

Practical No: 3 Static Routing

Configure IP static routing

Static routing is a form of routing that occurs when a router uses a manually-configured routing entry, rather than information from dynamic routing traffic.

Requirements: Cisco Packet Tracer

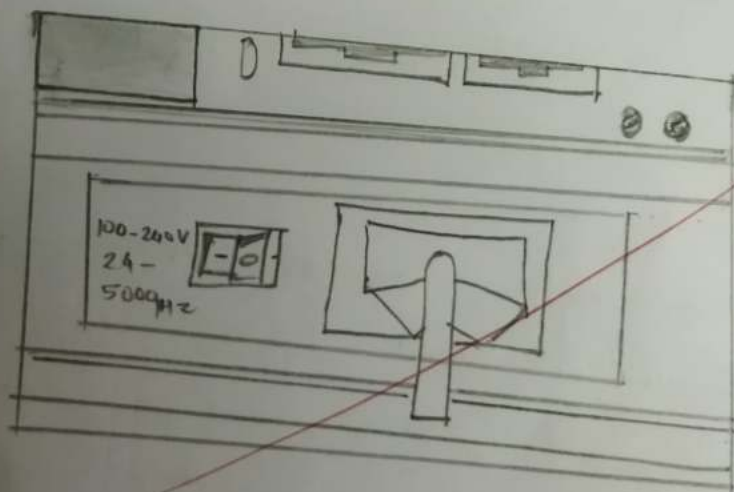
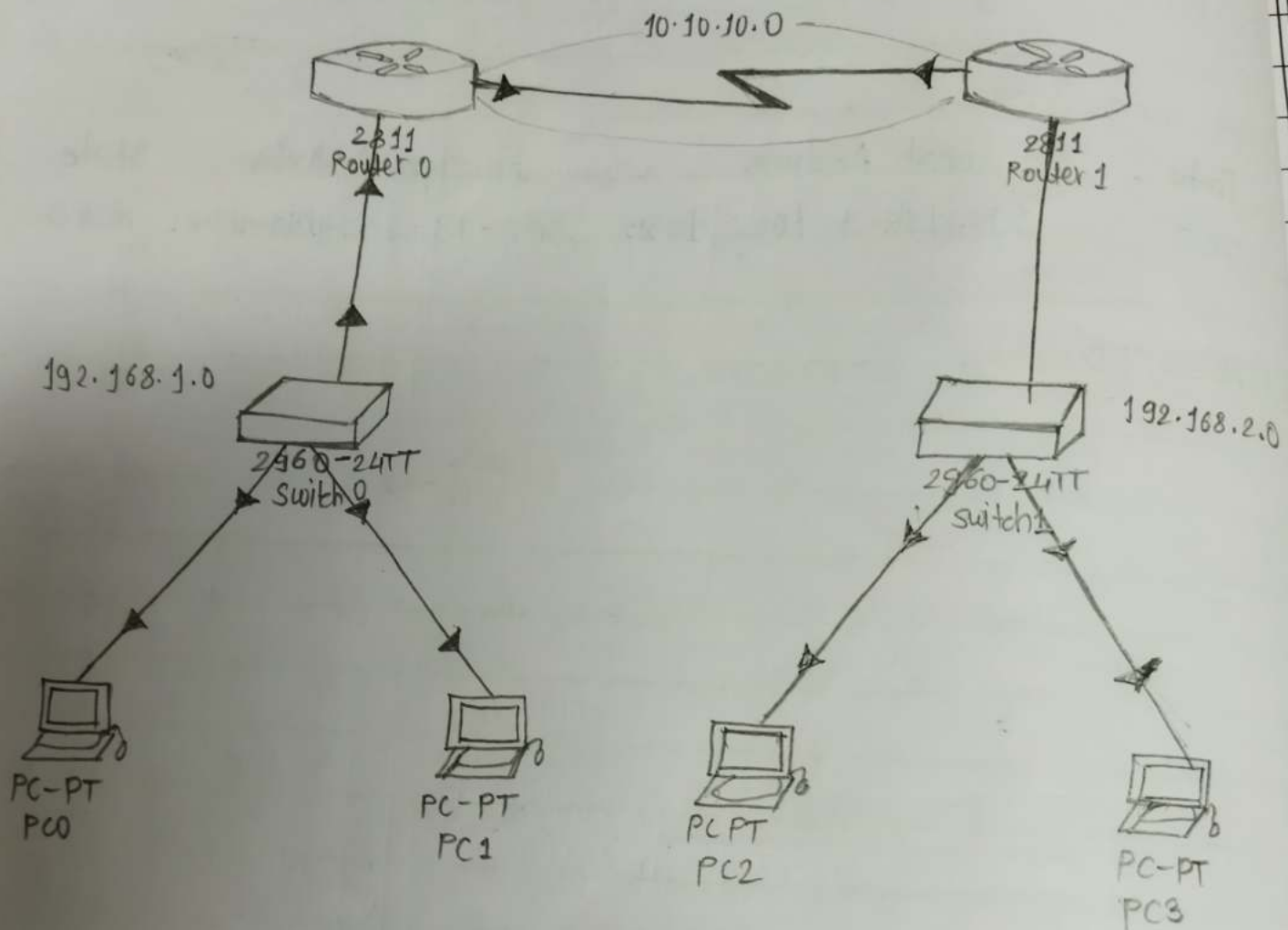
Step 1:

Drag and drop the devices which are needed for the practicals.

Step 2:

Configure router so that we connect serial wire for serial connection we have use port NM-4AS port which has 4 serial ports Kindly make the port setting in both the routers.

Note: Make sure you switch off the device before doing port setting.



Router 0		Serial 1/0
Physical	Config	CLI Attributes
Global	^	Port Status Duplex Clock Rate IP Configuration IP Address Subnet Mask Tx Ring limit Full Duplex <input checked="" type="checkbox"/> On 2000000 <input checked="" type="checkbox"/>
Routing		10.10.10.1
Switching		255.0.0.0
Interface		10
Serial 1/0	v	equivalent IOS commands

Router 1		serial 1/0
Physical	Config	CLI Attributes
Interface	^	Port status IP Address Subnet Mask Full Duplex <input checked="" type="checkbox"/> On
Serial 1/0	v	10.10.10.2 255.0.0.0
		equivalent IOS Commands

Router 0		Fast Ethernet 0/0
Physical	Config	CLI Attributes
Interface	^	Port Status IP Address Subnet Mask Full Duplex <input checked="" type="checkbox"/> On
Fast Ethernet 0/0	v	192.168.1.1 255.255.255.0
		equivalent IOS Commands

PC0

Physical Config Desktop Programming Attributes

Interface Fast Ethernet 0

IP configuration
☐ DHCP☒ Static

IP Address

192.168.1.2

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

0.0.0.0

PC1

IP configuration
☐ DHCP☒ Static

IP Address

192.168.1.3

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

0.0.0.0

PC2

IP configuration
☐ DHCP☒ Static

IP Address

192.168.2.2

Subnet Mask

255.255.255.0

Default Gateway

192.168.2.1

DNS Server

0.0.0.0

PC3

IP configuration
☐ DHCP☒ Static

IP Address

192.168.2.3

Subnet Mask

255.255.255.0

Default Gateway

192.168.2.1

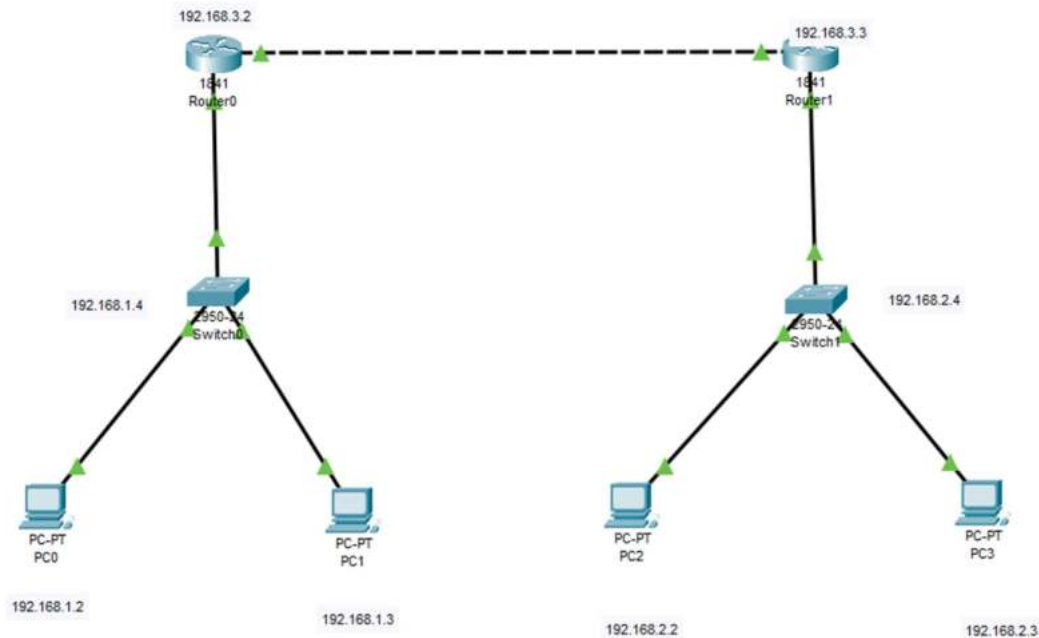
DNS Server

0.0.0.0

Moh
23/9/2

Practical 4

Aim:-Configure IP Routing Using RIP



Step 1:-

Drag and drop the devices which are needed for the Practical.

Step 2:-

Configure Router and use automatically chooses Connection type wire to connect all the devices.

Step:-3

Put the appropriate IP address and turn on the connection.

Step:-4

Go to the config menu of the router and complete the entire RIP Configuration.

Put the network address and Click on ADD Button.

Step-5:

Configuration of all PCs with their default gateway.

Step6:-

Send the message and Check whether the result is successful or not.

Router0

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings
- ROUTING**
- Static
- RIP
- SWITCHING**
- VLAN Database
- INTERFACE**
- FastEthernet0/0
- FastEthernet0/1

FastEthernet0/0

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0002.1608.6A01

IP Configuration

IP Address 192.168.1.4

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
```

☐ Top

Router0

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings
- ROUTING**
- Static
- RIP
- SWITCHING**
- VLAN Database
- INTERFACE**
- FastEthernet0/0
- FastEthernet0/1

FastEthernet0/1

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0002.1608.6A02

IP Configuration

IP Address 192.168.3.2

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#
```

☐ Top

Router0

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

FastEthernet0/1

Port Status ☒ On
Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto
Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto
MAC Address 0002.1608.6A02

IP Configuration
IP Address 192.168.3.2
Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#
```

☐ Top

Router0

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

RIP Routing

Network

Network Address
192.168.1.0
192.168.3.0

Equivalent IOS Commands

```
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#
Router(config-if)#exit
Router(config)#router rip
Router(config-router)#
```

☐ Top

Router1

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings

ROUTING

- Static
- RIP

SWITCHING

- VLAN Database

INTERFACE

- FastEthernet0/0
- FastEthernet0/1

FastEthernet0/0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 00E0.A39E.0801

IP Configuration

IP Address 192.168.2.4

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
```

☐ Top

Router1

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings

ROUTING

- Static
- RIP

SWITCHING

- VLAN Database

INTERFACE

- FastEthernet0/0
- FastEthernet0/1

FastEthernet0/1

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 00E0.A39E.0802

IP Configuration

IP Address 192.168.3.3

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#
```

☐ Top

Router1

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

RIP Routing

Network

Network Address

192.168.2.0

192.168.3.0

Add

Remove

Equivalent IOS Commands

```
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#
Router(config-if)#exit
Router(config)#router rip
Router(config-router)#
```

☐ Top

PC0

Physical Config **Desktop** Programming Attributes

IP Configuration [X]

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address 192.168.1.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.4

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::250:FFF:FE1E:23B2

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MDS

Username

☐ Top

PC1

Physical Config **Desktop** Programming Attributes

IP Configuration [X]

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address 192.168.1.3

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.4

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::202:17FF:FE9D:70C2

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MDS

Username

☐ Top

PC2

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.2.2

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.2.4

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::260:3EFF:FE6E:E295

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

☐ Top

PC3

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.2.3

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.2.4

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::230:F2FF:FE09:3098

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

☐ Top

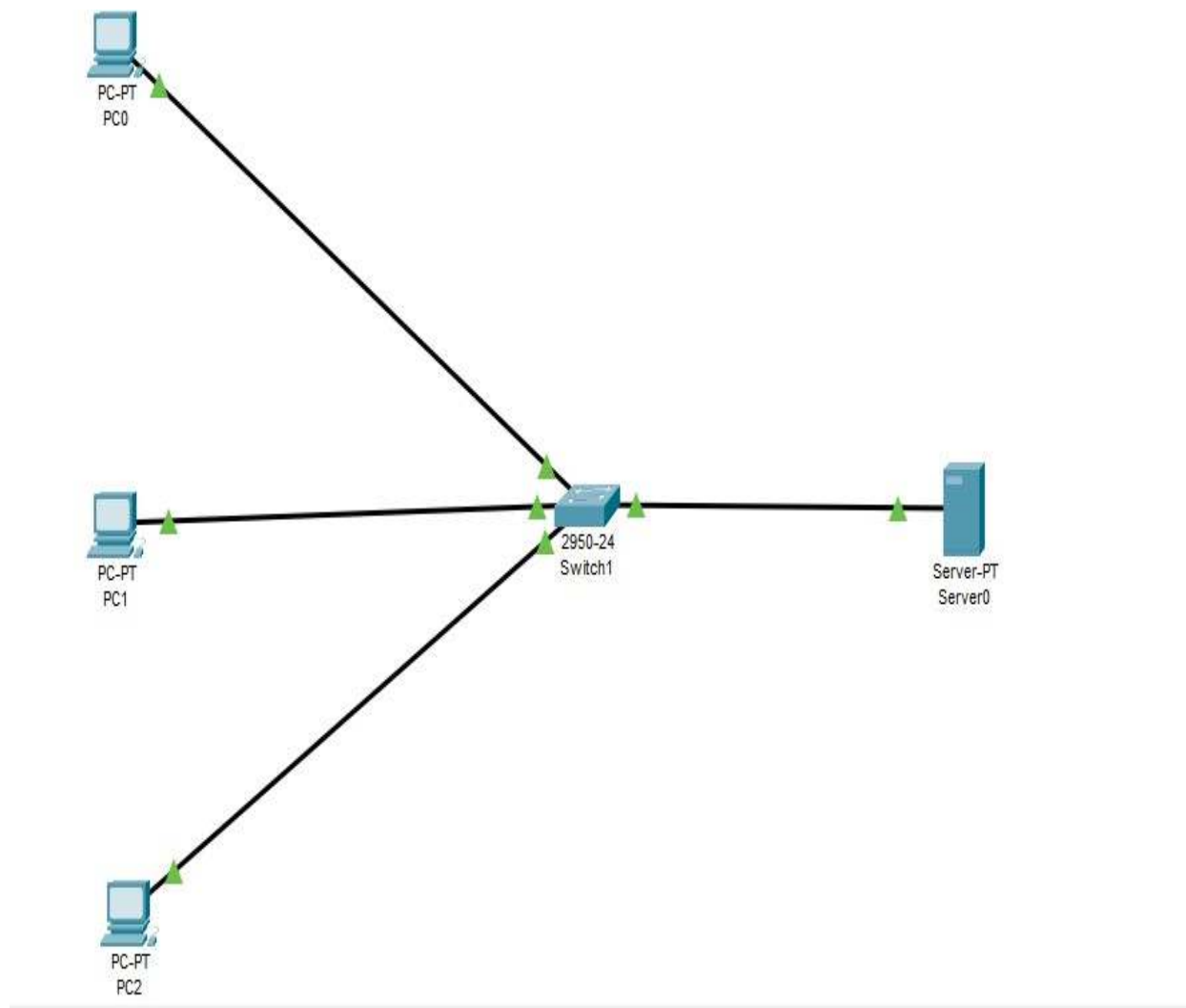
Practical-5

Aim: Configure IP routing using DNS.

DNS Stands for Domain Name System. It's a system used to translate human-friendly domain names like www.worldwideweb.com into ip addresses that computer use to identify each other on the internet.

Requirements:- Cisco Packet Tracer.

Step1:- Drag and Drop all the devices. And connect it by using appropriate wire.



Step2:- Go to the services tab select DNS Services. And add domain name worldwidewb.com as well IP

address.

Server0

Physical

Config

Services

Desktop

Programming

Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DNS

DNS Service ☒ On ☐ Off

Resource Records

Name Type

A Record

Address

Add

Save

Remove

No.	Name	Type	Detail
0	worldwideweb.com	A Record	192.168.10.0

DNS Cache

☐ Top

Step 3:- configuration of PC Put IP and DNS server Address.

The image shows a window titled "PC0" with a standard Windows-style title bar (minimize, maximize, close buttons). The window has four tabs: "Physical", "Config", "Desktop" (which is selected and highlighted in blue), "Programming", and "Attributes".

Inside the "Desktop" tab, there is a sub-window titled "IP Configuration" with a close button (X) in the top right corner. This sub-window contains the following configuration options:

- Interface:** A dropdown menu showing "FastEthernet0".
- IP Configuration:** A section with two radio buttons: "DHCP" (unselected) and "Static" (selected). Below these are four text input fields:
 - IP Address:** 192.168.10.2
 - Subnet Mask:** 255.255.255.0
 - Default Gateway:** 0.0.0.0
 - DNS Server:** 192.168.10.1
- IPv6 Configuration:** A section with three radio buttons: "DHCP" (unselected), "Auto Config" (unselected), and "Static" (selected). Below these are four text input fields:
 - IPv6 Address:** An empty field followed by a "/" separator and another empty field.
 - Link Local Address:** FE80::201:63FF:FE63:ECB0
 - IPv6 Gateway:** An empty field.
 - IPv6 DNS Server:** An empty field.
- 802.1X:** A section with a checkbox "Use 802.1X Security" (unchecked). Below it are two more fields:
 - Authentication:** A dropdown menu showing "MD5".
 - Username:** An empty text input field.

At the bottom left of the "IP Configuration" sub-window, there is a checkbox labeled "Top" which is currently unchecked.

PC2

Physical Config **Desktop** Programming Attributes

IP Configuration [X]

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.10.4

Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 192.168.10.1

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::2E0:A3FF:FE86:654B

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

☐ Top

PC1

Physical Config **Desktop** Programming Attributes

IP Configuration [X]

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.10.3

Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 192.168.10.1

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::2E0:B0FF:FE09:1EE0

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

☐ Top

Step 4:- Send messages Server to PC and check the status Successful or not.

Scenario 0											
New		Delete		Toggle PDU List Window							
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete	
	Successful	Server0	PC1	ICMP		0.000	N	0	(edit)	(delete)	

Practical 6

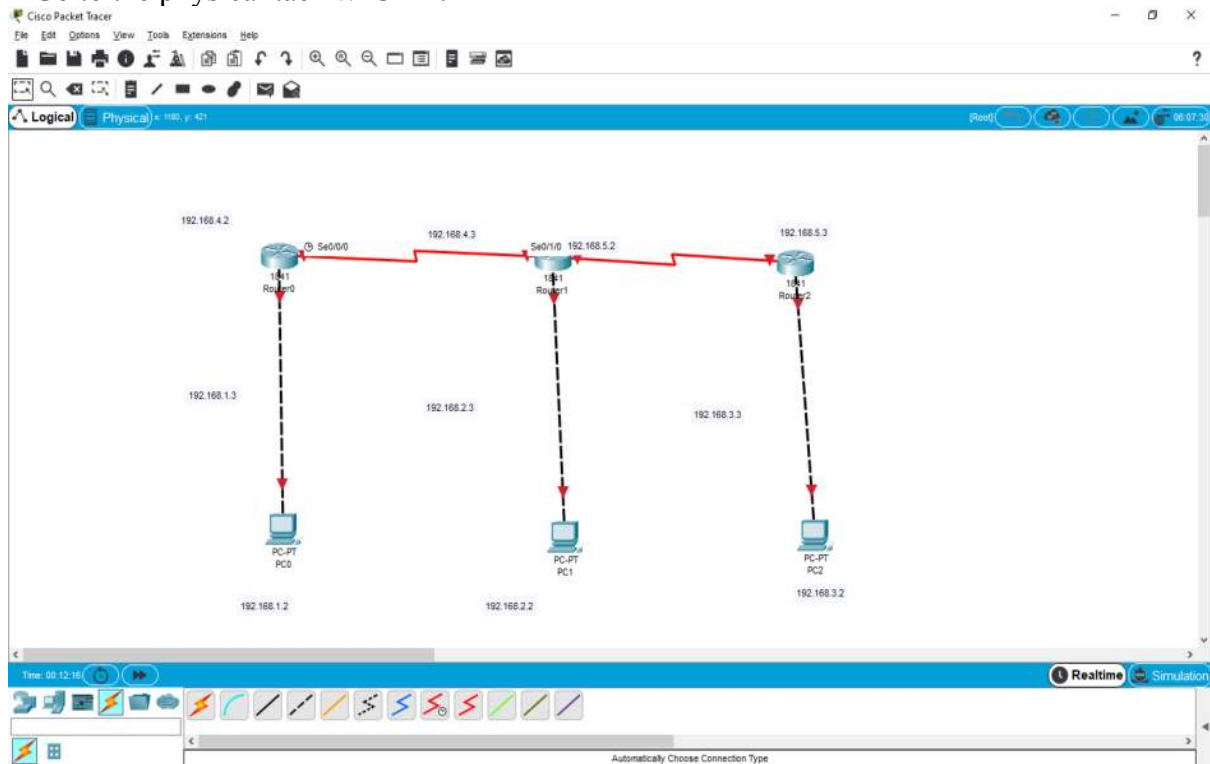
Aim: - Configure Multi area Open Shortest Path First (OSPF).

Requirements: - Cisco Packet Tracer.

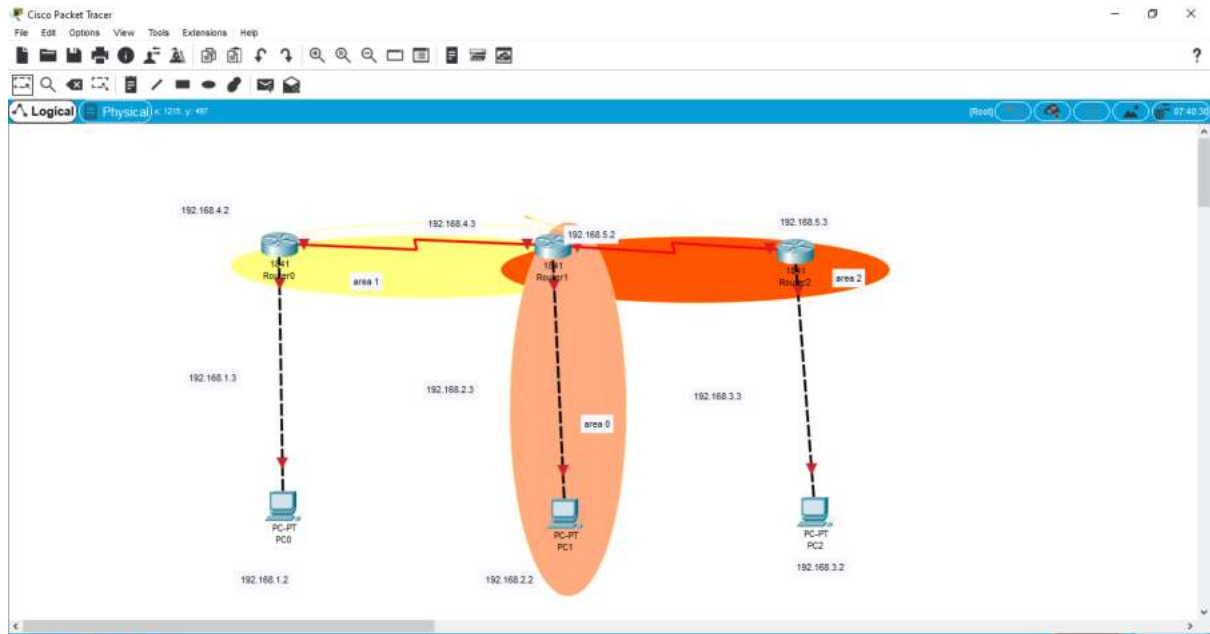
Step1:- Drag and Drop all the devices. And connect it by using appropriate wire (Automatic choose connection).

Use 1841 Router as well as add extra ports that is router 3&0-1 port , router 2-1 port.

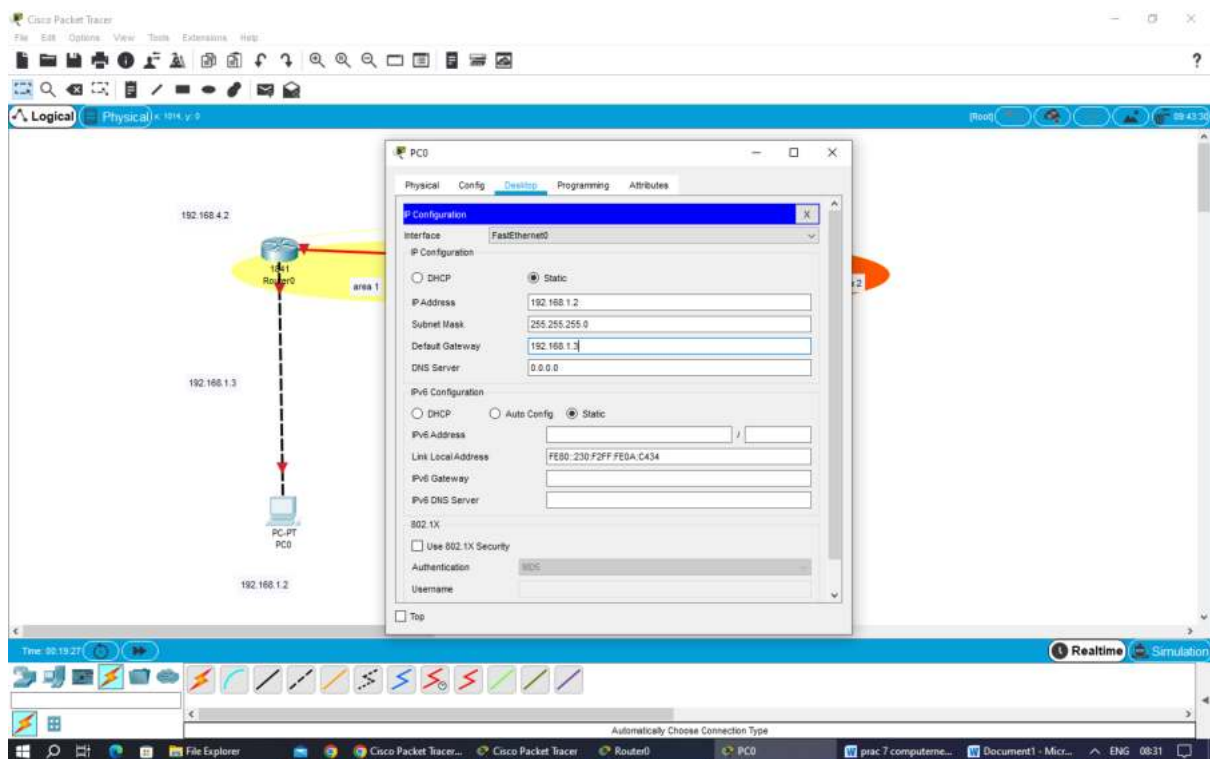
Go to the physical tab>WIC-1T.



Step 2:- create area 1, area 0, area 2



Step 3:- Configure all the PC go to Desktop> IP Configuration>put IP address and Default gateway.



Step-4:- Configuration of Routers.

Router0

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

Serial0/0/0

FastEthernet0/0

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☐ Full Duplex ☒ Auto

MAC Address 0001.64D2.7D01

IP Configuration

IP Address 192.168.1.3

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

Router(config)#interface FastEthernet0/0

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

ip address 192.168.1.3 255.255.255.0

Router(config-if)#

☐ Top

Router0

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

Serial0/0/0

Serial0/0/0

Port Status

Duplex

Full Duplex

On

Clock Rate

2000000

IP Configuration

IP Address

192.168.4.2

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

```

ip address 192.168.1.3 255.255.255.0
Router(config-if)#ip address 192.168.1.3 255.255.255.0
Router(config-if)#ip address 192.168.1.3 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial0/0/0
Router(config-if)#no shutdown
Router(config-if)#ip address 192.168.4.2 255.255.255.0
Router(config-if)#

```

☐ Top

Router1

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

Serial0/0/0

Serial0/1/0

FastEthernet0/1

Port Status

Bandwidth

100 Mbps

10 Mbps

Auto

Duplex

Half Duplex

Full Duplex

Auto

MAC Address

0003.E433.7702

IP Configuration

IP Address

192.168.2.3

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

```

Router(config-if)#ip address 192.168.2.3 255.255.255.0
Router(config-if)#ip address 192.168.2.3 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
ip address 192.168.2.3 255.255.255.0
Router(config-if)#

```

☐ Top

Router1

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

Serial0/0/0

Serial0/1/0

Serial0/0/0

Port Status

☒ On

Duplex

Full Duplex

Clock Rate

2000000

IP Configuration

IP Address

192.168.5.2

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
ip address 192.168.2.3 255.255.255.0
Router(config-if)#ip address 192.168.2.3 255.255.255.0
Router(config-if)#ip address 192.168.2.3 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial0/0/0
Router(config-if)#

☐ Top

Router1

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

Serial0/0/0

Serial0/1/0

Serial0/1/0

Port Status

☒ On

Duplex

☐ Full Duplex

Clock Rate

1200

IP Configuration

IP Address

192.168.4.3

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

ip address 192.168.2.3 255.255.255.0

Router(config-if)#ip address 192.168.2.3 255.255.255.0

Router(config-if)#

Router(config-if)#exit

Router(config)#interface Serial0/0/0

Router(config-if)#

Router(config-if)#exit

Router(config)#interface Serial0/1/0

Router(config-if)#

☐ Top

Step 6-Configuration of OSPF

The screenshot shows the 'Router2' configuration window with the 'Config' tab selected. The left sidebar contains a tree view with categories: GLOBAL, ROUTING, SWITCHING, and INTERFACE. Under the INTERFACE category, 'Serial0/0/0' is selected. The main configuration area for 'Serial0/0/0' shows the following settings:

- Port Status: ☒ On
- Duplex: ☐ Full Duplex
- Clock Rate: 2000000
- IP Configuration:
 - IP Address: 192.168.5.3
 - Subnet Mask: 255.255.255.0
- Tx Ring Limit: 10

Below the configuration area, the 'Equivalent IOS Commands' section displays the following commands and output:

```
Router(config)#interface Serial0/0/0
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed
state to up
ip address 192.168.5.3 255.255.255.0
Router(config-if)#
```

At the bottom left, there is a 'Top' button with a checkbox icon.

Router2

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

Serial0/0/0

FastEthernet0/0

Port Status

☒ On

Bandwidth

☒ 100 Mbps

☐ 10 Mbps

☒ Auto

Duplex

☐ Half Duplex

☒ Full Duplex

☒ Auto

MAC Address

0001.427D.B701

IP Configuration

IP Address

192.168.3.3

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up

ip address 192.168.5.3 255.255.255.0

Router(config-if)#ip address 192.168.5.3 255.255.255.0

Router(config-if)#ip address 192.168.5.3 255.255.255.0


Router(config-if)#

Router(config-if)#exit

Router(config)#interface FastEthernet0/0

Router(config-if)#

☐ Top

 Router0

Physical Config CLI Attributes

IOS Command Line Interface

```
Router(config-if)#
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed
state to up
ip address 192.168.4.2 255.255.255.0
Router(config-if)#
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console


Router#^Z
Router#
Router#enable
Router#^Z
Router#^Z
Router#^Z
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router ospfl
      ^
% Invalid input detected at '^' marker.

Router(config)#router ospf 1
Router(config-router)#network 192.168.1.0 0.0.0.255 area 1
Router(config-router)#network 192.168.4.0 0.0.0.255 area 1
Router(config-router)#exit
Router(config)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

 Router1

Physical Config CLI Attributes

IOS Command Line Interface

```
Router>enable
Router#configure teminal
      ^
% Invalid input detected at '^' marker.

Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#router ospf 2
Router(config-router)#network 192.168.2.0 0.0.0.255 area 0
Router(config-router)#network 192.168.4.0 0.0.0.255 area 1
Router(config-router)#network 192
00:35:36: %OSPF-5-ADJCHG: Process 2, Nbr 192.168.4.2 on Serial0/1/0
from LOADING to FULL, Loading Done
.
      ^
% Invalid input detected at '^' marker.

Router(config-router)#network 192.168.5.0 0.0.0.255 area 2
Router(config-router)#exit
Router(config)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

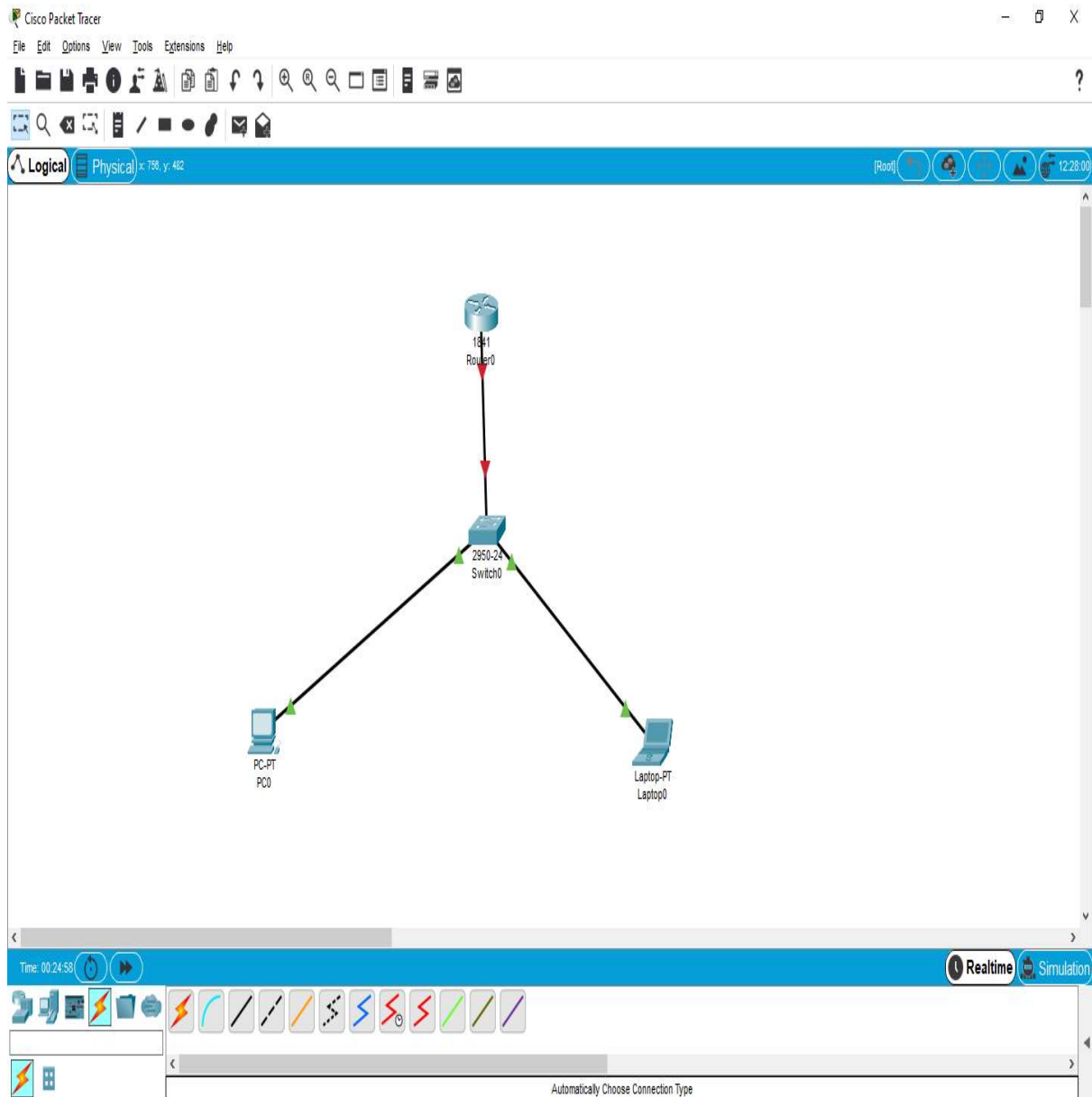
☐ Top

Practical no. 7

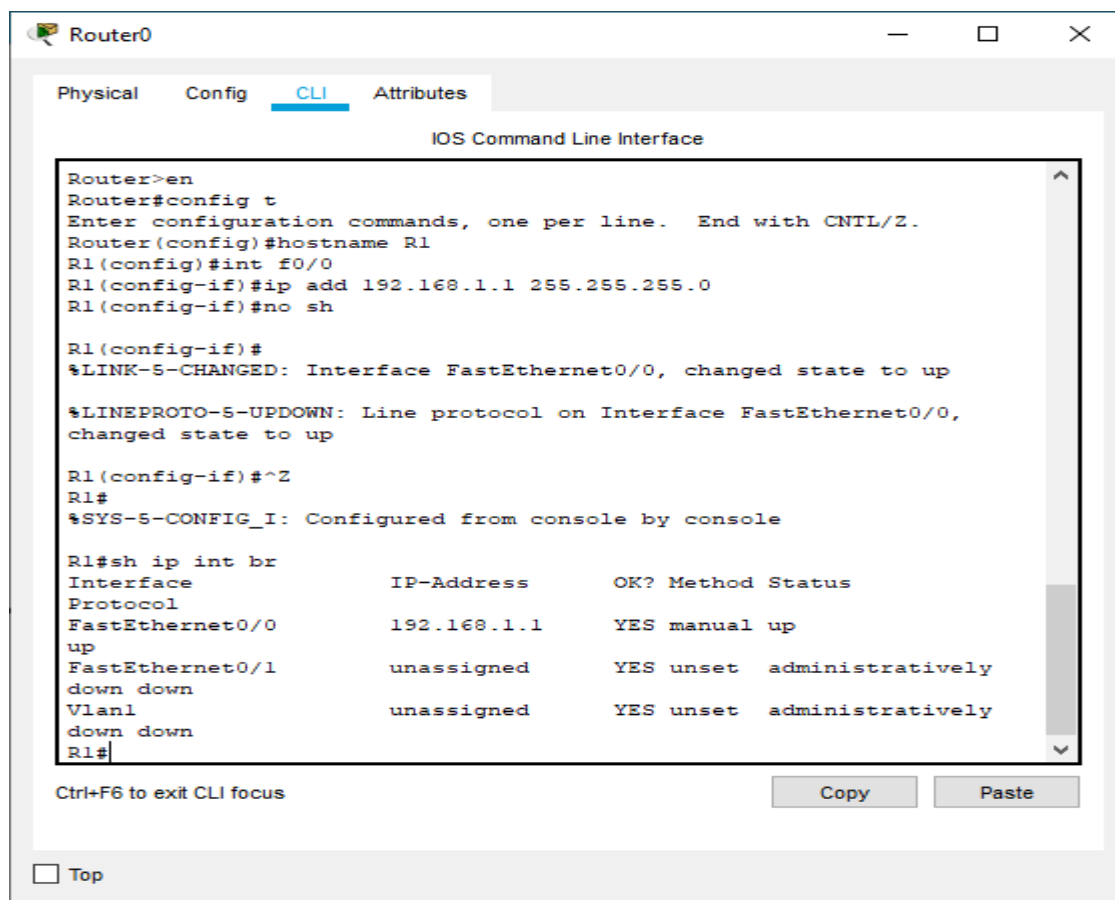
Aim:-Configure Dynamic host Configuration Protocol.

Requirements: - Cisco Packet Tracer.

Step 1:- Drag and Drop all the devices. And connect it by using appropriate wire (Automatic choose connection) Use 1841 Router, Switch 2950-24.



Step 2:- Go to CLI tab of router0 and complete the configuration.



Router0

Physical

Config

CLI

Attributes

IOS Command Line Interface

%SYS-5-CONFIG_I: Configured from console by console

R1#sh ip int br

Interface	IP-Address	OK?	Method	Status
FastEthernet0/0	192.168.1.1	YES	manual	up
FastEthernet0/1	unassigned	YES	unset	administratively down
Vlan1	unassigned	YES	unset	administratively down

R1#wr

Building configuration...

[OK]

R1#config t

Enter configuration commands, one per line. End with CNTL/Z.

R1(config)#ip dhcp pool abc

R1(dhcp-config)#default-router 192.168.1.1 255.255.255.0

% Invalid input detected at '^' marker.

R1(dhcp-config)#default-router 192.168.1.1

R1(dhcp-config)#network 192.168.1.0 255.255.255.0

R1(dhcp-config)#^Z

R1#

%SYS-5-CONFIG_I: Configured from console by console

R1#

Ctrl+F6 to exit CLI focus

Copy

Paste

☐ Top

Step 3:- Go to Desktop>IP Configuration>Select DHCP

The screenshot shows the 'PC0' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section is active, showing the 'FastEthernet0' interface. The 'DHCP' radio button is selected, and the status 'DHCP request successful.' is displayed. The IP Address is 192.168.1.2, Subnet Mask is 255.255.255.0, Default Gateway is 192.168.1.1, and DNS Server is 0.0.0.0. The 'IPv6 Configuration' section shows 'Static' selected, with fields for IPv6 Address, Link Local Address (FE80::2E0:A3FF:FE04:508), IPv6 Gateway, and IPv6 DNS Server. The '802.1X' section has 'Use 802.1X Security' unchecked, 'Authentication' set to 'MD5', and a 'Username' field. A 'Top' button is at the bottom left.

PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IP Address 192.168.1.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:A3FF:FE04:508

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

☐ Top

Laptop0

Physical

Config

Desktop

Programming

Attributes

IP Configuration

X

Interface

FastEthernet0

IP Configuration

☒ DHCP

☐ Static

DHCP request successful.

IP Address

192.168.1.3

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

0.0.0.0

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address

/

Link Local Address

FE80::2E0:F7FF:FE4B:1630

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication

MD5

Username

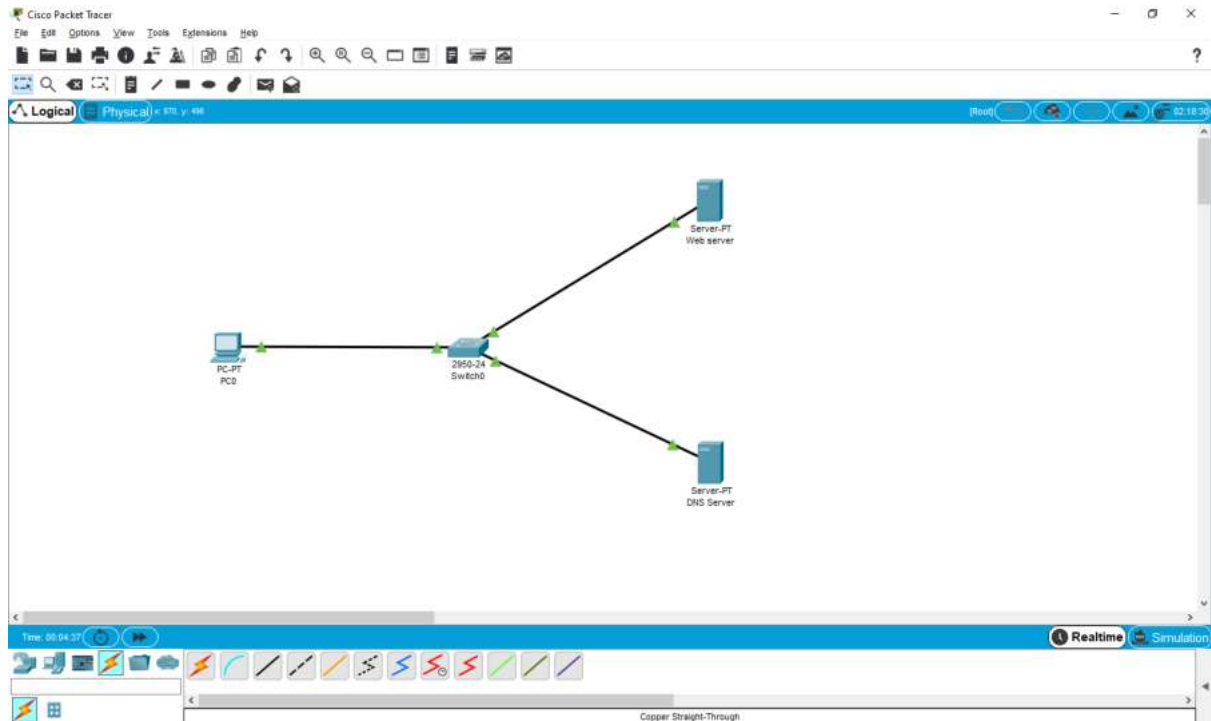
Top

Practical no. 8

Aim:-Configure HTTP (Hypertext transfer Protocol.)

Requirements: - Cisco Packet Tracer.

Step 1:- Drag and Drop all the devices. And connect it by using appropriate wire (Use Copper Straight through wire) Web Server, DNS Server, PC, Switch 2950-24.



Step 2:- Assign IP address and DNS Server address as well as default gateway.

Web server

Physical

Config

Services

Desktop

Programming

Attributes

IP Configuration

IP Configuration

☐ DHCP

☒ Static

IP Address

192.168.1.2

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

192.168.1.1

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address

/

Link Local Address

FE80::2D0:BCFF:FE18:464E

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication

MD5

Username

Password

☐ Top

DNS Server

Physical

Config

Services

Desktop

Programming

Attributes

IP Configuration

IP Configuration

☐ DHCP

☒ Static

IP Address

192.168.1.1

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

192.168.1.1

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address

/

Link Local Address

FE80::2D0:97FF:FE34:C3EE

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication

MD5

Username

Password

Top

PC0

Physical

Config

Desktop

Programming

Attributes

IP Configuration

X

Interface

FastEthernet0

IP Configuration

DHCP

Static

IP Address

192.168.1.3

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

192.168.1.1

IPv6 Configuration

DHCP

Auto Config

Static

IPv6 Address

/

Link Local Address

FE80::260:47FF:FEAC:5B99

IPv6 Gateway

IPv6 DNS Server

802.1X

Use 802.1X Security

Authentication

MD5

Username

Top

Step 3:- On the DNS Service give name-Cisco & Address- 192.168.1.2

DNS Server

Physical

Config

Services

Desktop

Programming

Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DNS

DNS Service

On

Off

Resource Records

Name

Type

A Record

Address

Add

Save

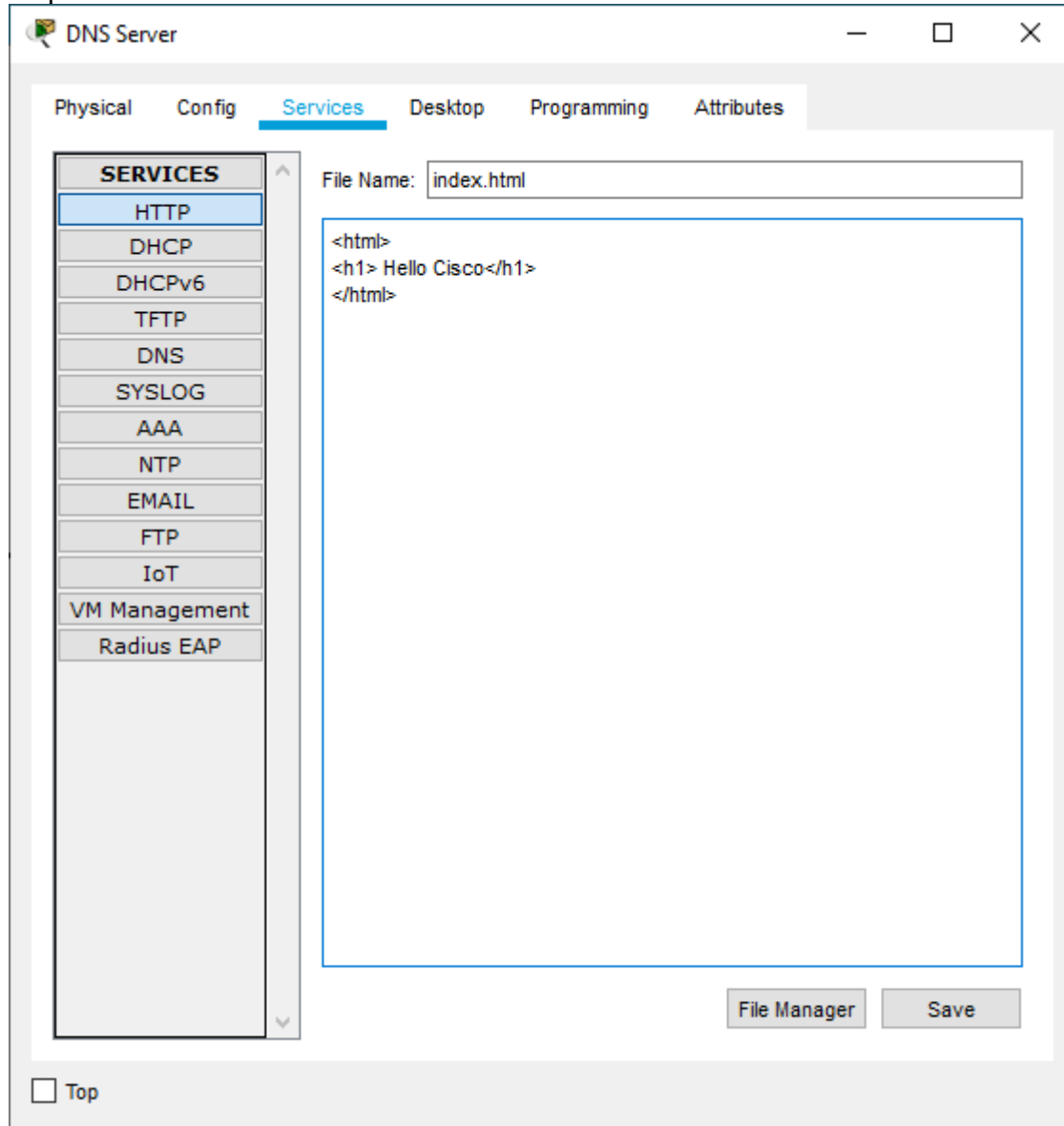
Remove

No.	Name	Type	Detail
0	cisco	A Record	192.168.1.2

DNS Cache

Top

Step 4:- Go to HTTP Services edit Index.html and save the file.



Step 5:- Go to Web Server>Desktop> Web Browser> Put URL 192.168.1.1
By using HTTP We Can access the File which is available on DNS Sever.

