COMPUTER NETWORKS LAB

LAB TASK # 05

Submitted By

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5A

Submitted To

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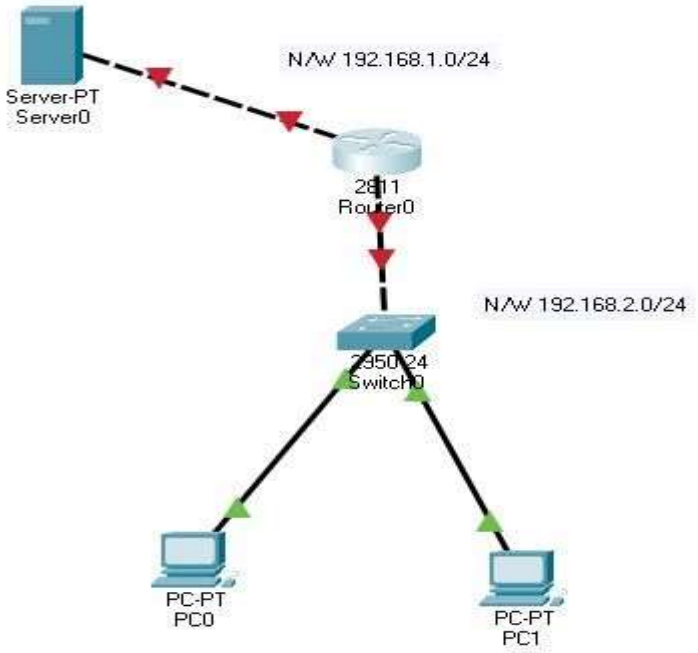
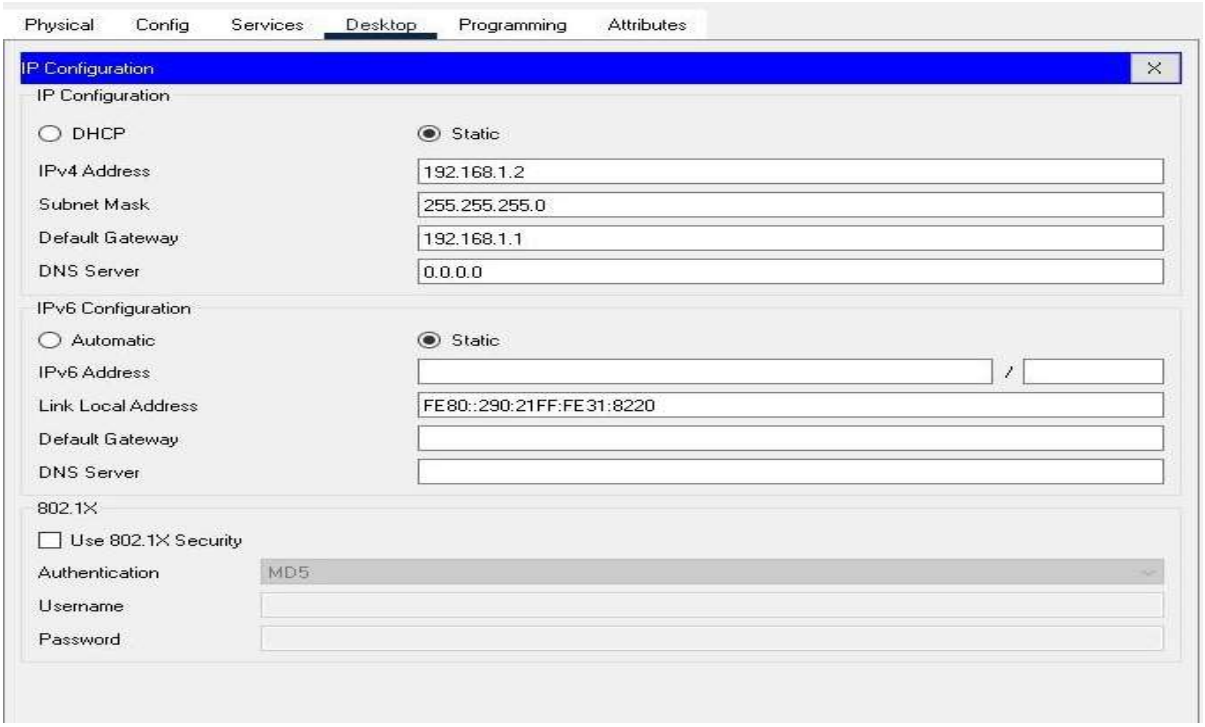
Task 1: Configuring an IP helper address:

1. Topology:

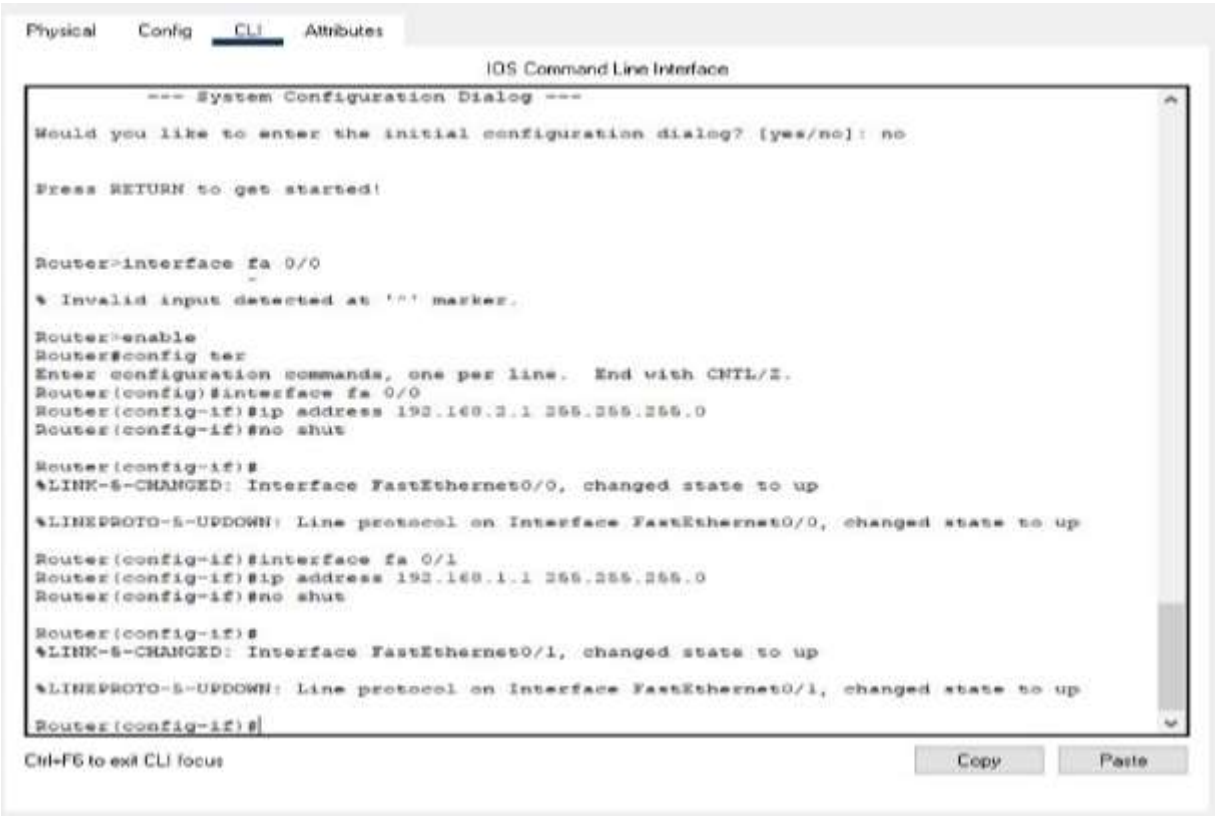


2. Assign a static IP address to the server.Server: IP address: 192.168.1.2

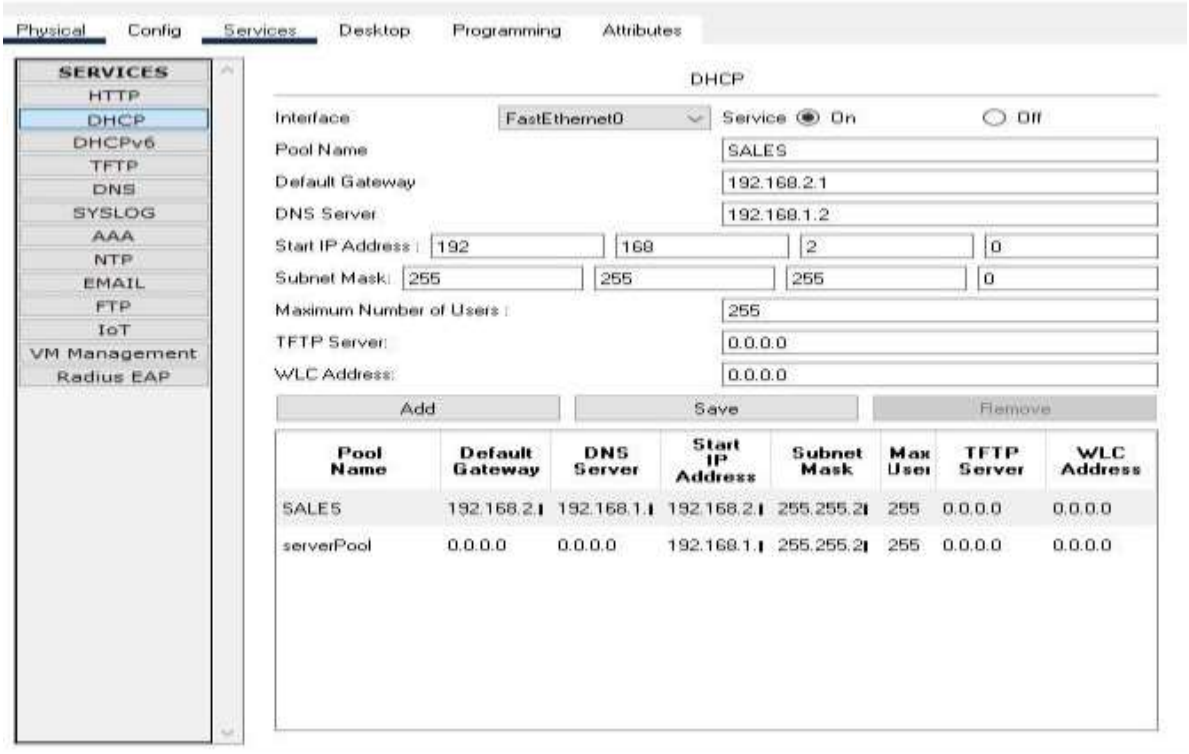
   Subnet mask: 255.255.255.0 Default gateway: 192.168.1.1



3. Router interface configurations:



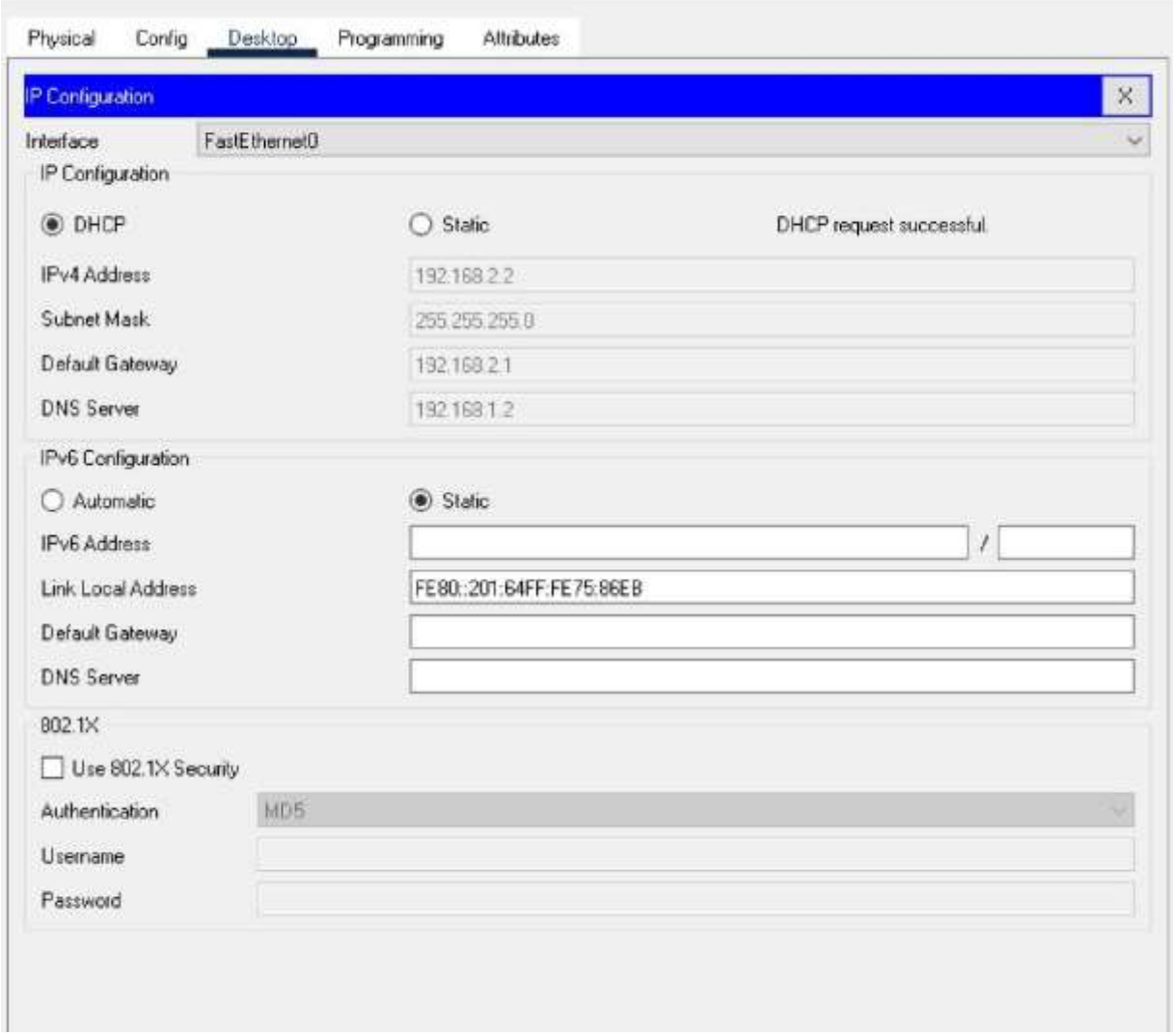
4. Click on DHCP Server->Services->DHCP:



5. Add the command ip helper-address 192.168.1.2 on the interface configuration mode of fa 0/0 of Router 2, just as we've done before:

```
Router(config-if)#ex
Router(config)#interface fa 0/0
Router(config-if)#ip helper-address 192.168.1.2
Router(config-if)#
```

6. Lastly enable DHCP on the PCs in SALES LAN. The PCs will obtain their address from the DHCP server.



Task 2: Students should make the scenario exactly implemented in Lab 4 and implement the following:

1. We have three website each of them is stored on separate Web Server,

• (www.slate.nu.edu.pk or state.nu.edu.pk) having IP address 192.168.1.5

• (www.pwr.nu.edu.pk or pwr.nu.edu.pk) having IP address 192.168.1.6

• (www.flex.nu.edu.pk or flex.nu.edu.pk) having IP address 192.168.1.7

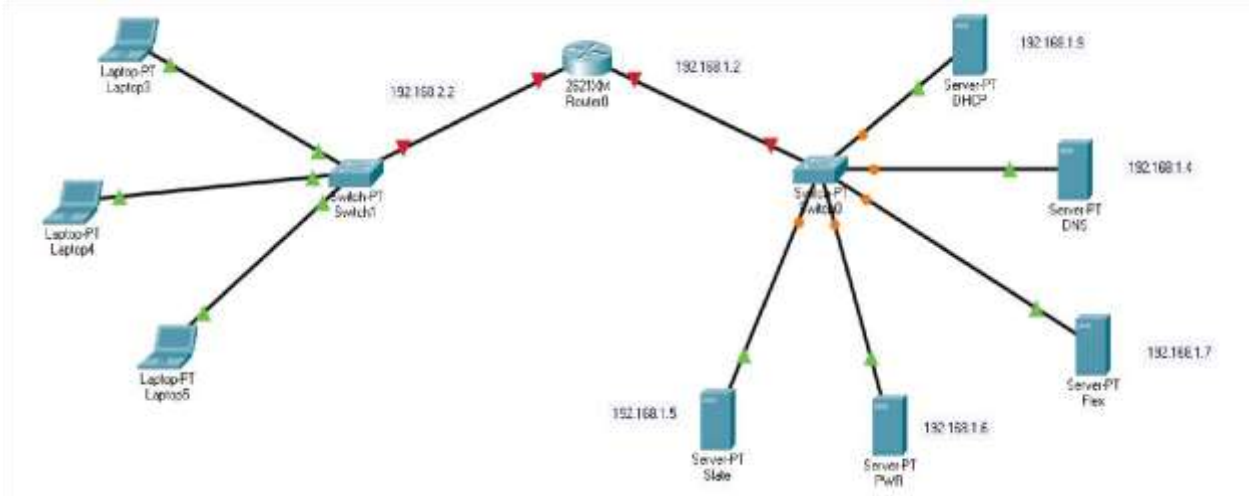
2. A DHCP server and a DNS server configured as follow:

• DHCP IP : 192.168.1.9

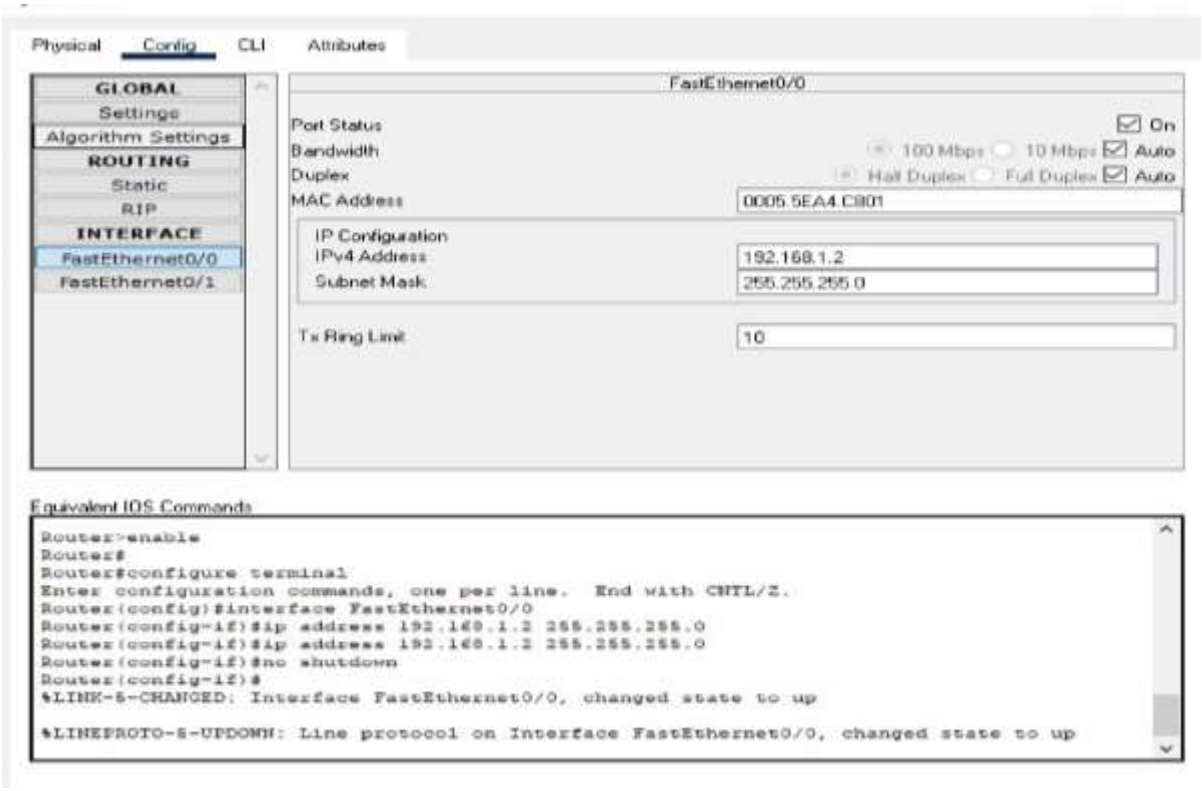
• DNS Server IP : 192.168.1.4

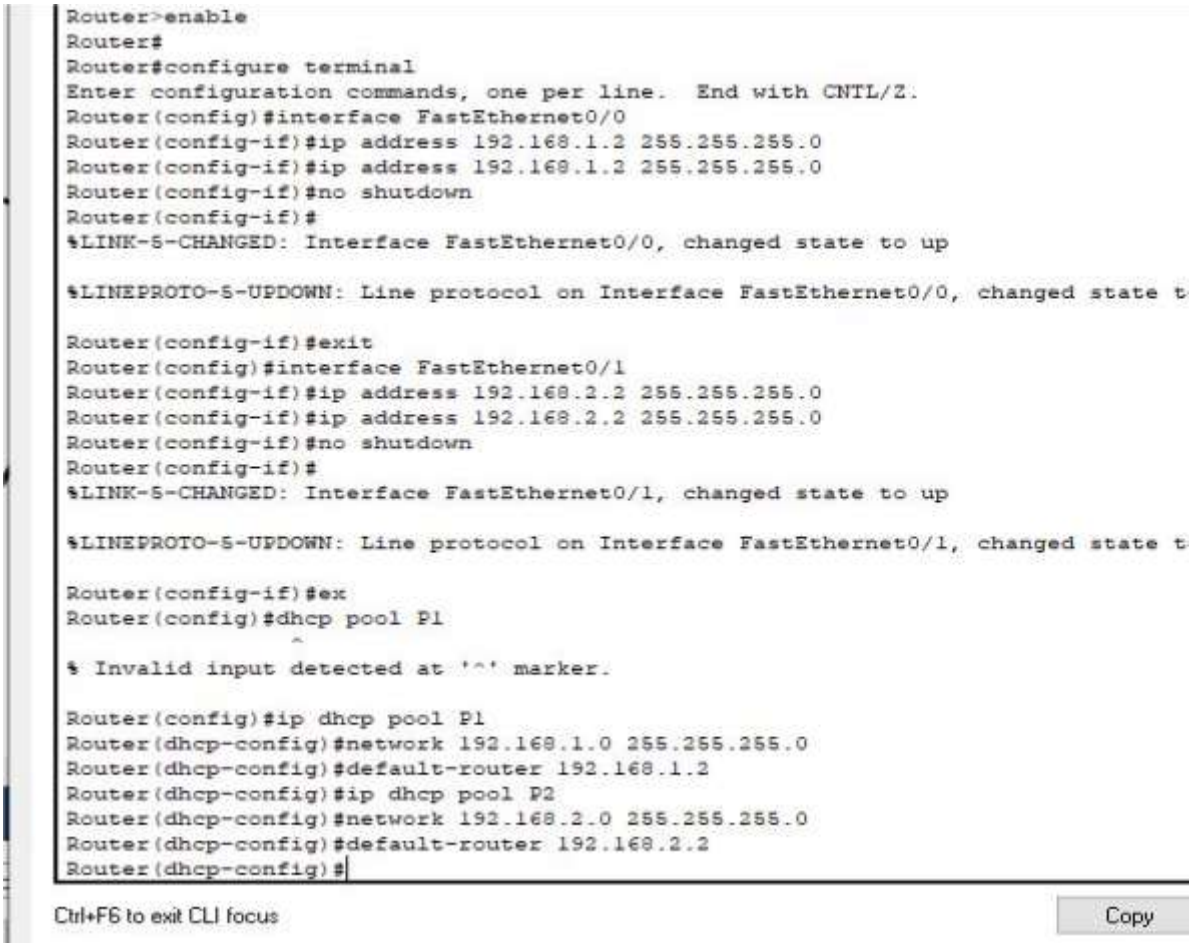
3. We are going to make Two Labs “Lab A” and “Lab B”. In each Lab there are three PC’s.We want to use DHCP Server to avoid static IP’s. We also have our own DNS Server. Use the Class C IP Address like 192.168.1.0 or 192.168.2.0:

I. Topology:

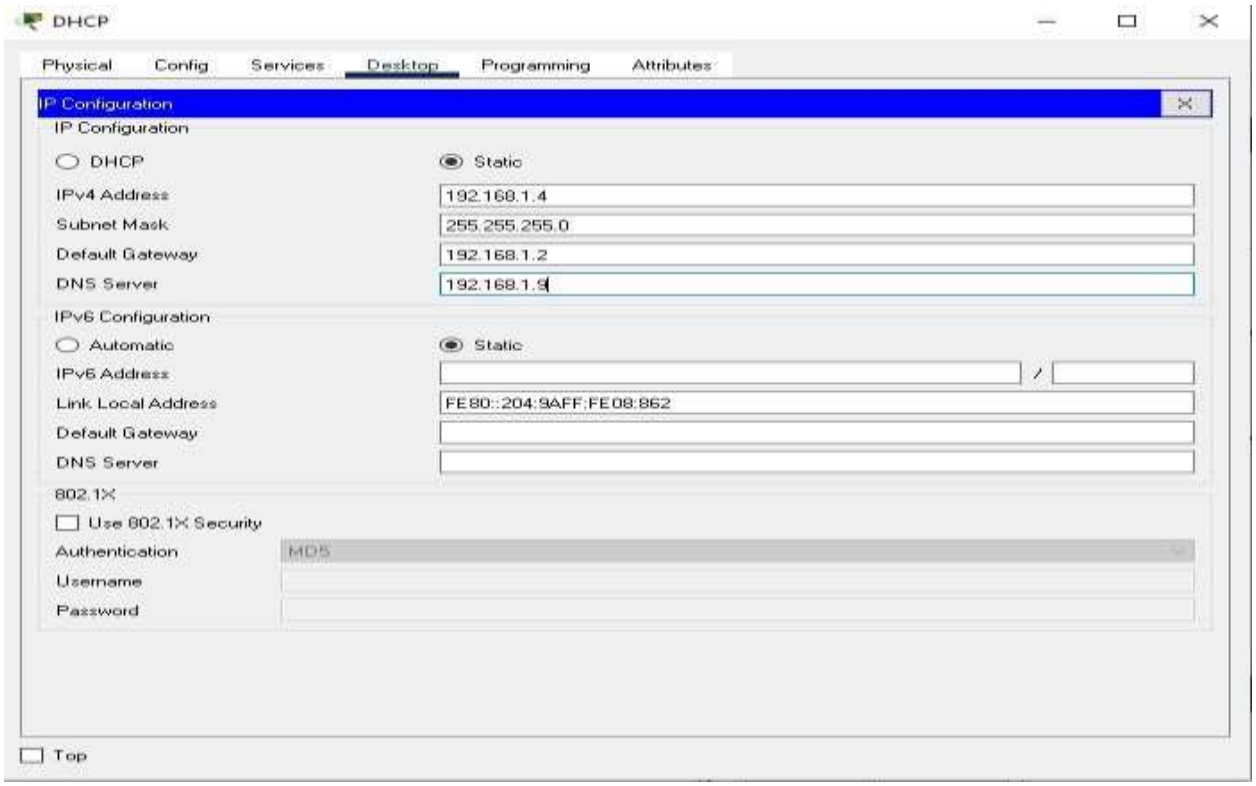


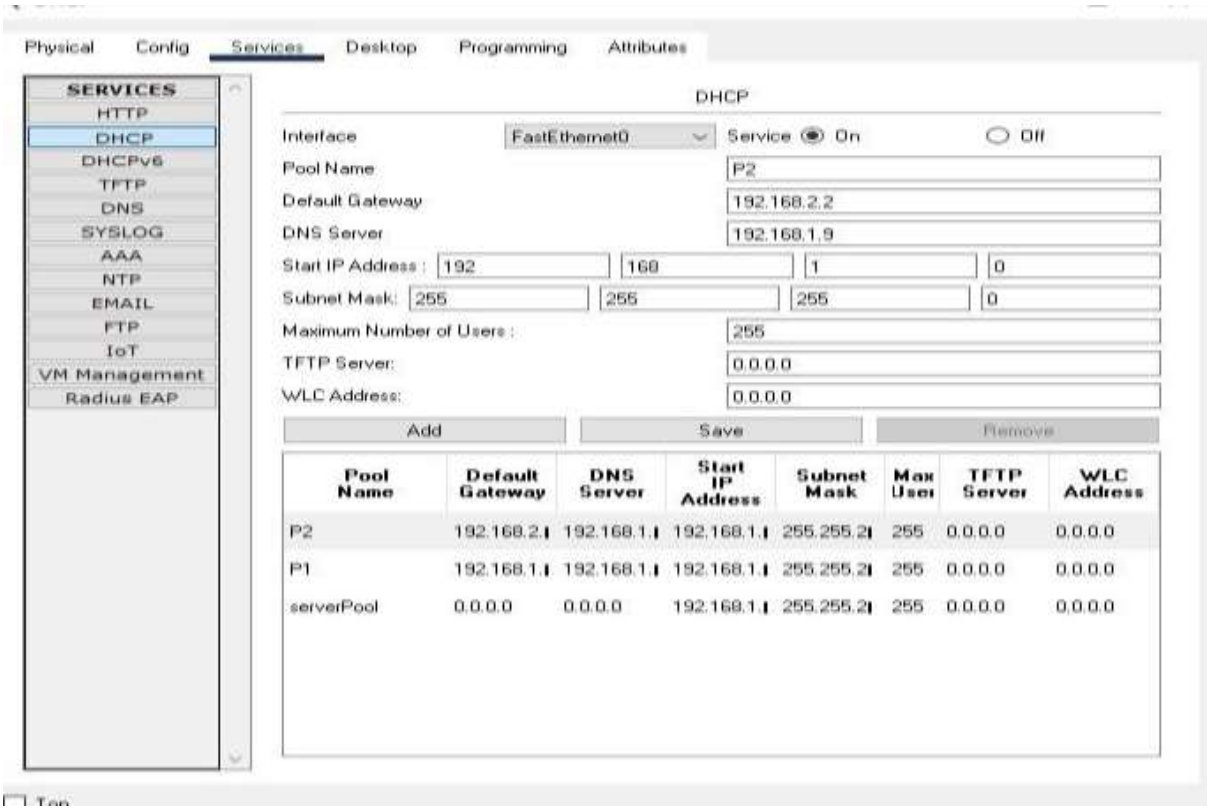
II. Router interface configurations:





III. Assign static IP to DHCP and Enable DHCP Services and Add Pool P1 and Pool P2 with respective IP Addresses:





IV. Assign Static IP to DNS and Enable DNS Services of DNS and add resources records: