Assignment

Network systems assignment 5

OBJECTIVE:

Design and configure a network in Cisco Packet Tracer with two separate LANs. The first LAN contains six PCs and a DNS Server connected to a switch. The second LAN contains three target servers (e.g., flipkart.com, amazon.com, lenskart.com) connected to a switch. Connect these two LANs using a router and access the target servers from each PC in LAN 1 through the DNS Server by mapping the domain name given in each PC to the corresponding IP address of the target server. Assign IP addresses to each PC either manually or through DHCP.

Following are the network details:

Network 1:

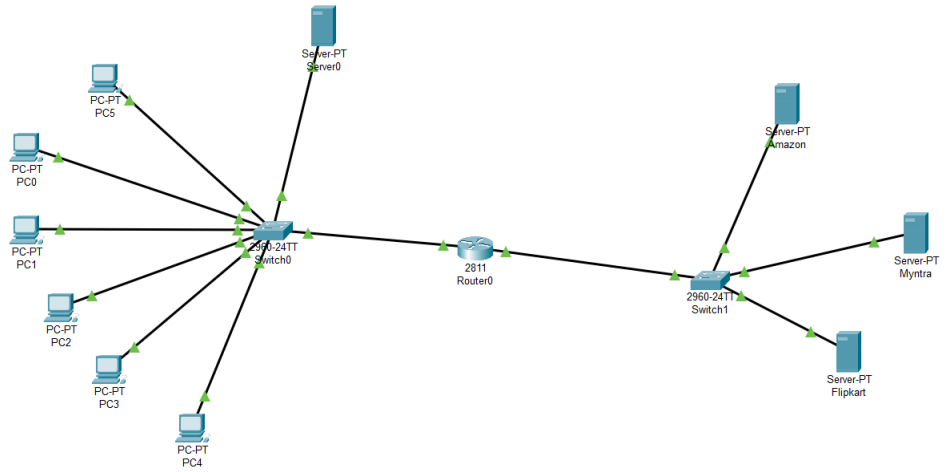
- Starting IP Address: 192.168.15.10
- DNS Server: (Assign an appropriate IP address within the same subnet)

Network 2:

- 192.168.16.10
- 192.168.16.12
- 192.168.16.13

Establish a successful connection and verify the DNS Server implementation. Attach all screenshots (including IP configuration, DNS Server configuration, target server configuration, router configuration, web browser screenshots from PCs showing the mapping of domain names to IP addresses, and network structure) along with a description in a PDF file and submit.

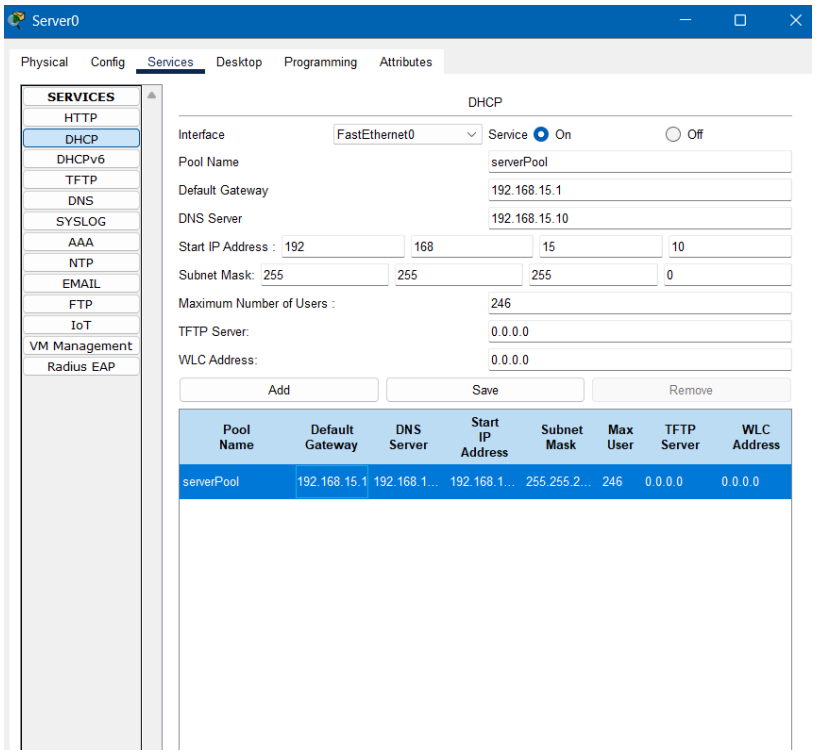
Network Structure



Router configuration

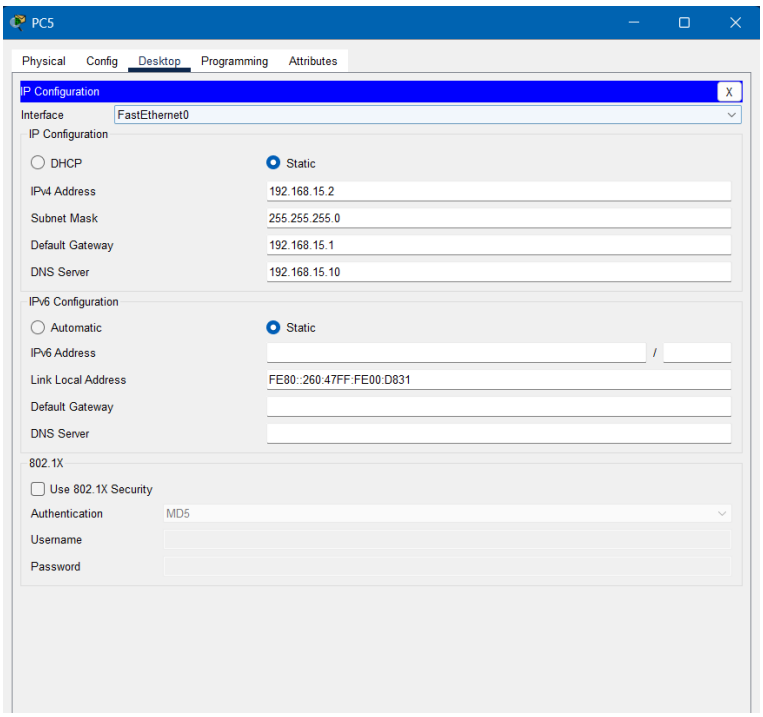
```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.15.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#enable
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface FastEthernet0/1
Router(config-if)#ip address 192.168.16.1 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Router(config-if)#
```

DHCP → Server to PCs

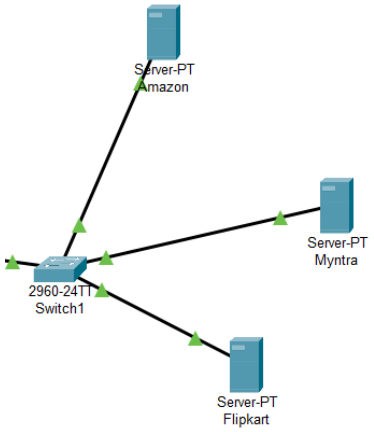


- Configure the IP and Set DNS server as 192.168.15.10 and start the Service

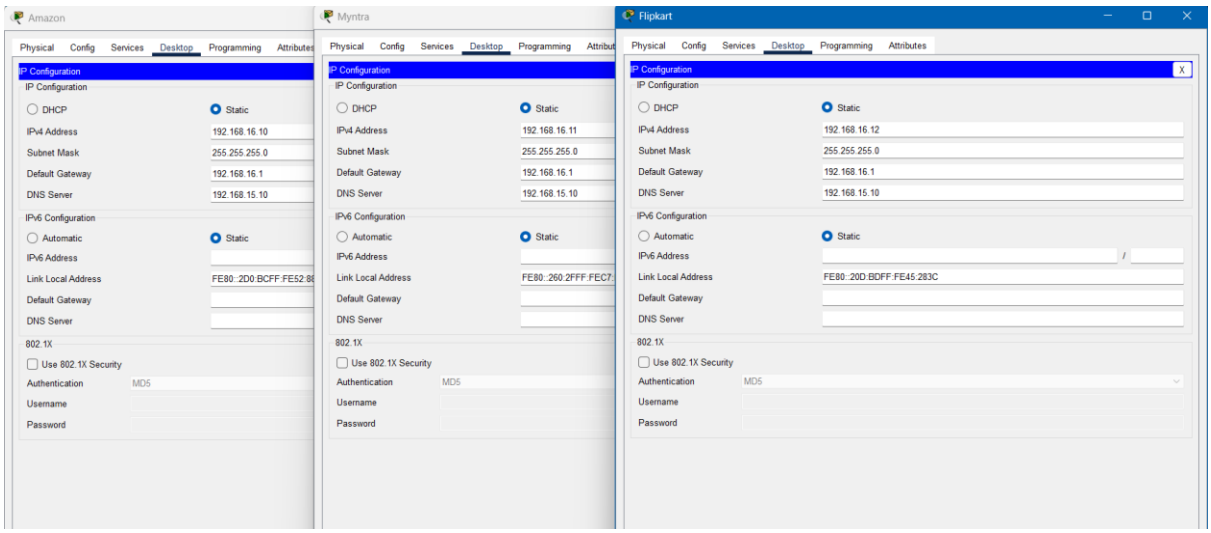
DHCP configured on PC 1 -



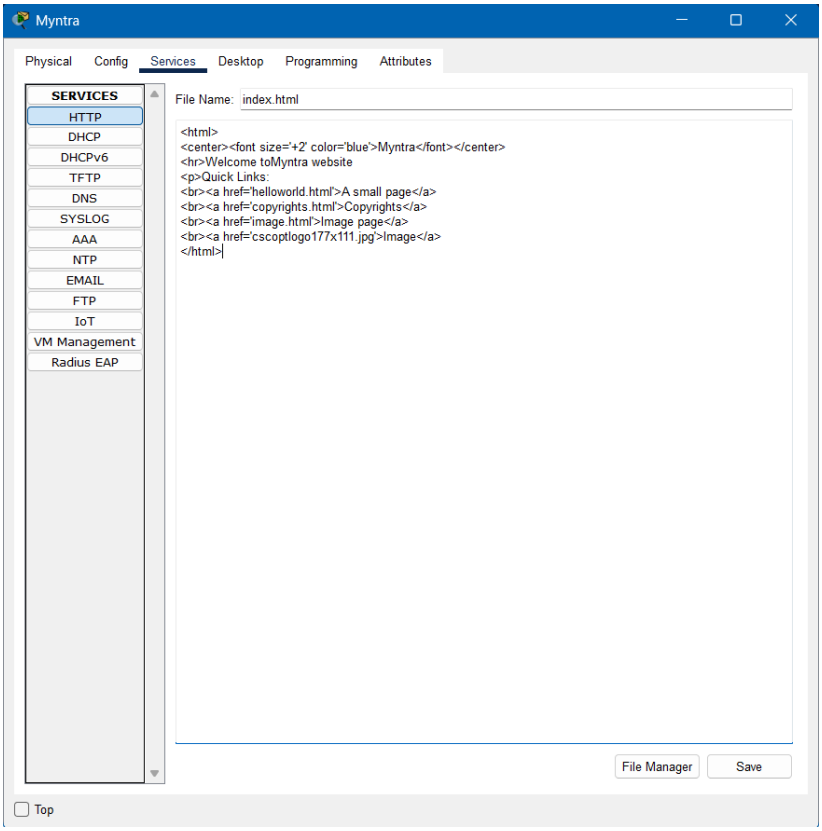
Setup another LAN network with servers



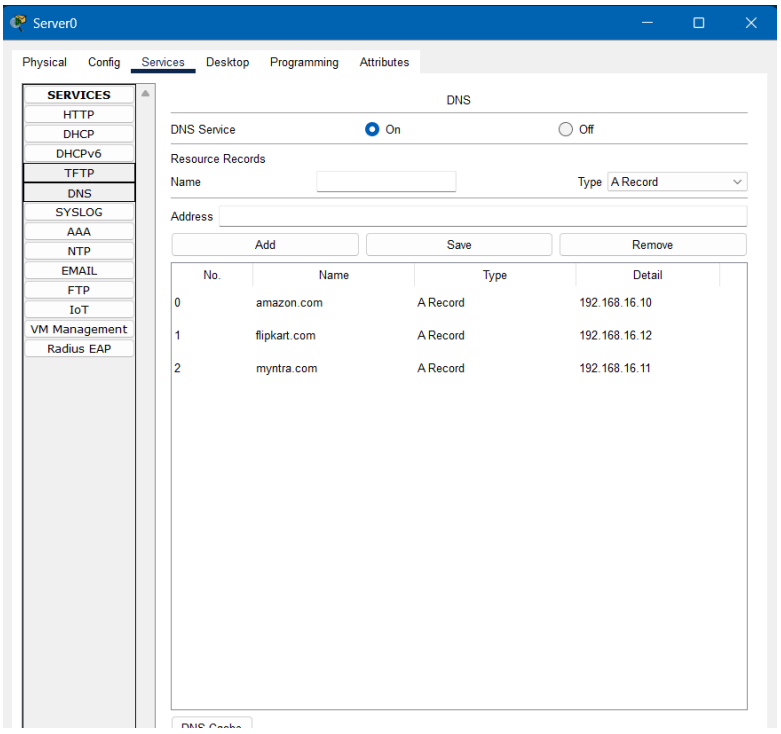
Configure those Server's IP



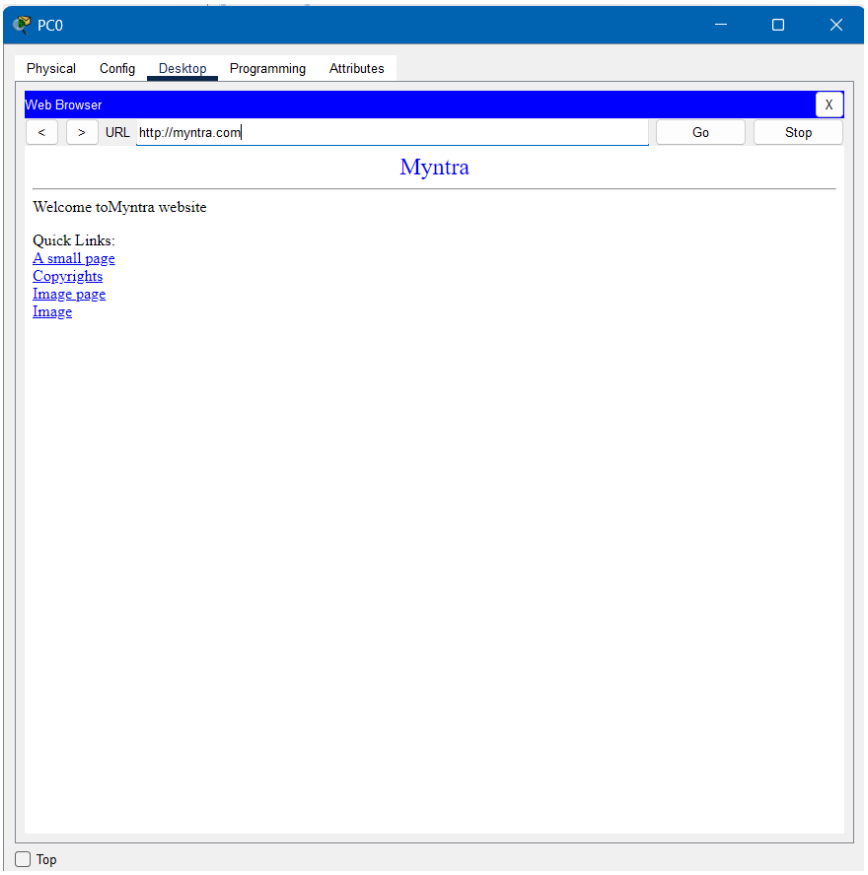
Change the HTML of the pre-existing page into the sites name



Input those DNS server details in the LAN 1 server with it ‘s IP



Ping the Web Server using the Web browser in PC



Submitted By **Neeraj Jayesh**

SOCSE 241037