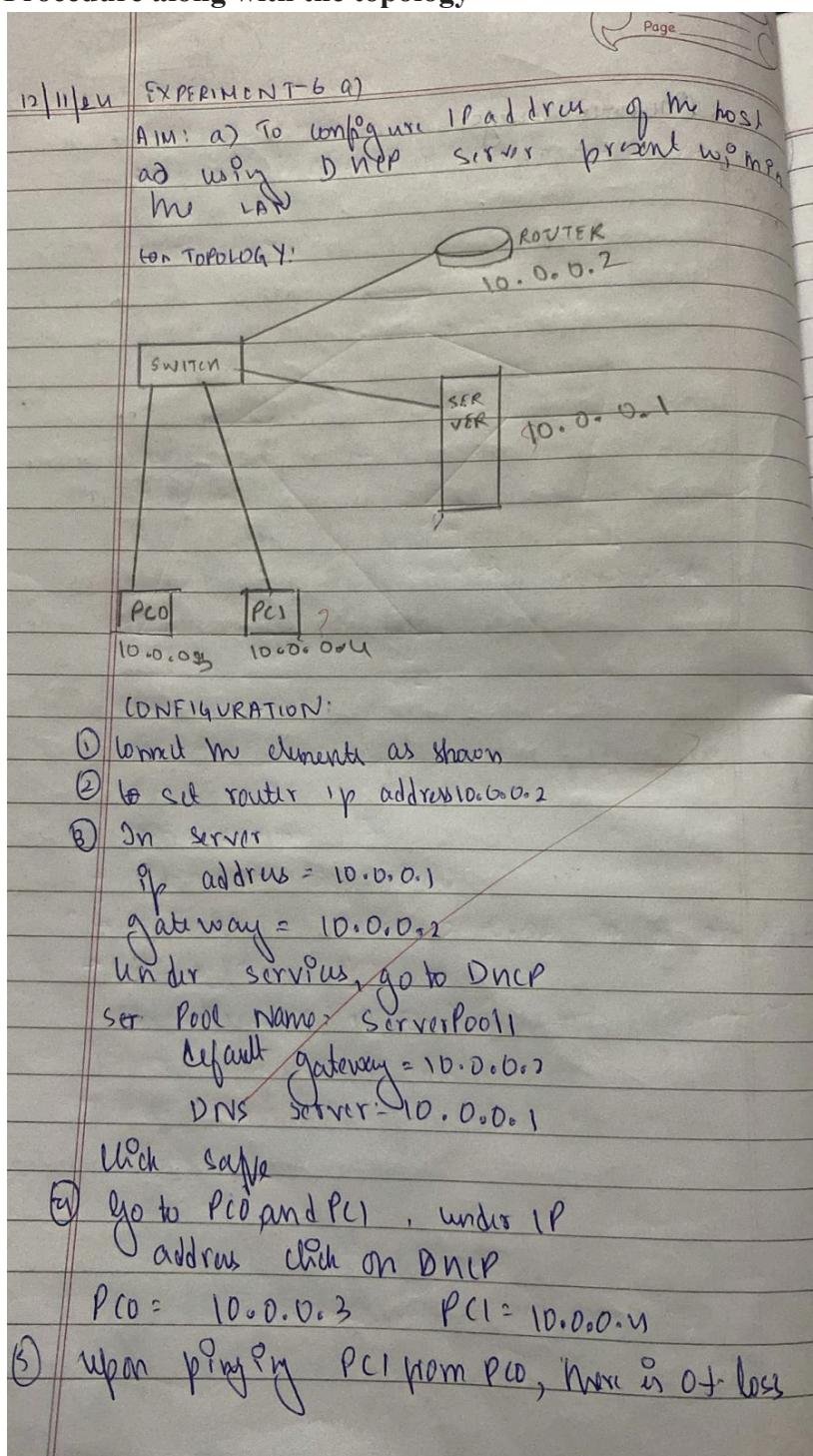


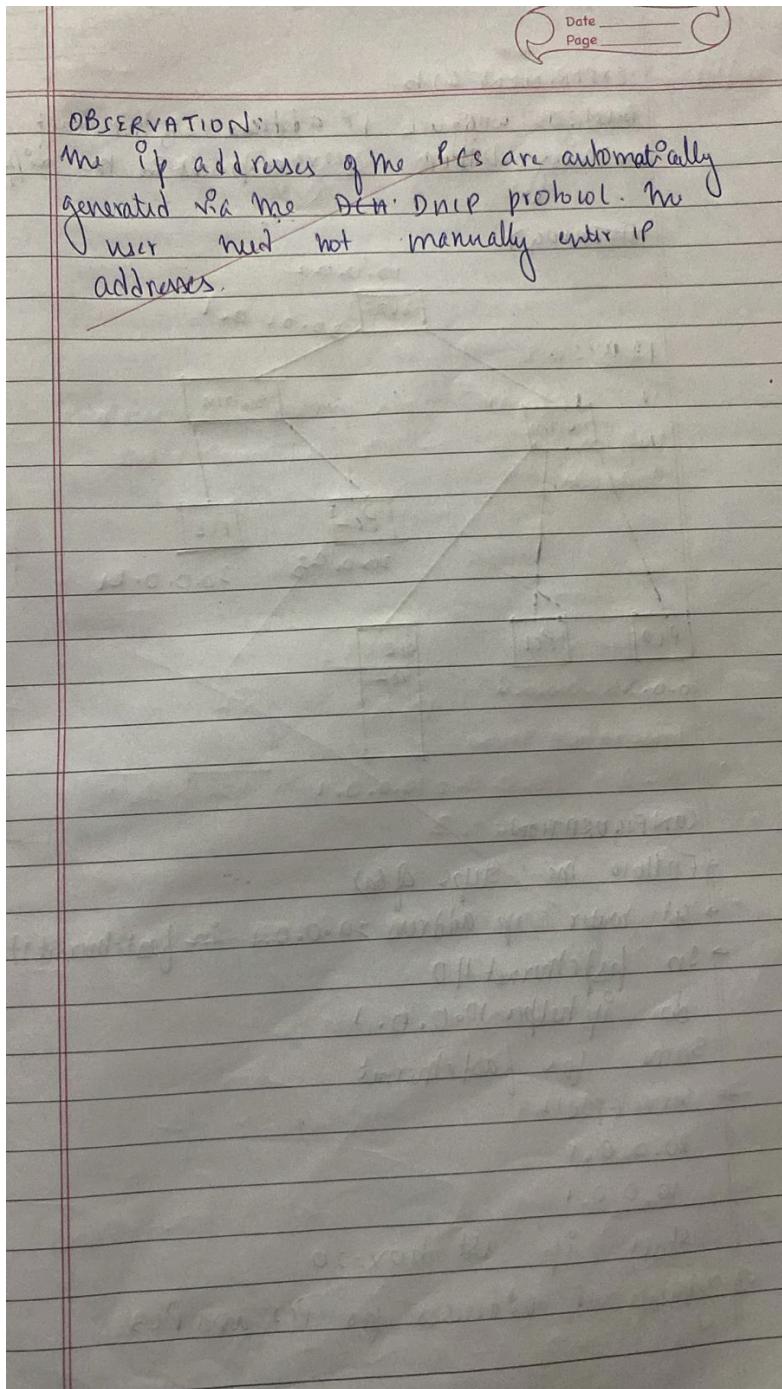
Program6

(a)

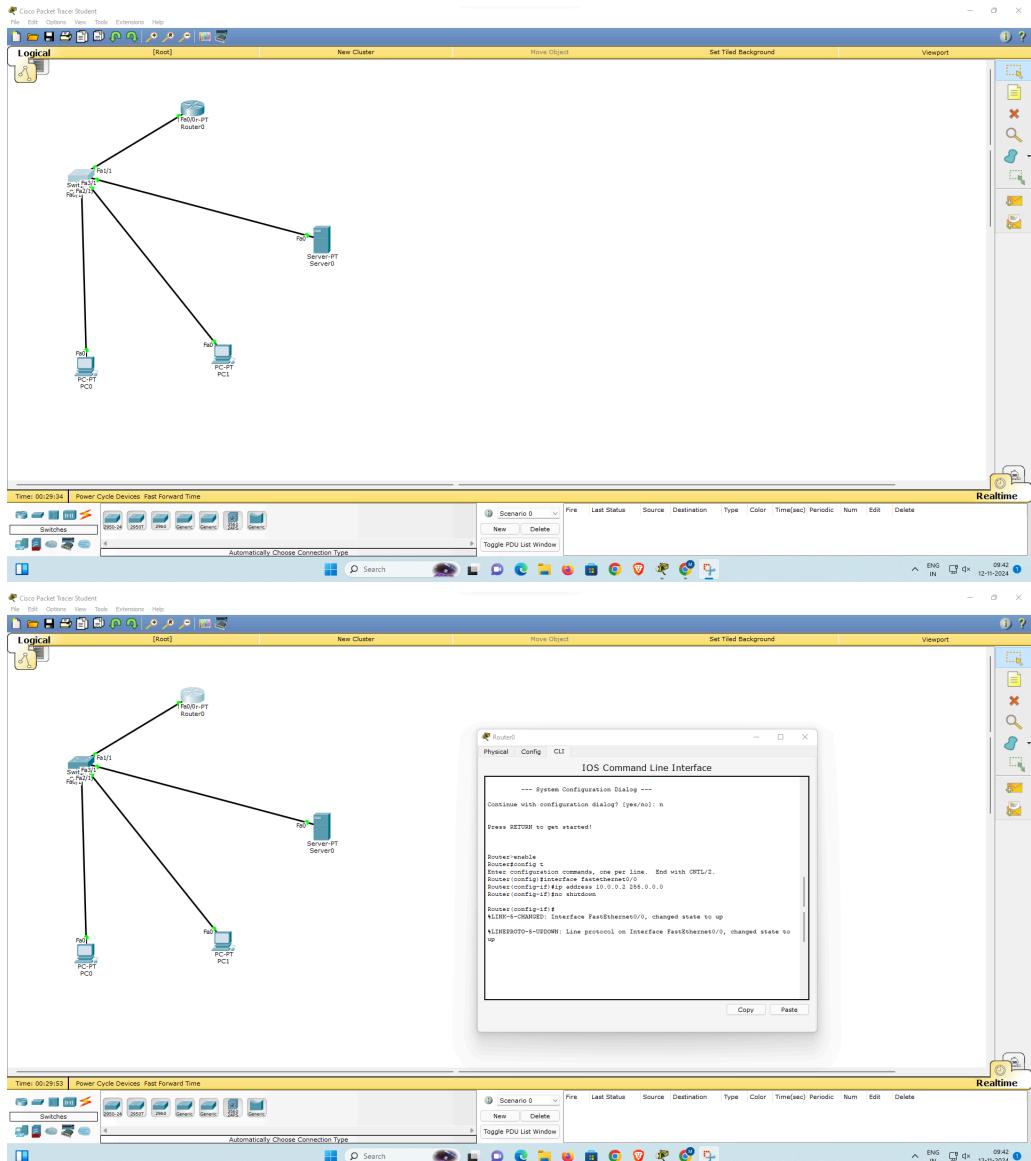
Aim: To configure ip addresses of the host using DHCP server present within the LAN

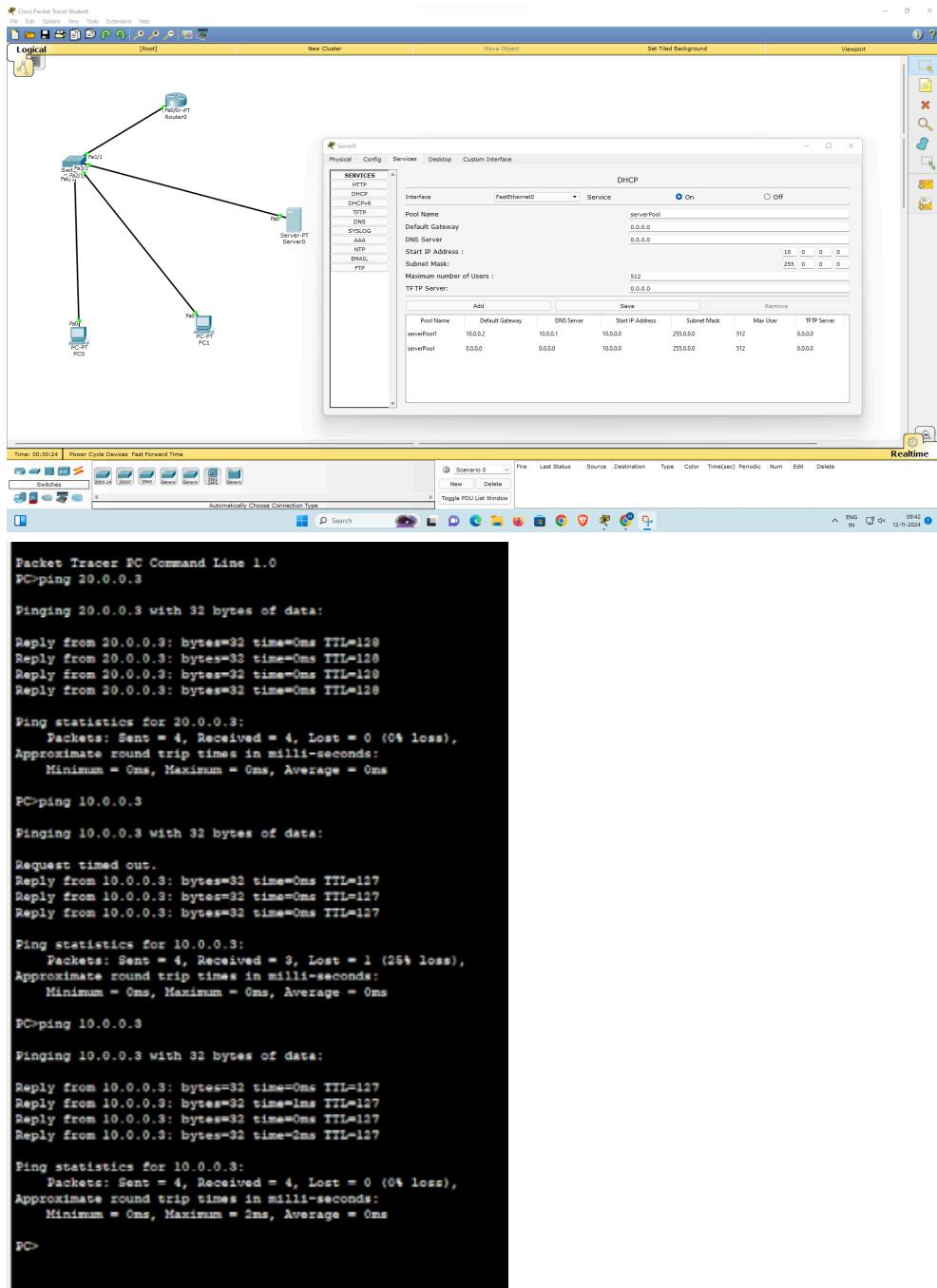
Procedure along with the topology





Screen shots/ output





Observation

OBSERVATION:

The IP addresses of the PCs are automatically generated via the DHCP protocol. We never need to manually enter IP addresses.

Program 6

b)

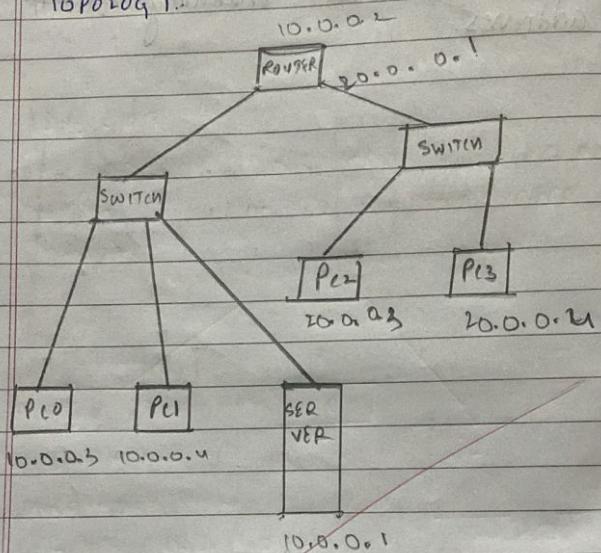
Aim of the program: Configure IP address of the host using DHCP server present in different LANS

Procedure along with the topology:

EXPERIMENT 6(b)

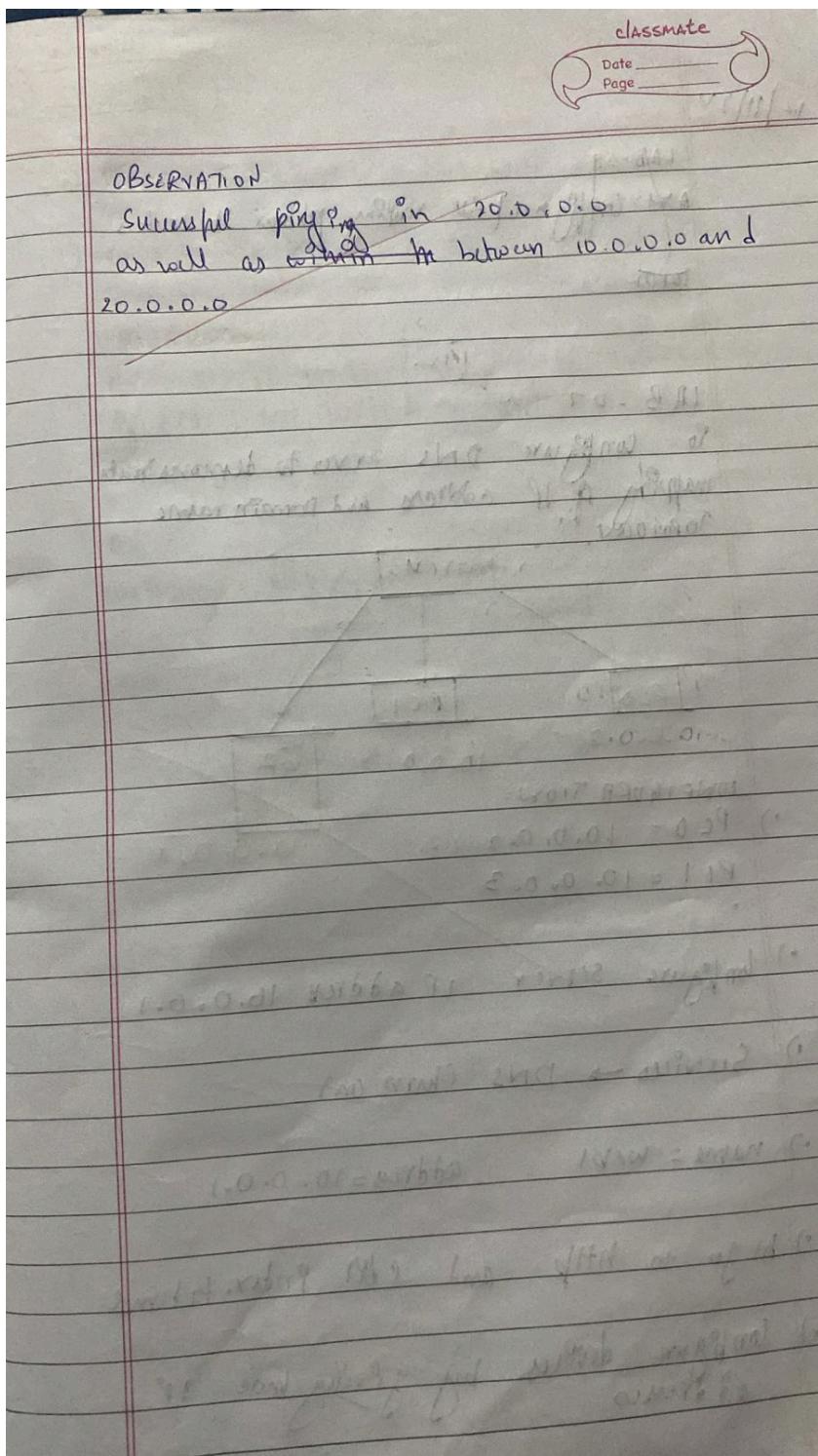
AIM: To configure IP address of the host using DHCP server present in the different

TOPOLOGY:

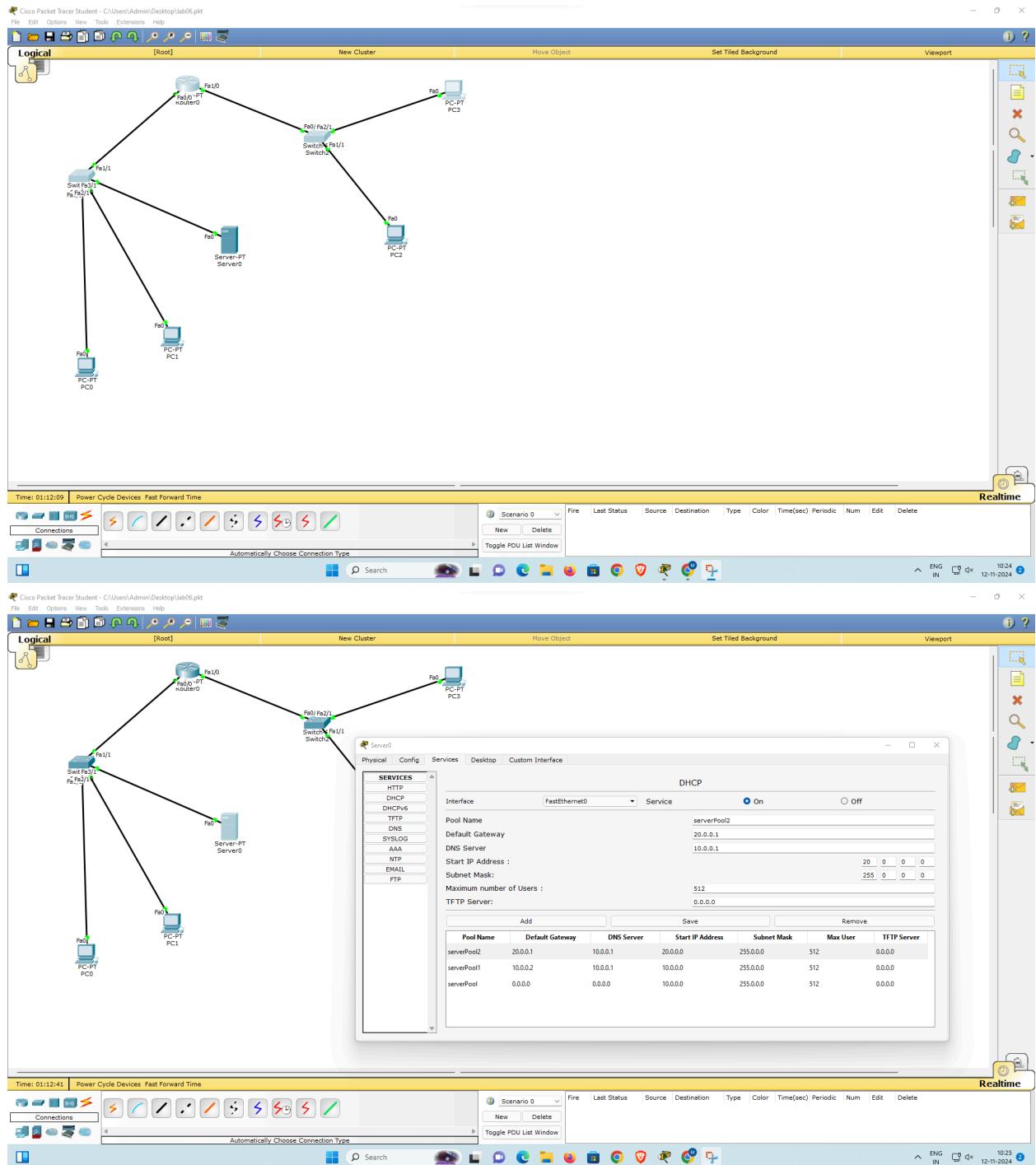


CONFIGURATION:

- Follow the steps of 6a)
- Set Router IP address 20.0.0.1 in fastEthernet1/0
- In fastEthernet1/0
 - do ip helper 10.0.0.1
- Same for fastEthernet
- Server pool12
 - 20.0.0.1
 - 10.0.0.1
 - Start IP 1st box=20
- generate IP addresses for PC2 and PC3



Screen shots/ output



Router0 Physical Config CLI

IOS Command Line Interface

```
Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet1/0
Router(config-if)#ip address 20.0.0.1 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#LINE=FastEthernet1/0
Interface FastEthernet1/0, changed state to up
*LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
*LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to down
*LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
*LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to down
*LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up

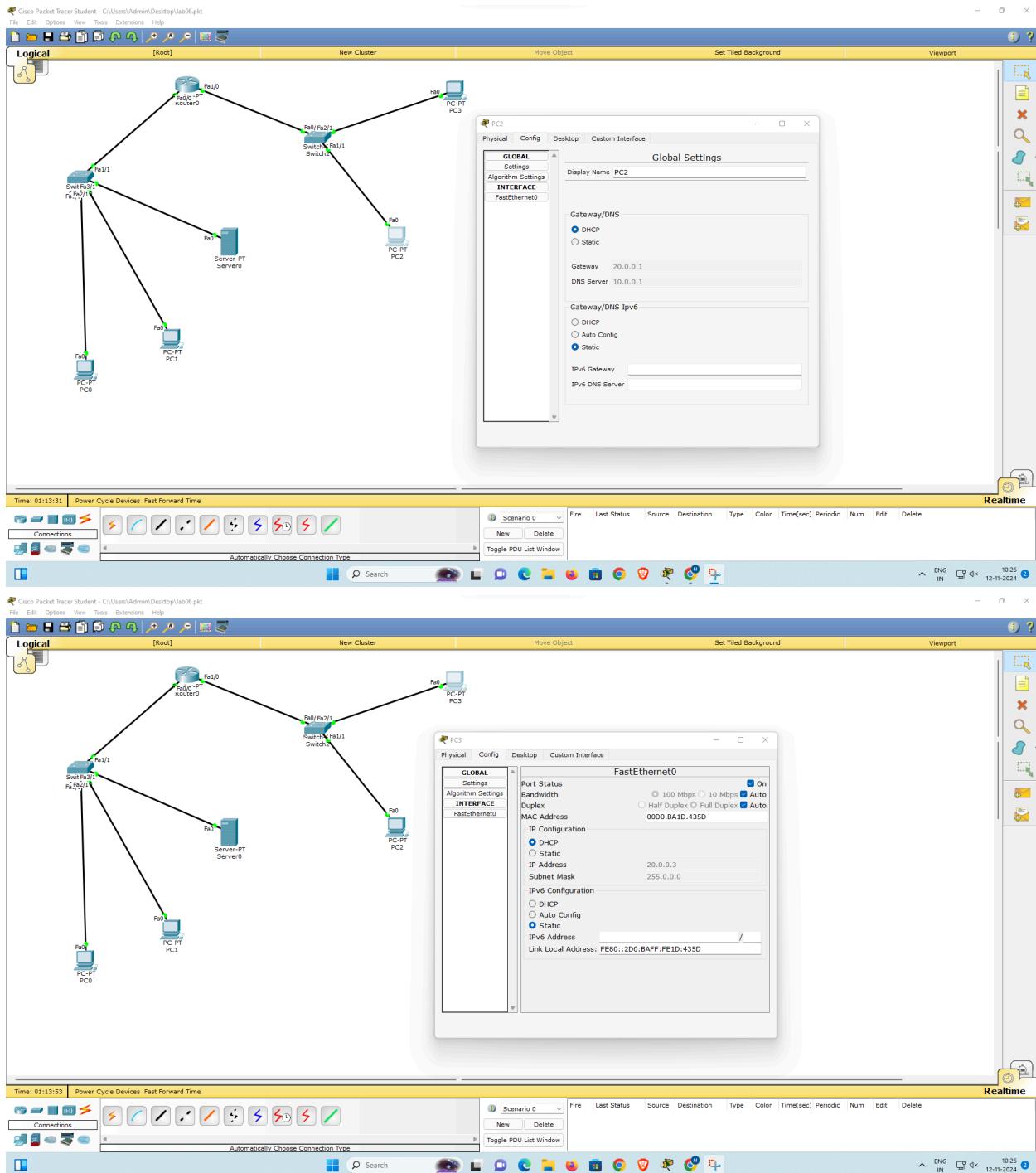
Router(config-if)#ip helper 10.0.0.1
Router(config-if)#exit
Router#config t
Interface fastethernet0/0
Router(config-if)#ip helper 10.0.0.1
Router(config-if)#exit
Router#config r

Router con0 is now available

Press RETURN to get started.
```

Copy Paste

ENG IN 10:25 12-11-2024



```

PC>ping 20.0.0.3
Pinging 20.0.0.3 with 32 bytes of data:
Reply from 20.0.0.3: bytes=32 time=0ms TTL=128

Ping statistics for 20.0.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 10.0.0.3
Pinging 10.0.0.3 with 32 bytes of data:
Request timed out.
Reply from 10.0.0.3: bytes=32 time=0ms TTL=127
Reply from 10.0.0.3: bytes=32 time=0ms TTL=127
Reply from 10.0.0.3: bytes=32 time=0ms TTL=127

Ping statistics for 10.0.0.3:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 10.0.0.3
Pinging 10.0.0.3 with 32 bytes of data:
Reply from 10.0.0.3: bytes=32 time=0ms TTL=127
Reply from 10.0.0.3: bytes=32 time=1ms TTL=127
Reply from 10.0.0.3: bytes=32 time=0ms TTL=127
Reply from 10.0.0.3: bytes=32 time=2ms TTL=127

Ping statistics for 10.0.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 0ms

```

Observation

