

Name: Noman Siddique

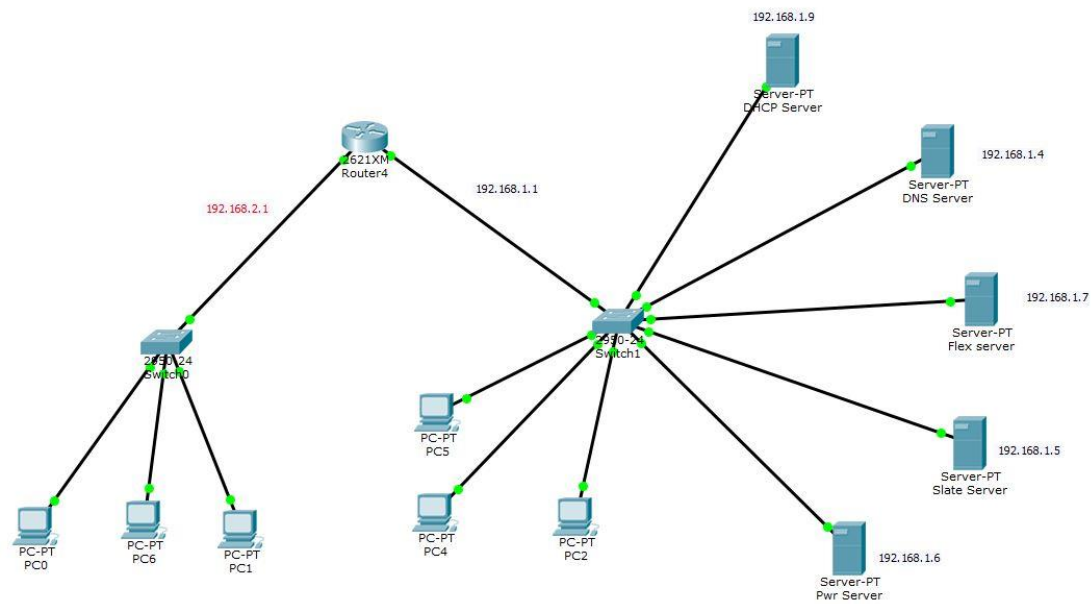
Roll Number: 19P1664

Assignment: Lab 4 Home Work

Course: Computer Networks

Instructor: Engr. Khurram Shahzad

## TOPOLOGY:



## Router Configure Using CLI:

### Router Hostname:

```
Router>
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Noman
Noman(config)#ex
Noman#
%SYS-5-CONFIG_I: Configured from console by console
Noman#
```

## Router Ip Config:

```
1313-3-Config_1. Configured from console by console

Noman#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Noman(config)#interface f0/0
Noman(config-if)#ip address 192.168.2.1 255.255.255.0
Noman(config-if)#no shut

Noman(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

Noman(config-if)#ex
Noman(config)#
Noman(config)#interface f0/1
Noman(config-if)#ip address 192.168.1.1 255.255.255.0
Noman(config-if)#no shut

Noman(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

Noman(config-if)#ex
Noman(config)#
```

## Web Server

### Flex:

Flex server

Physical Config Services Desktop Custom Interface

### IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address 192.168.1.7

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 192.168.1.4

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::207:ECFF:FED3:8388

IPv6 Gateway

IPv6 DNS Server

```

<!DOCTYPE html>
<html>

<head>
  <title>Page Title</title>
</head>

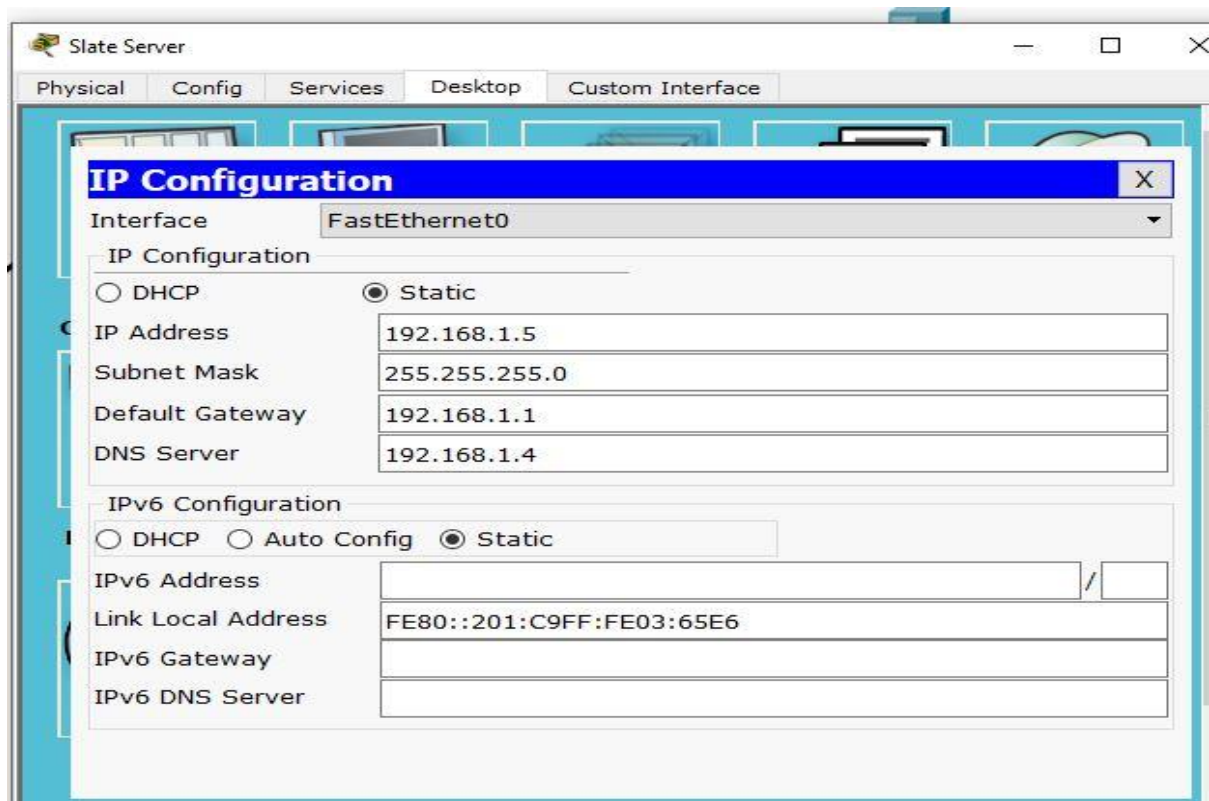
<body>
<h1>Welcome to Flex</h1>

  <form>
    <label for='username'>User Name</label>
    <input class="username" placeholder="User Name"
type="text"><br>
    <label for='password'> Password </label>
    <input class="password" placeholder="Password"
type="password"> <br>
    <button type="button">login</button><br>
    <input type="radio" value="Remember Me"
name="remember"> Remember Me

```

## Slate:



Slate Server

Physical Config Services Desktop Custom Interface

**SERVICES**

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP

File Name:

```
<!DOCTYPE html>
<html>

<head>
  <title>Page Title</title>
</head>

<body>

<h1>Welcome to Slate </h1>
  

  <form>
    <label for='username'>User Name</label>
    <input class="username" placeholder="User Name"
type="text"><br>
    <label for='password'> Password </label>
    <input class="password" placeholder="Password"
type="password"> <br>
    <button type="button">login</button><br>
    <input type="radio" value="Remember Me"
name="remember"> Remember Me
```

**PWR:**

Pwr Server

Physical Config Services Desktop Custom Interface

**IP Configuration** X

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address:

Subnet Mask:

Default Gateway:

DNS Server:

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address:



File Name:

```
<!DOCTYPE html>
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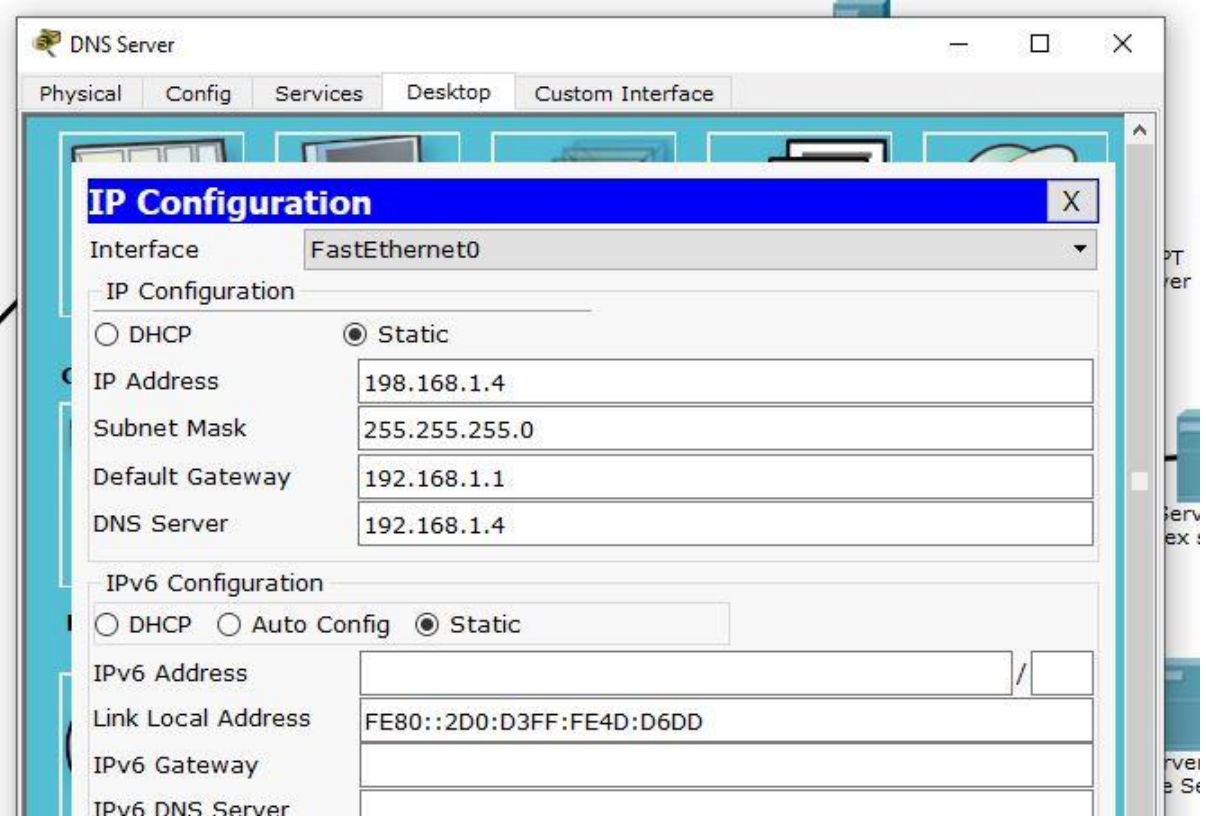
<head>
  <title>Page Title</title>
</head>

<body>

<h1>Welcome to Fast Peshawar </h1>
  

  <form>
    <label for='username'>User Name</label>
    <input class="username" placeholder="User Name"
type="text"><br>
    <label for='password'> Password </label>
    <input class="password" placeholder="Password"
type="password"> <br>
    <button type="button">login</button><br>
    <input type="radio" value="Remember Me"
name="remember"> Remember Me
```

## DNS Server:



DNS Server

Physical
 Config
 Services
 Desktop
 Custom Interface

**SERVICES**

HTTP
 DHCP
 DHCPv6
 TFTP
 DNS
 SYSLOG
 AAA
 NTP
 EMAIL
 FTP

### DNS

DNS Service
 ☒ On
 ☐ Off

Resource Records
 Name
 
 Type
 A Record

Address

Add
 Save
 Remove

No.	Name	Type	Detail
0	www.flex.nu.edu.pk	A Record	192.168.1.7
1	www.pwr.nu.edu.pk	A Record	192.168.1.6
2	www.slate.nu.edu.pk	A Record	192.168.1.5

## DHCP Server:

DHCP Server

Physical
 Config
 Services
 Desktop
 Custom Interface

### IP Configuration

Interface
 FastEthernet0

IP Configuration
 ☐ DHCP
 ☒ Static

IP Address
 192.168.1.9

Subnet Mask
 255.255.255.0

Default Gateway
 192.168.1.1

DNS Server
 192.168.1.4

IPv6 Configuration
 ☐ DHCP
 ☐ Auto Config
 ☒ Static

Maximum number of Users :

TFTP Server:

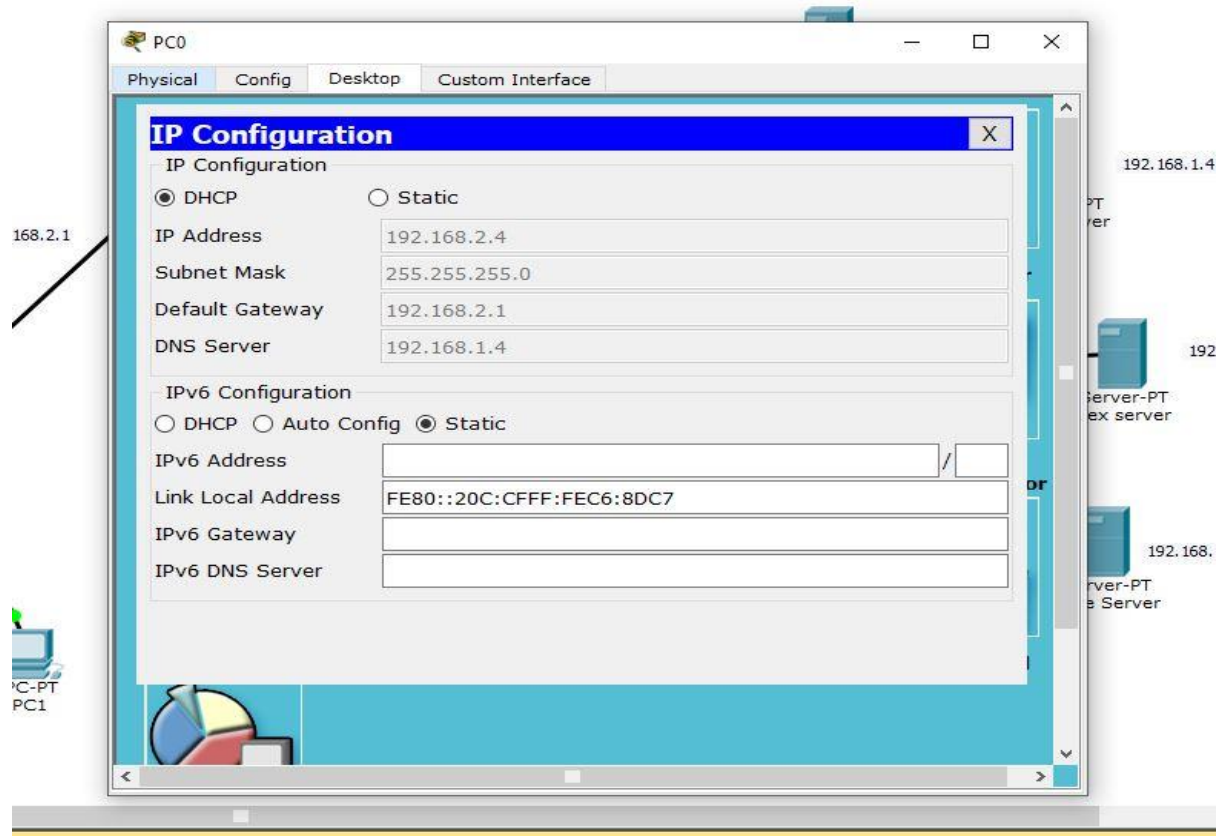
Add		Save			Remove	
Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server
P2	192.168.2.1	192.168.1.4	192.168.2.0	255.255.255.0	256	0.0.0.0
P1	192.168.1.1	192.168.1.4	192.168.1.0	255.255.255.0	256	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	192.168.1.0	255.255.255.0	256	0.0.0.0

#### DHCP SERVER POOL:

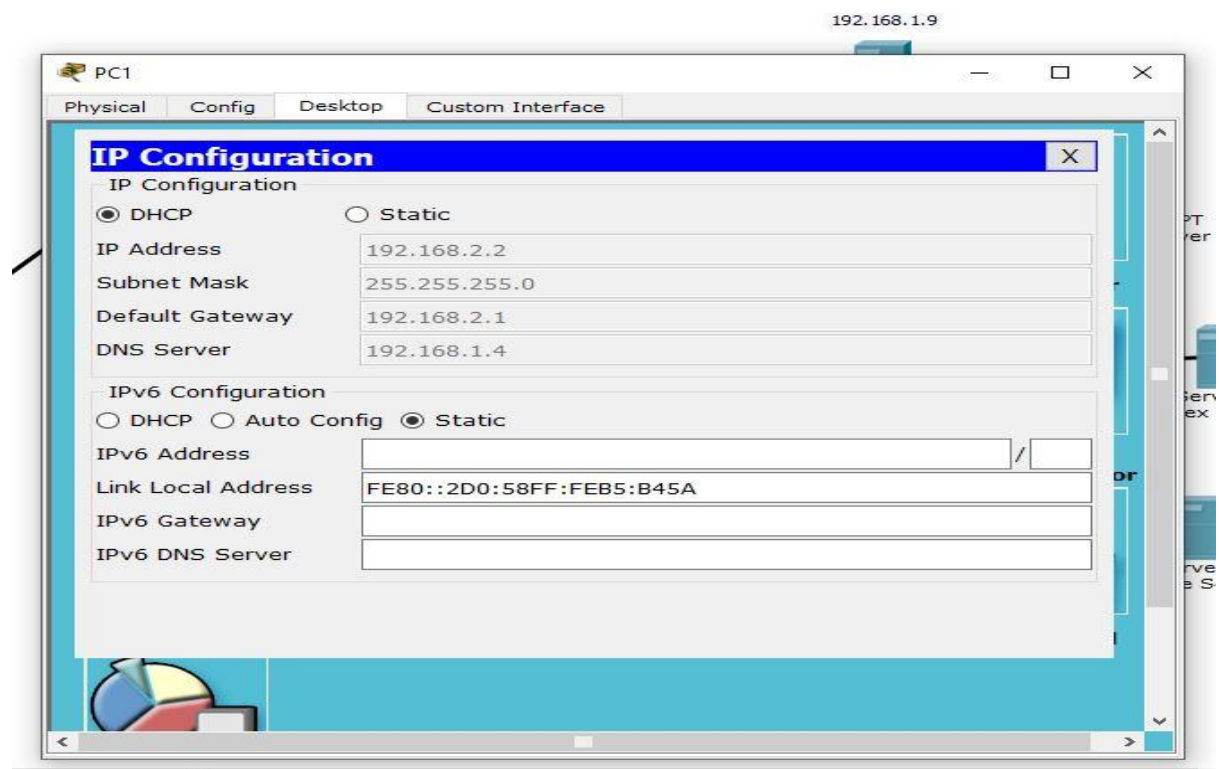
```
Noman#  
Noman#  
Noman#configure terminal  
Enter configuration commands, one per line. End with CNTL/Z.  
Noman(config)#ip dhcp pool P1  
Noman(dhcp-config)#network 192.168.1.1 255.255.255.0  
Noman(dhcp-config)#default-router 192.168.1.1  
Noman(dhcp-config)#dns-server 192.168.1.4  
Noman(dhcp-config)#ex  
Noman(config)#  
Noman(config)#ip dhcp pool P2  
Noman(dhcp-config)#network 192.168.2.1 255.255.255.0  
Noman(dhcp-config)#default-router 192.168.2.1  
Noman(dhcp-config)#dns-server 192.168.1.4  
Noman(dhcp-config)#ex  
Noman(config)#
```



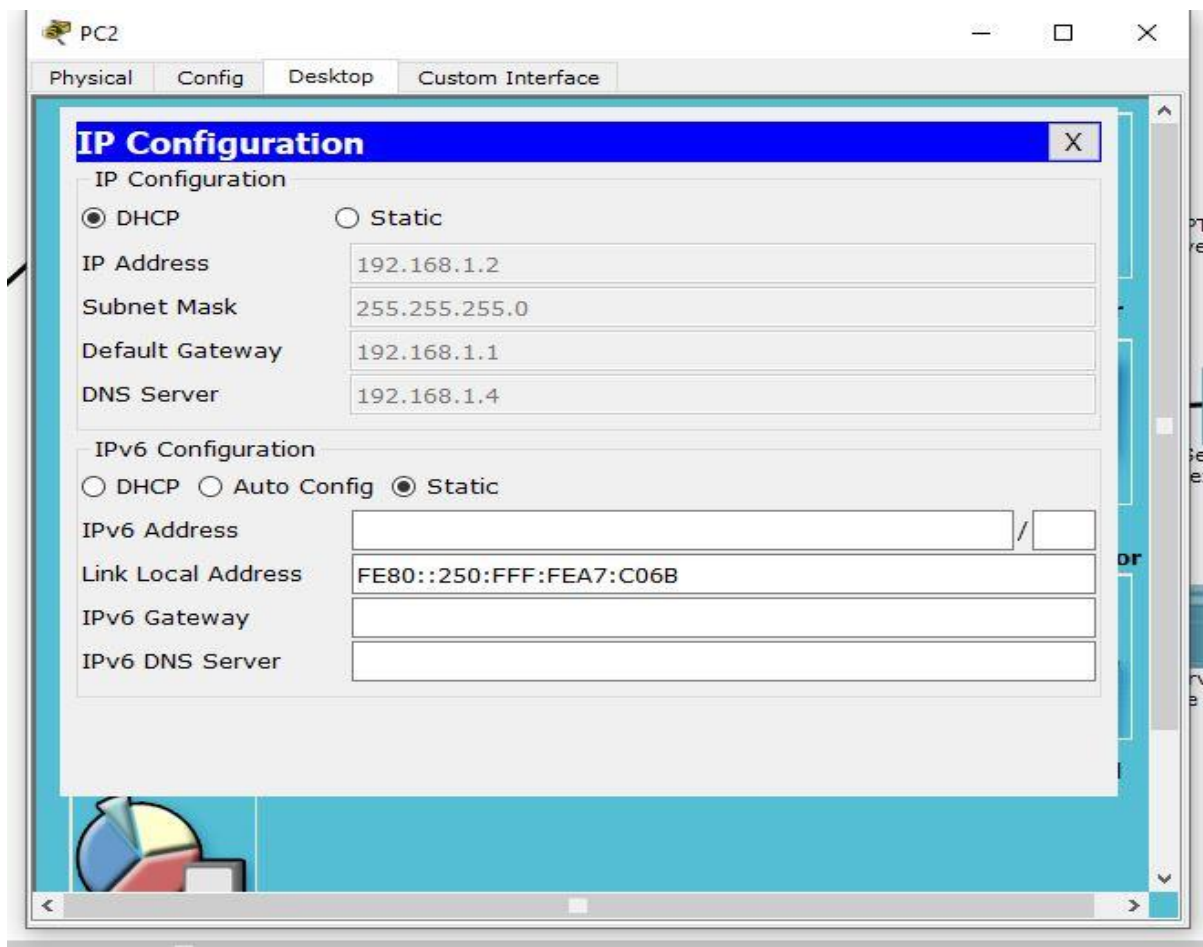
## DHCP PC1



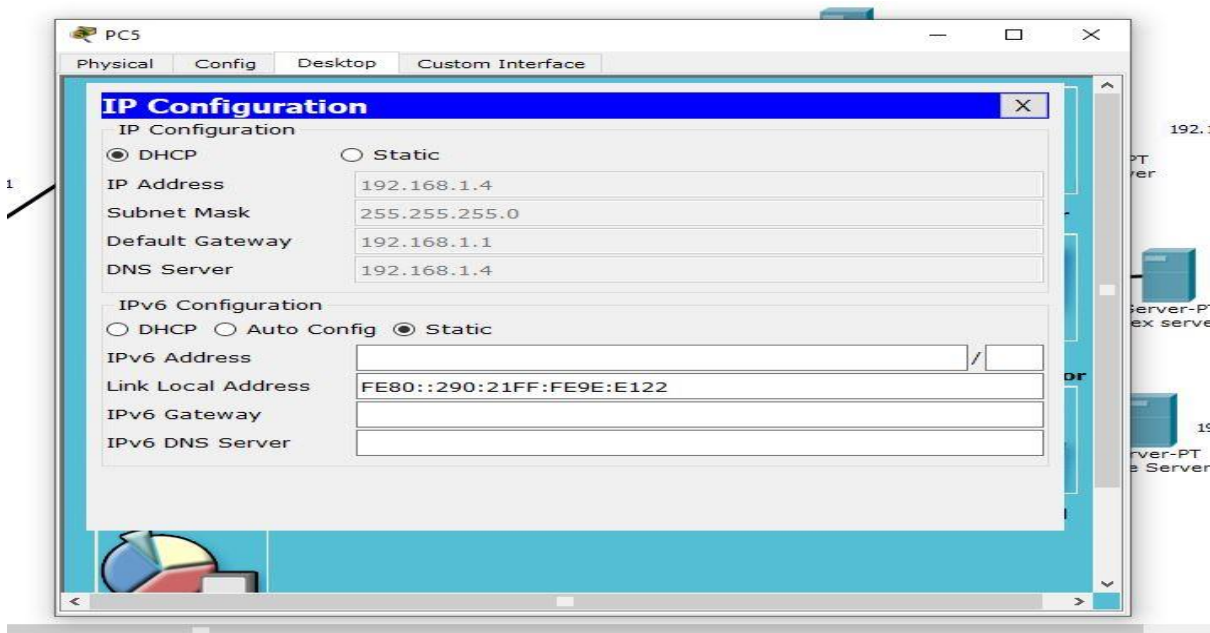
## DHCP PC2



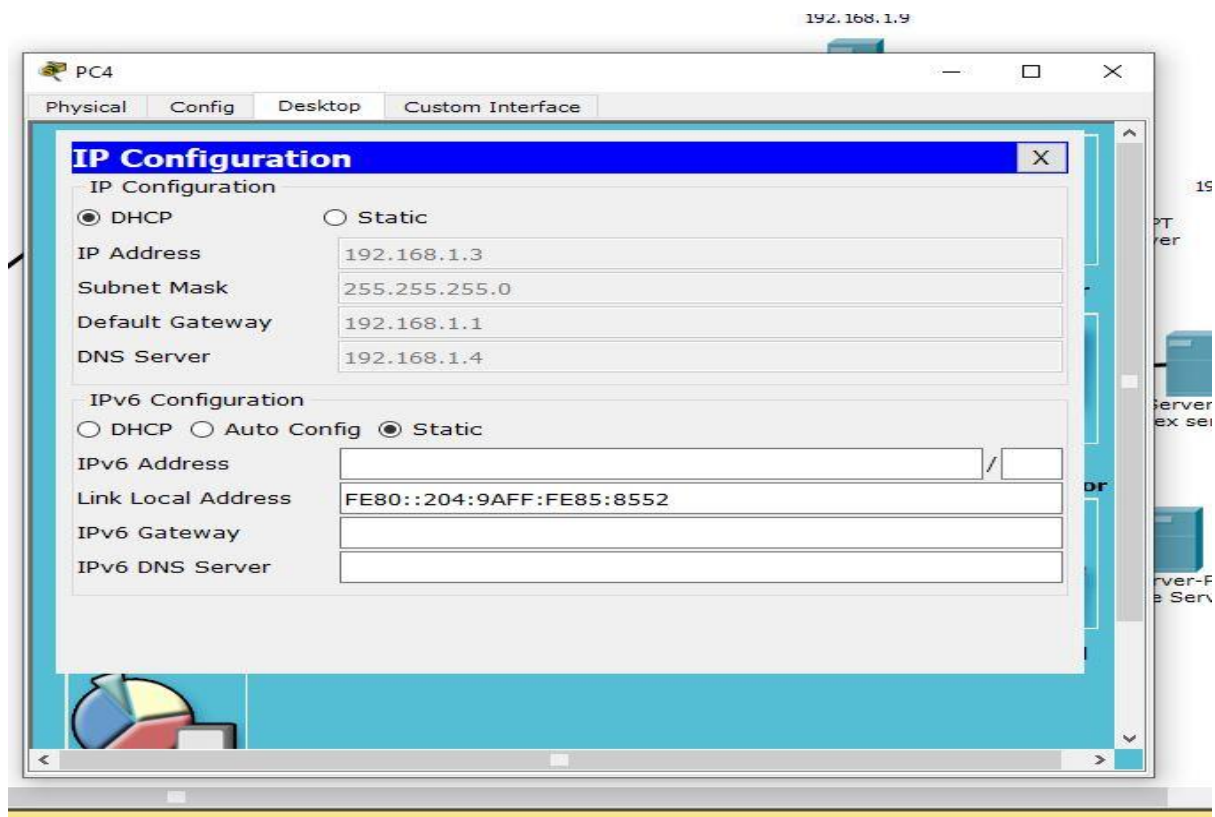
## DHCP PC3



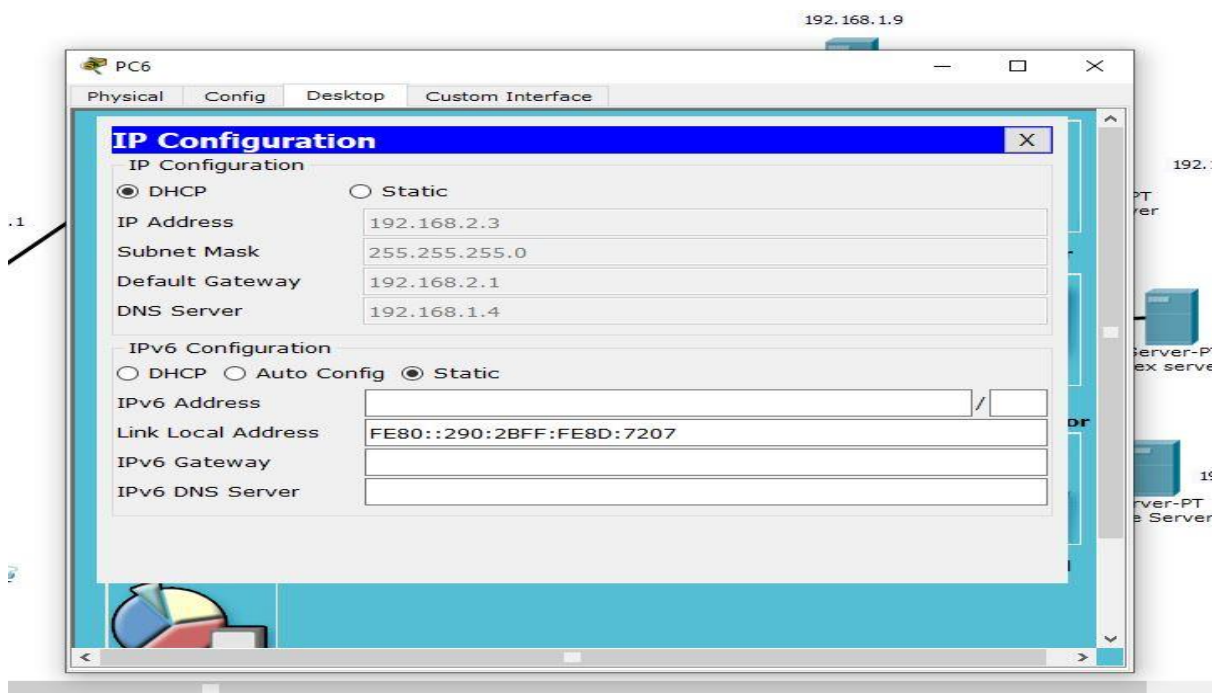
## DHCP PC4:



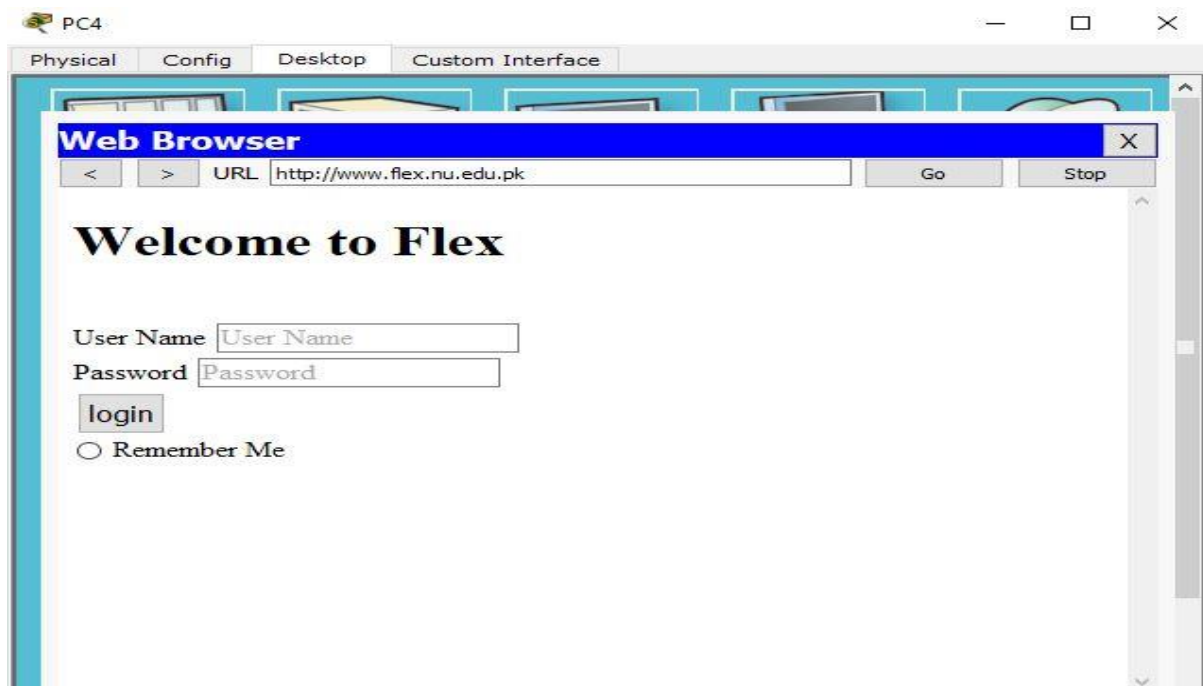
## DHCP PC5



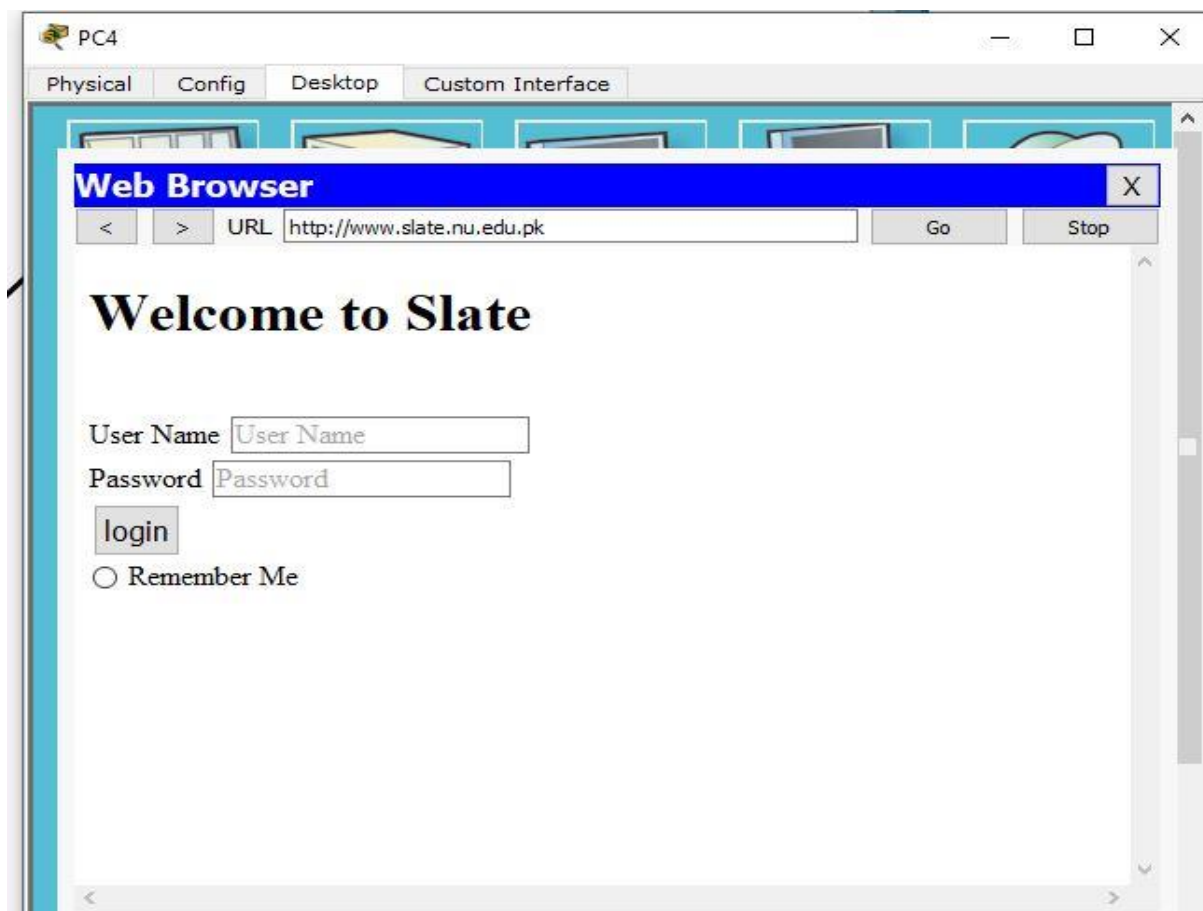
## DHCP PC6



### FLEX PAGE:



### SLATE PAGE:

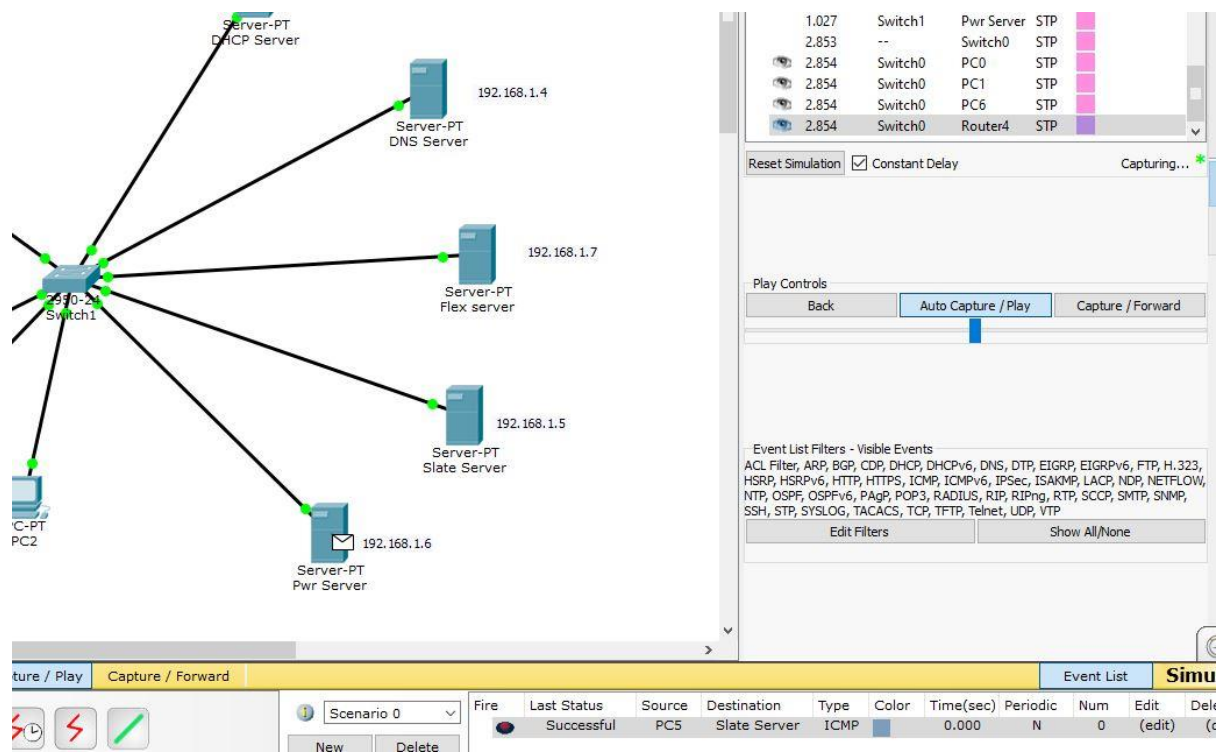


## PWR PAGE:





## Simulation Observation:



## Observation:

When We enter IP address goes to web server that we created and then to the DNS after that this return to our pc and then goes to web server at first time.