

CN ASSIGNMENT – 10

Name – Hityshi

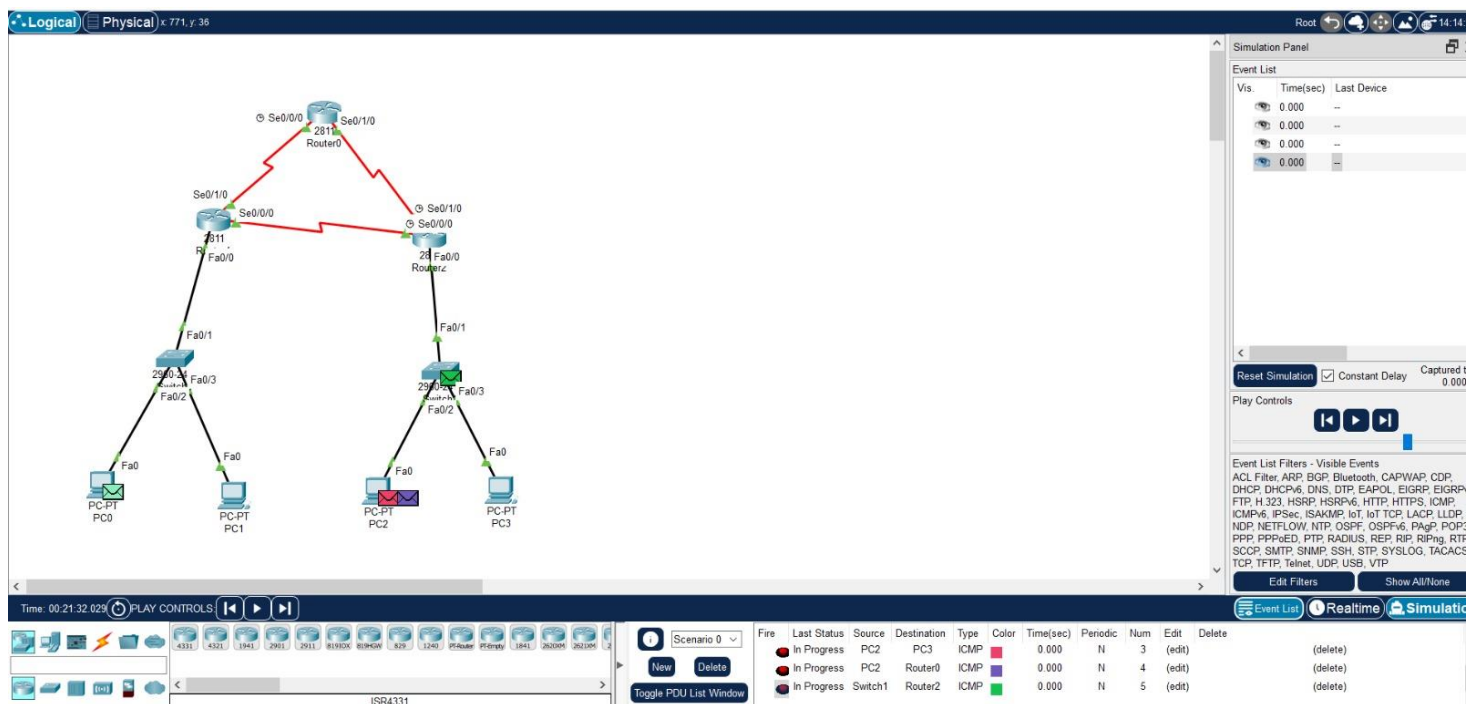
Roll no. -102103535

Configure OSPF routing

To verify and test the OSPF configuration.

To view the OSPF neighbor routers.

To view the OSPF border routers.



```

255K bytes of non-volatile configuration memory.
249856K bytes of ATA System CompactFlash 0 (Read/Write)

Press RETURN to get started!

%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up
%LINK-5-CHANGED: Interface Serial0/1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up

Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router ospf 0
^
% Invalid input detected at '^' marker.

Router(config)#router ospf 1
Router(config-router)#network 160.160.160.0 0.0.255.255 area 0
Router(config-router)#network 150.150.150.0 0.0.255.255 area 0
Router(config-router)#exit
Router(config)#
00:10:24: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.1.1 on Serial0/0/0 from LOADING to FULL, Loading Done

Router(config)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#
Router#show ip ospf neighbor

Neighbor ID      Pri   State           Dead Time   Address        Interface
192.168.1.1      0     FULL/-         00:00:32    150.150.150.2  Serial0/0/0
Router#show ip ospf border-routers
OSPF Process 1 internal Routing Table

Codes: i - Intra-area route, I - Inter-area route

Router#
00:13:18: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.1.2 on Serial0/1/0 from LOADING to FULL, Loading Done

```

```

Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router ospf 1
Router(config-router)#network 160.160.160.0 0.0.255.255
% Incomplete command.
Router(config-router)#network 160.160.160.0 0.0.255.255 area 0
Router(config-router)#network
00:13:18: %OSPF-5-ADJCHG: Process 1, Nbr 160.160.160.2 on Serial0/1/0 from LOADING to FULL, Loadi
Router(config-router)#
Router(config-router)#network 192.168.1.0 0.0.0.255 area 0
Router(config-router)#network
00:14:20: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.1.1 on Serial0/0/0 from LOADING to FULL, Loading
Done

% Incomplete command.
Router(config-router)#network 20.0.0.0 0.255.255.255 area 0
Router(config-router)#exit
Router(config)#
Router(config)#
Router(config)#
Router(config)#
Router(config)#show ip ospf neighbor
^
% Invalid input detected at '^' marker.

Router(config)#show ip ospf neighbor
^
% Invalid input detected at '^' marker.

Router(config)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show ip ospf neighbor

Neighbor ID      Pri   State           Dead Time   Address        Interface
160.160.160.2    0     FULL/-         00:00:34    160.160.160.2  Serial0/1/0
192.168.1.1      0     FULL/-         00:00:36    192.168.1.1    Serial0/0/0
Router#show ip ospf border-room
^

```

Router1

Physical Config **CLI** Attributes

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1/0, changed state to up

Router>enable
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router ospf 1
Router(config-router)#network 10.0.0.0 0.255.255.255 area 0
Router(config-router)#network 150.150.150.0 0.0.255.255 area 0
Router(config-router)#network 192.168.1.0 0.0.0.255 area 0
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Router#
Router#show ip ospf neighbor

Router#
Router#show ip ospf neighbor

Router#show ip ospf border-route
OSPF Process 1 internal Routing Table

Codes: i - Intra-area route, I - Inter-area route

Router#show ip ospf neighbor

Router#
00:10:24: %OSPF-5-ADJCHG: Process 1, Nbr 160.160.160.2 on Serial0/1/0 from LOADING to FULL, Loading Done
00:14:20: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.1.2 on Serial0/0/0 from LOADING to FULL, Loading Done
```

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

Serial0/2/0

Serial0/3/0

Serial0/0/0

Port Status ☒ On

Duplex ☐ Full Duplex

Clock Rate 2000000

IP Configuration

IPv4 Address 192.168.1.1

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 Serial0/0/0
Router(config-if)#
```

PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 10.0.0.2

Subnet Mask 255.0.0.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::260:70FF:FE71:D8A6

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

PC3

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 20.0.0.3

Subnet Mask 255.0.0.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::250:FFF:FE31:78BA

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password