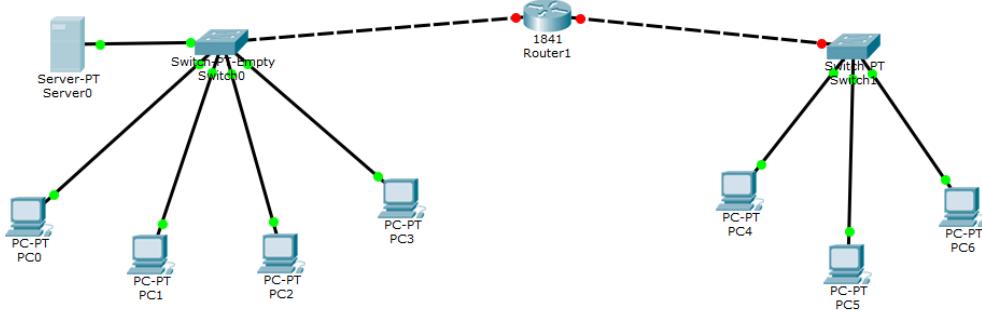


Program – 2:

Aim: Configure DHCP within a LAN and outside LAN.

Topology:



Procedure:

1. Configure DHCP Server

1. On the Server → **Desktop > IP Configuration**, set:
 - o **Static IP:** 192.168.10.2
 - o **Default Gateway:** 192.168.10.1
2. Open **Services > DHCP** and add the following two DHCP pools:

(a) Pool Name: switch1

- Gateway: 192.168.10.1
- Start IP: 192.168.10.3
- Subnet Mask: 255.255.255.0
- Max Users: 20

(b) Pool Name: switch2

- Gateway: 192.168.20.1
- Start IP: 192.168.20.2
- Subnet Mask: 255.255.255.0
- Max Users: 20

3. Turn **DHCP Service ON**.
4. Go to **Config > Interface > FastEthernet0** and assign server IP:
 - o IP Address: 192.168.10.10
 - o Port Status: ON

2. Configure Router

- i. Router > **enable**
- ii. Router# **configure terminal**
(Within LAN)
- iii. Router(config)# **int fa0/0**
- iv. Router(config-if)# **ip address 192.168.10.1 255.255.255.0**
- v. Router(config-if)# **ip helper-address 192.168.10.2**
- vi. Router(config-if)# **no shutdown**
- vii. Router(config-if)# **exit**
(Outside LAN)
- viii. Router(config)# **int fa0/1**
- ix. Router(config-if)# **ip address 192.168.20.1 255.255.255.0**
- x. Router(config-if)# **ip helper-address 192.168.10.2**

- xi. Router(config-if)# **no shutdown**
- xii. Router(config-if)# **exit**
- xiii. Router(config)# **exit**
- xiv. Router# **write memory**

Output:

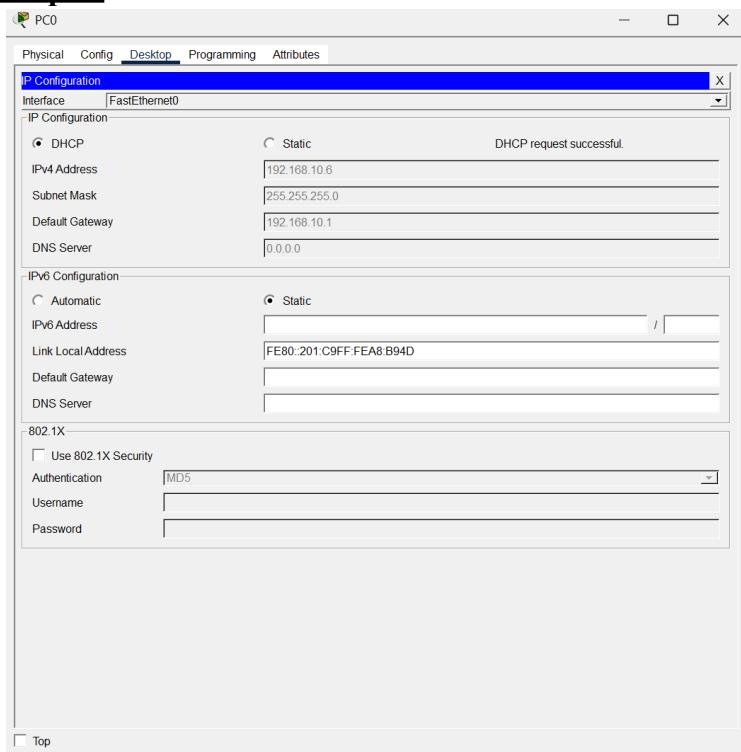


Fig 2.1 DHCP Inside LAN

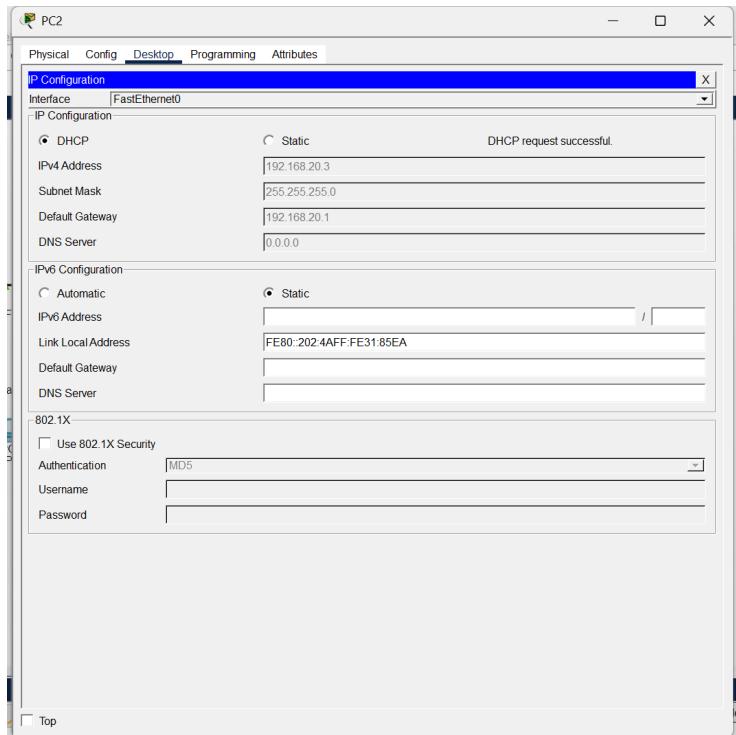


Fig 2.2 DHCP Outside LAN