

WEEK 5

NAME: VARUN RAJ S

USN: 1BM21CS264

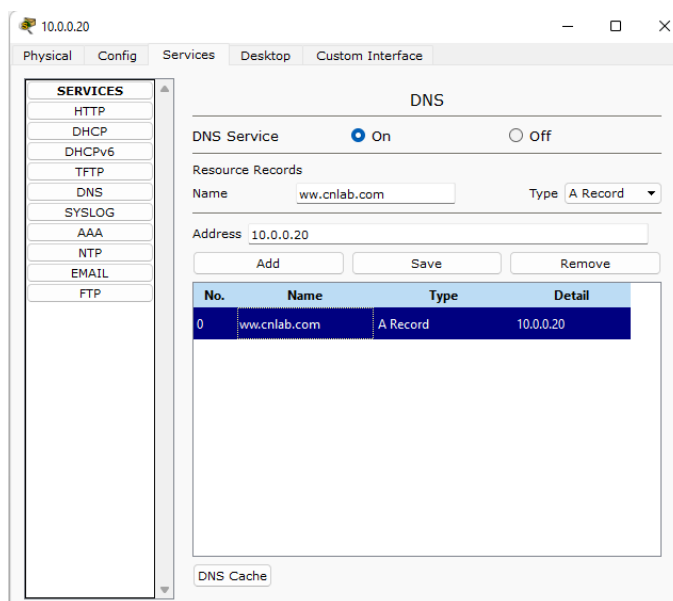
EXP-8: Configure http and DNS Server

Create a topology consisting of one end device and one server.

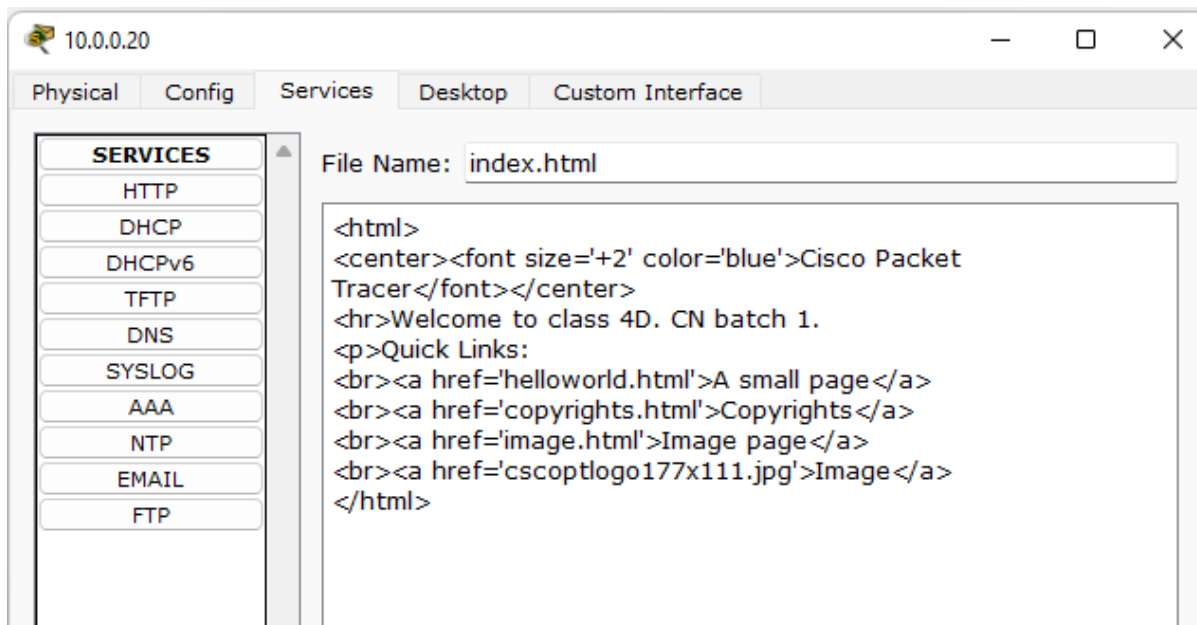
TOPOLOGY:



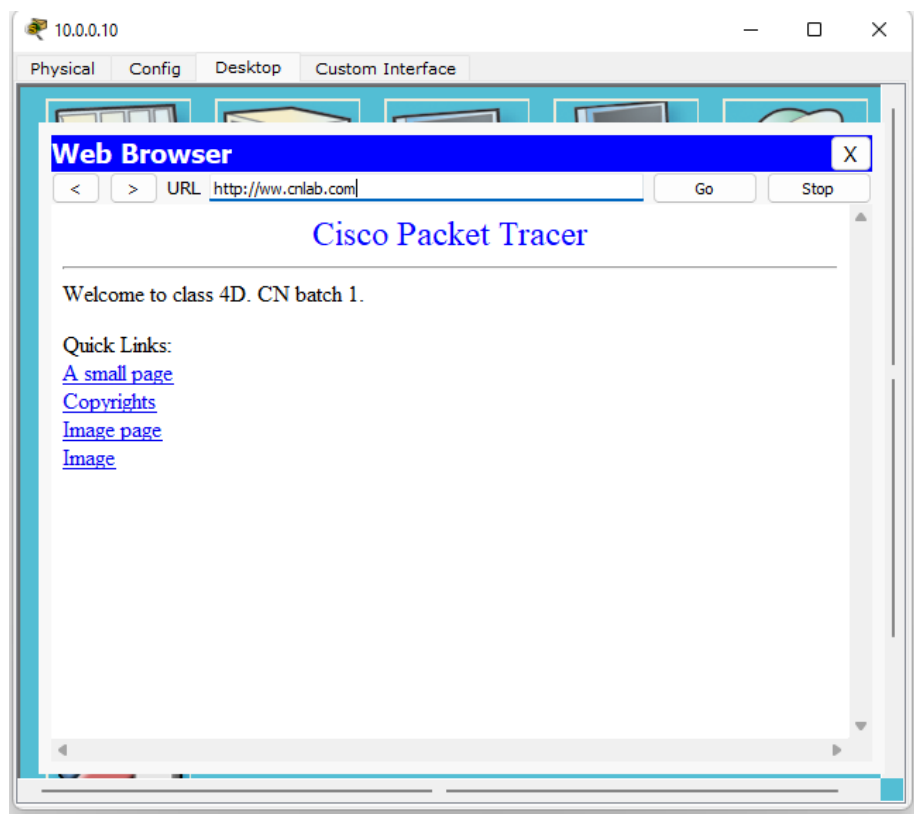
In the server:



Edit the html. Index page(server->services->index.html->edit)

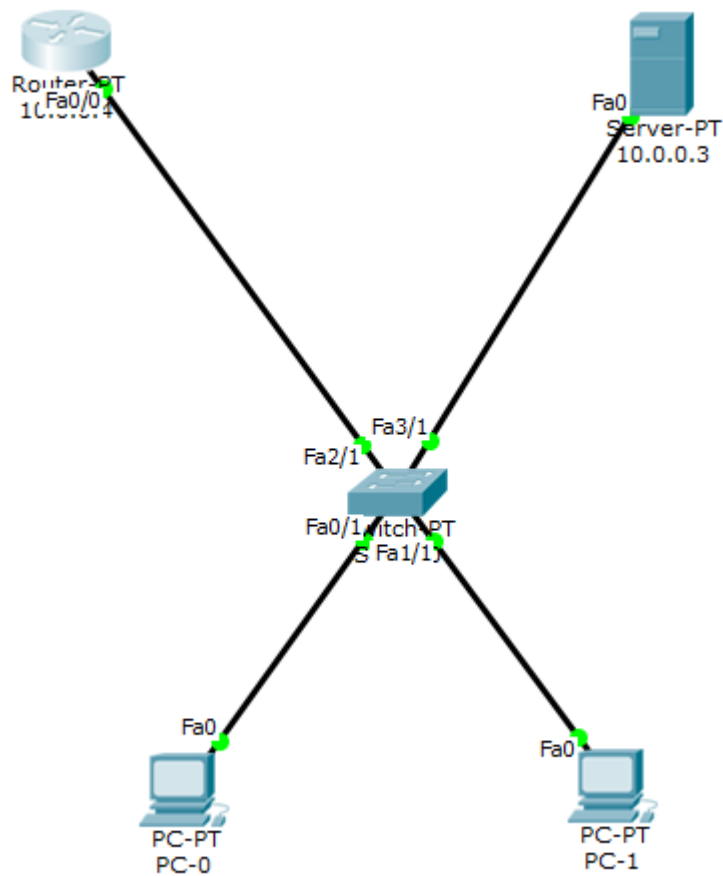


At end device, search from ww.cnlab.com in web browser:



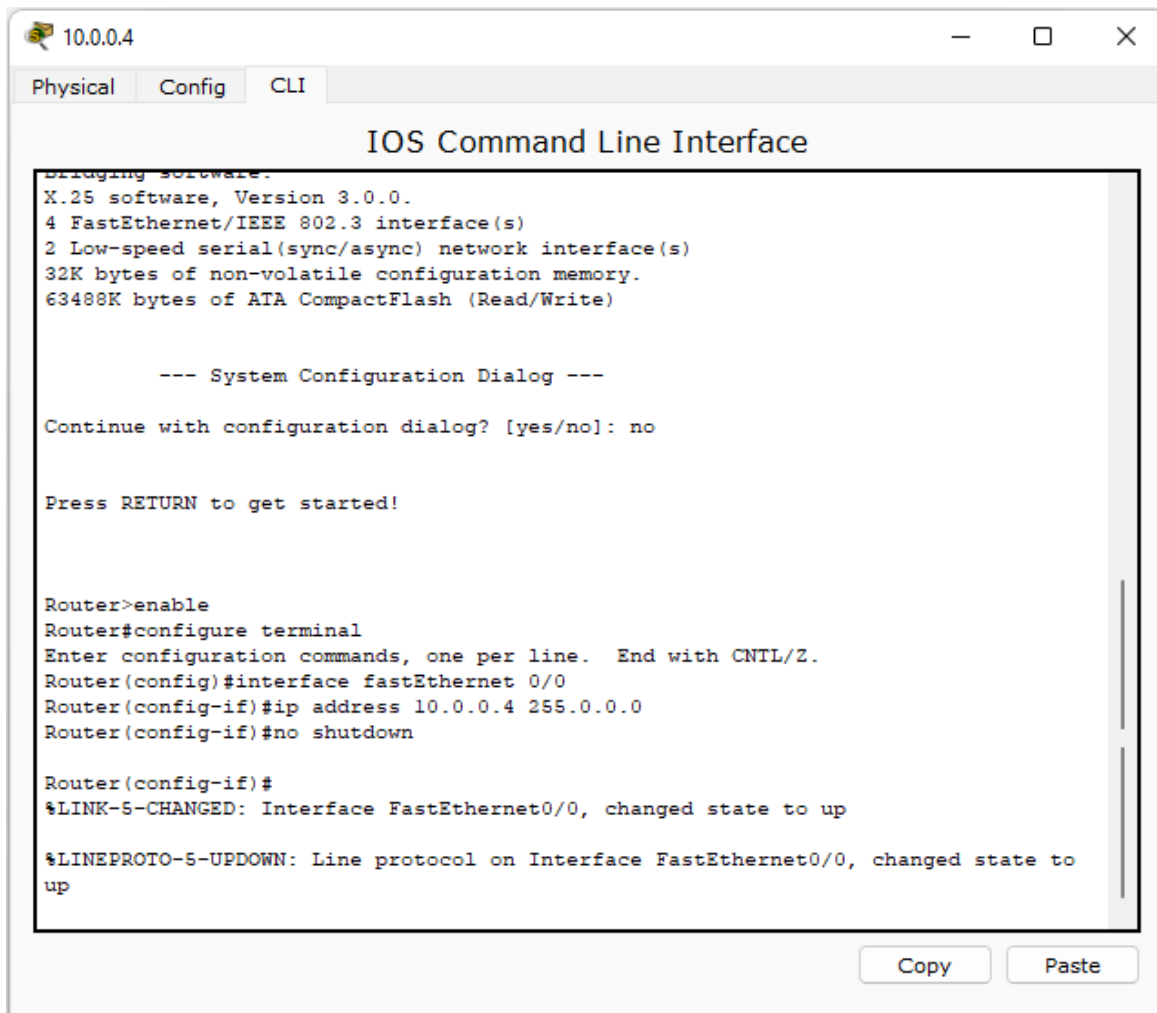
EXP-4.1: Configure DHCP within a LAN.

Topology:

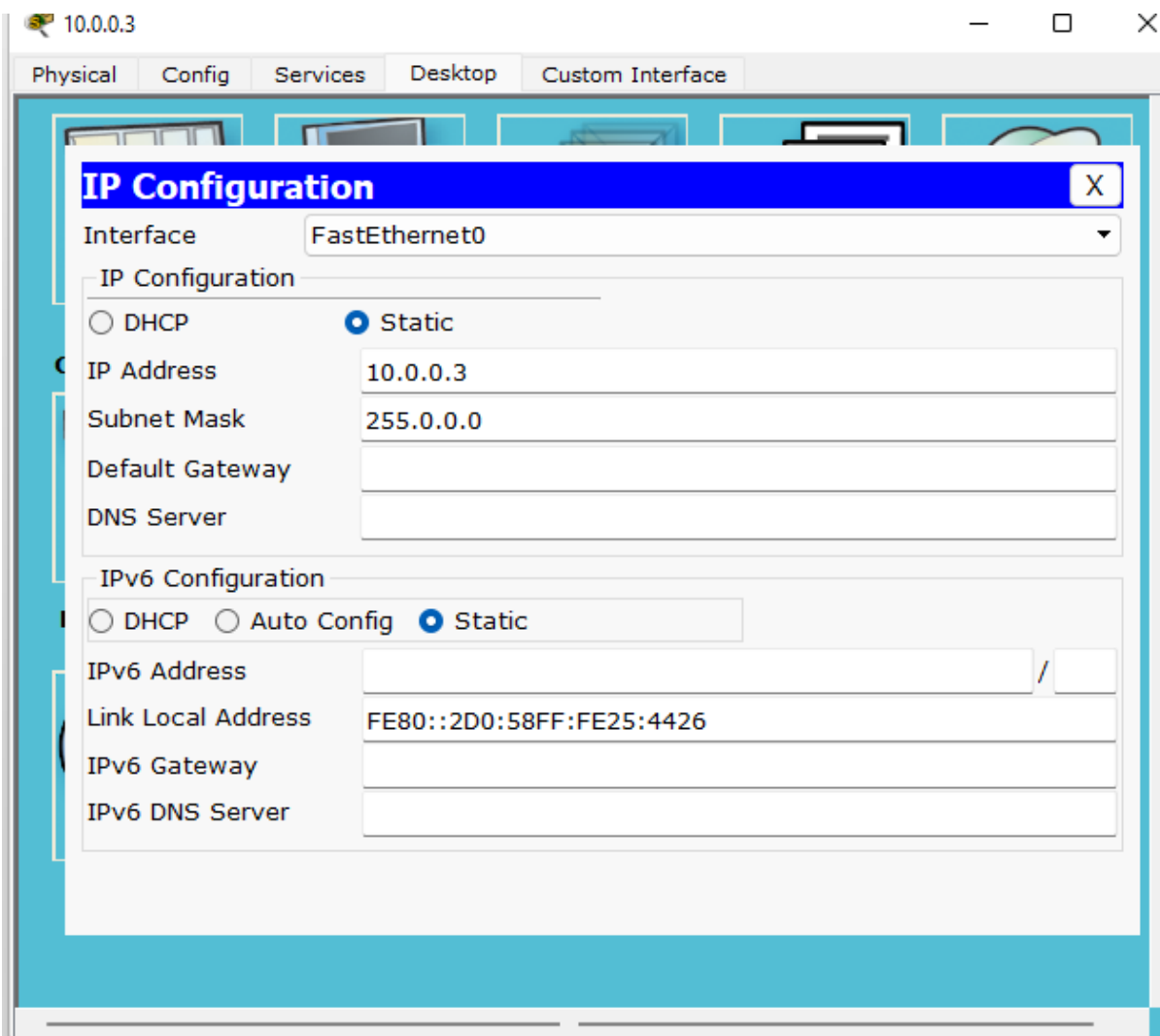


Configure Router and Server ip addresses only:

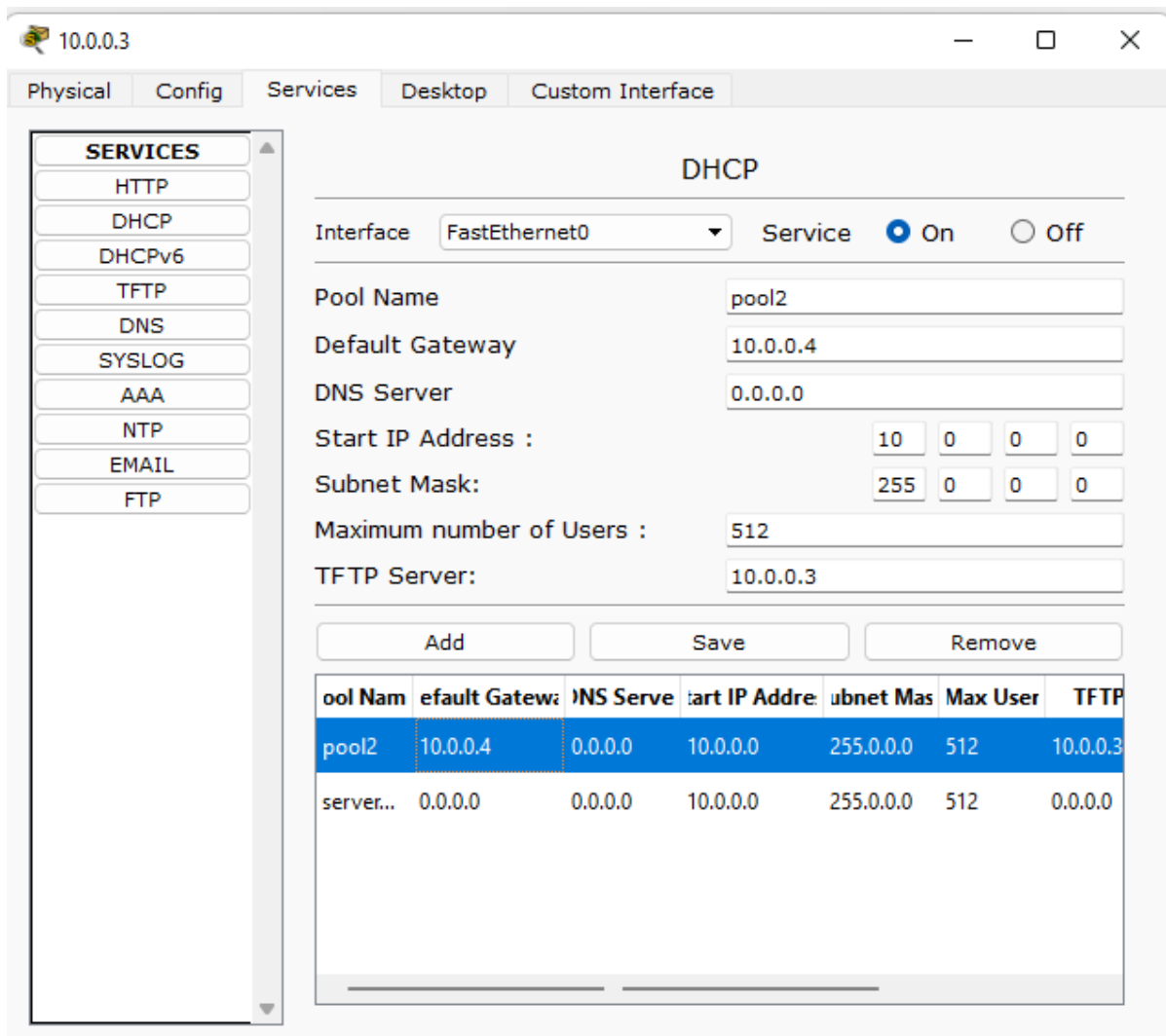
In router CLI(10.0.0.4):



In Server-desktop ip config(10.0.0.3):

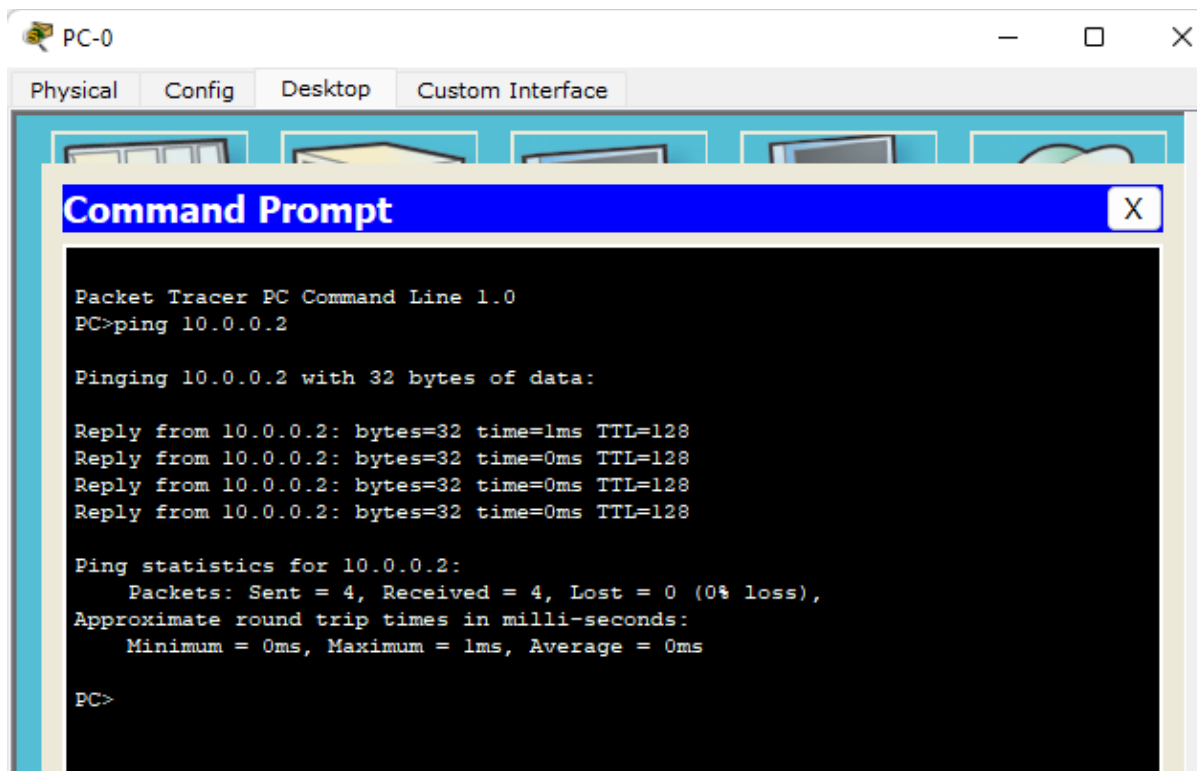


In Server, services, set pool name , default gateway = ip of router . TFTP server = IP of server.



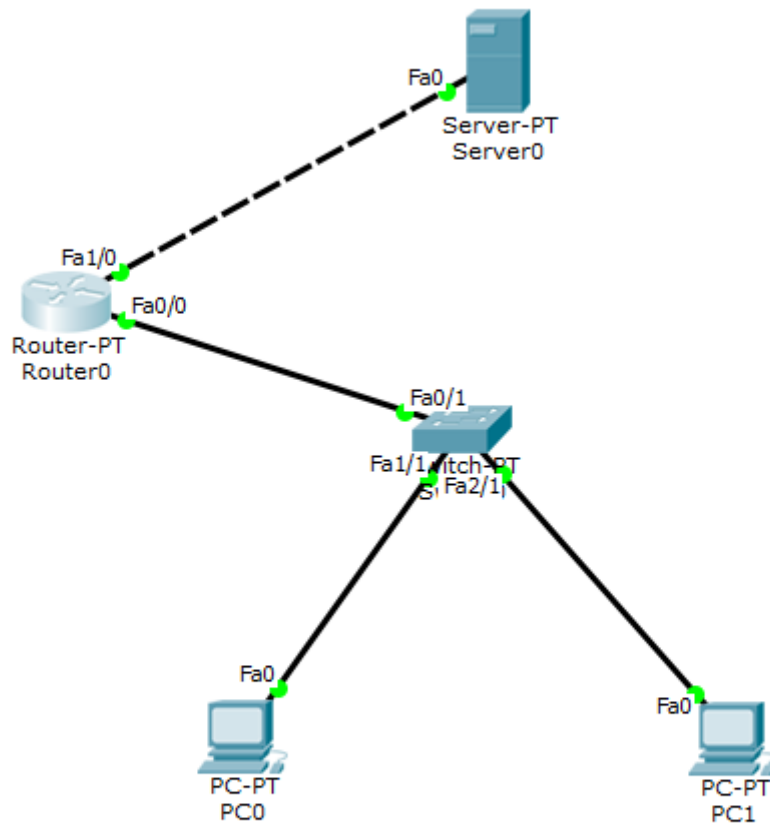
IP for the two end devices get dynamically set:

Pinging from 10.0.0.1(first end device) to 10.0.0.2 (second end device):



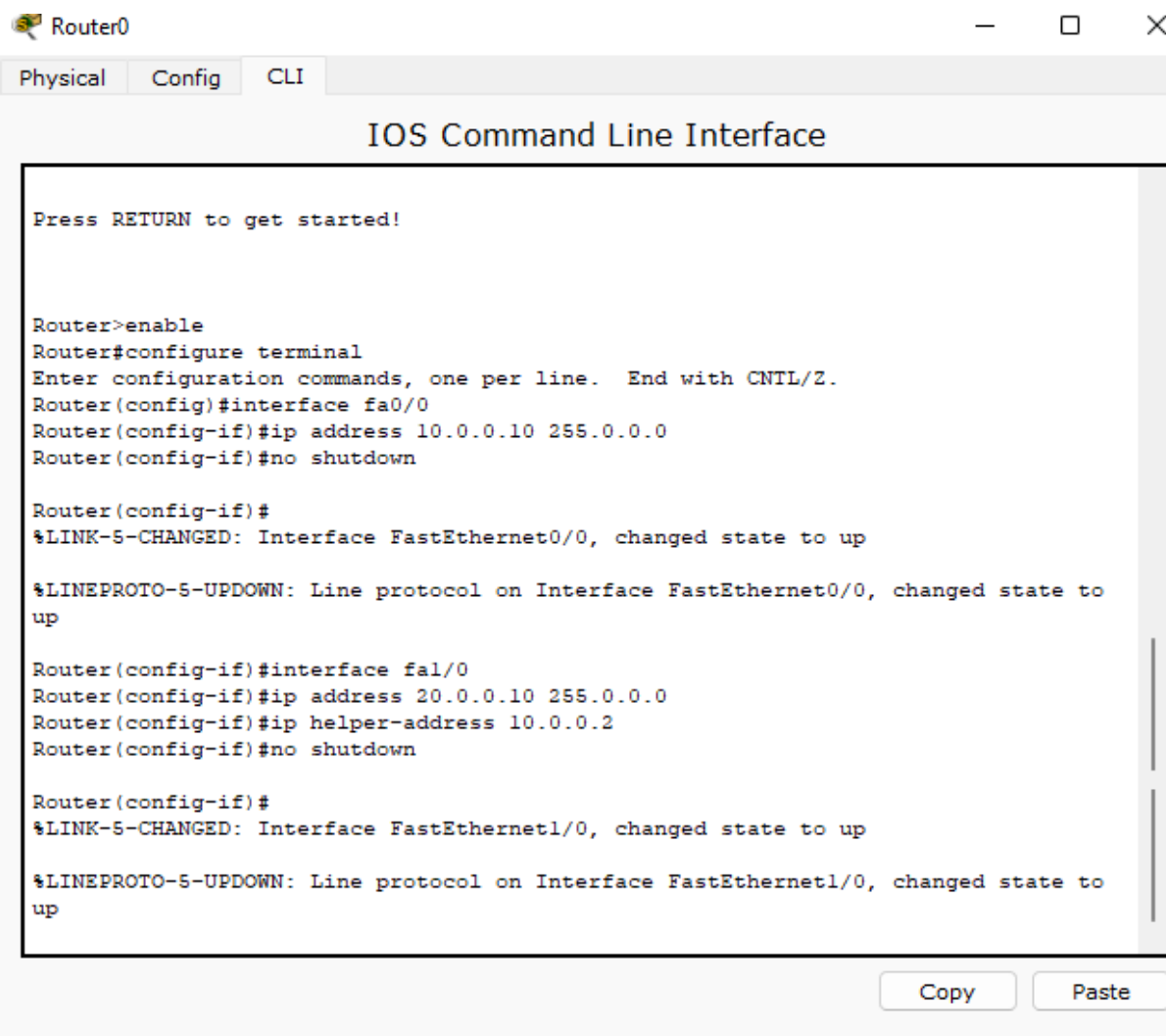
2.Configure DHCP outside a LAN.

Topology:



Configure server ip(10.0.0.2) ,default gateway=ip address of router.

Configure router ip in CLI:



The screenshot shows a window titled "Router0" with three tabs: "Physical", "Config", and "CLI". The "CLI" tab is active, displaying the "IOS Command Line Interface". The interface shows a series of commands entered in a terminal-like environment. The commands configure the router's operational mode, enable configuration mode, and then configure two interfaces, fa0/0 and fa1/0, with IP addresses and helper addresses. Status messages indicate that the interfaces and their line protocols are now up. At the bottom right of the CLI window, there are "Copy" and "Paste" buttons.

```
Press RETURN to get started!

Router>enable
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface fa0/0
Router(config-if)#ip address 10.0.0.10 255.0.0.0
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)#interface fa1/0
Router(config-if)#ip address 20.0.0.10 255.0.0.0
Router(config-if)#ip helper-address 10.0.0.2
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to
up
```

Configure server default gateway(services->DHCP->pool1,pool 2 set default gateway for both server pools ,both the ip addresses of the router)

Physical Config Services Desktop Custom Interface

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

DHCP

Interface FastEthernet0 Service ☐ On ☒ OffPool Name pool1Default Gateway 20.0.0.10DNS Server 0.0.0.0Start IP Address : 20 0 0 0Subnet Mask: 255 0 0 0Maximum number of Users : 512TFTP Server: 10.0.0.2

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP
pool 2	10.0.0.10	0.0.0.0	10.0.0.0	255.0.0.0	512	10.0.0.2
pool1	20.0.0.10	0.0.0.0	20.0.0.0	255.0.0.0	512	10.0.0.2
server...	0.0.0.0	0.0.0.0	10.0.0.0	255.0.0.0	512	0.0.0.0

Physical Config **Services** Desktop Custom Interface**SERVICES**

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

DHCP

Interface **FastEthernet0** Service ☐ On ☒ OffPool Name **pool 2**Default Gateway **10.0.0.10**DNS Server **0.0.0.0**Start IP Address : **10** **0** **0** **0**Subnet Mask: **255** **0** **0** **0**Maximum number of Users : **512**TFTP Server: **10.0.0.2**

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP
pool 2	10.0.0.10	0.0.0.0	10.0.0.0	255.0.0.0	512	10.0.0.2
pool1	20.0.0.10	0.0.0.0	20.0.0.0	255.0.0.0	512	10.0.0.2
server...	0.0.0.0	0.0.0.0	10.0.0.0	255.0.0.0	512	0.0.0.0

first PC:

The screenshot shows the 'IP Configuration' window in a network configuration tool. The window has tabs for 'Physical', 'Config', 'Desktop', and 'Custom Interface'. The 'Config' tab is active. The window title is 'IP Configuration' with a close button 'X'. It contains two sections: 'IP Configuration' and 'IPv6 Configuration'. In the 'IP Configuration' section, the 'DHCP' radio button is selected, and the fields for IP Address (20.0.0.11), Subnet Mask (255.0.0.0), Default Gateway (20.0.0.10), and DNS Server (10.0.0.2) are filled. In the 'IPv6 Configuration' section, the 'Static' radio button is selected, and the Link Local Address is set to FE80::205:5EFF:FEC0:8918. The IPv6 Address, Gateway, and DNS Server fields are empty.

IP Configuration	
<input checked="" type="radio"/> DHCP <input type="radio"/> Static	
IP Address	20.0.0.11
Subnet Mask	255.0.0.0
Default Gateway	20.0.0.10
DNS Server	10.0.0.2

IPv6 Configuration	
<input type="radio"/> DHCP <input type="radio"/> Auto Config <input checked="" type="radio"/> Static	
IPv6 Address	
Link Local Address	FE80::205:5EFF:FEC0:8918
IPv6 Gateway	
IPv6 DNS Server	

second PC:

The screenshot shows the 'IP Configuration' window in a network configuration tool for the second PC. The window has tabs for 'Physical', 'Config', 'Desktop', and 'Custom Interface'. The 'Config' tab is active. The window title is 'IP Configuration' with a close button 'X'. It contains two sections: 'IP Configuration' and 'IPv6 Configuration'. In the 'IP Configuration' section, the 'DHCP' radio button is selected, and the fields for IP Address (20.0.0.12), Subnet Mask (255.0.0.0), Default Gateway (20.0.0.10), and DNS Server (10.0.0.2) are filled. In the 'IPv6 Configuration' section, the 'Static' radio button is selected, and the Link Local Address is set to FE80::290:CFF:FE80:7D65. The IPv6 Address, Gateway, and DNS Server fields are empty.

IP Configuration	
<input checked="" type="radio"/> DHCP <input type="radio"/> Static	
IP Address	20.0.0.12
Subnet Mask	255.0.0.0
Default Gateway	20.0.0.10
DNS Server	10.0.0.2

IPv6 Configuration	
<input type="radio"/> DHCP <input type="radio"/> Auto Config <input checked="" type="radio"/> Static	
IPv6 Address	
Link Local Address	FE80::290:CFF:FE80:7D65
IPv6 Gateway	
IPv6 DNS Server	