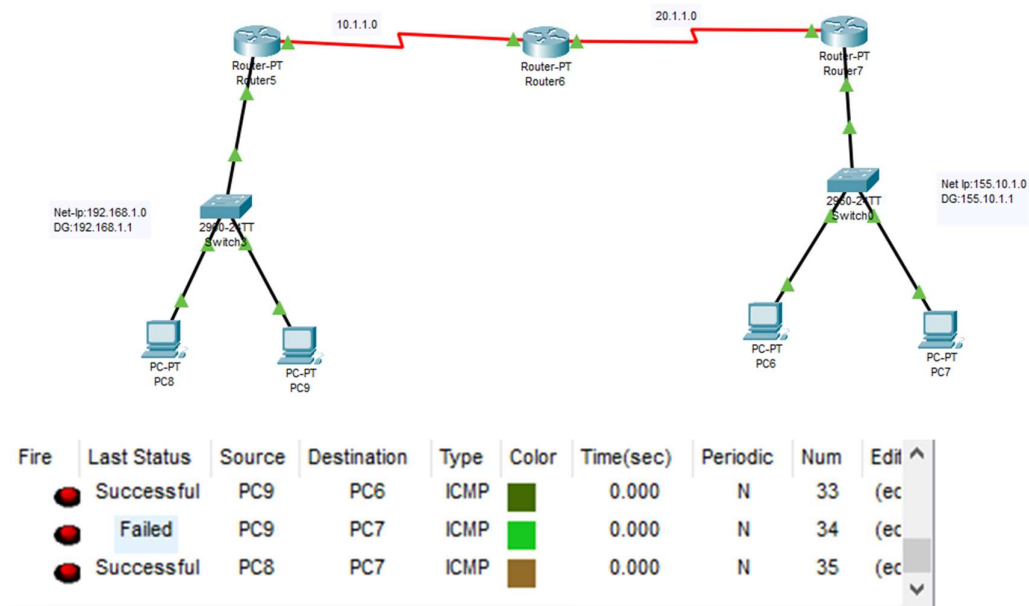


Shakeeb Shaikh

TCS2526068

Practical 9B:

Aim:



Set up the ip address of the pc and the Go for router

Router Configuration:

Router 5

Router5

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet0/0

Port Status

On

Bandwidth

100 Mbps

10 Mbps

Auto

Duplex

Half Duplex

Full Duplex

Auto

MAC Address

00E0.F796.717A

IP Configuration

IPv4 Address

192.168.1.1

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

Gateway of last resort is not set

C 10.0.0.0/8 is directly connected, Serial2/0

O IA 20.0.0.0/8 [110/128] via 10.1.1.2, 00:00:54, Serial2/0

O IA 155.10.0.0/16 [110/129] via 10.1.1.2, 00:00:54, Serial2/0

C 192.168.1.0/24 is directly connected, FastEthernet0/0

Router#

Router#

Router#configure terminal

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

Router(config)#interface FastEthernet0/0

Router(config-if)#

Top

Physical **Config** CLI Attributes

Serial2/0	
Port Status	<input checked="" type="checkbox"/> On
Duplex	<input type="radio"/> Full Duplex
Clock Rate	1200
IP Configuration	
IPv4 Address	10.1.1.1
Subnet Mask	255.0.0.0
Tx Ring Limit	10

Equivalent IOS Commands

```
C 10.0.0.0/8 is directly connected, Serial2/0
O IA 20.0.0.0/8 [110/128] via 10.1.1.2, 00:00:54, Serial2/0
O IA 155.10.0.0/16 [110/129] via 10.1.1.2, 00:00:54, Serial2/0
C 192.168.1.0/24 is directly connected, FastEthernet0/0

Router#
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 Serial2/0
Router(config-if)#
```

☐ Top

```

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

Router(config)#router ospf 0
^
% Invalid input detected at '^' marker.

Router(config)#router ospf 1
Router(config-router)#network 10.1.1.0 0.255.255.255 area 0
Router(config-router)#
00:24:18: %OSPF-5-ADJCHG: Process 1, Nbr 20.1.1.2 on Serial2/0 from LOADING to FULL,
Loading Done

Router(config-router)#network 192.168.1.0 0.0.255.255 area 0
Router(config-router)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#write
Building configuration...
[OK]
Router#sh ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
        i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
        * - candidate default, U - per-user static route, o - ODR
        P - periodic downloaded static route

```

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```

Router#write
Building configuration...
[OK]
Router#sh ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
        i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
        * - candidate default, U - per-user static route, o - ODR
        P - periodic downloaded static route

Gateway of last resort is not set

C    10.0.0.0/8 is directly connected, Serial2/0
O IA 20.0.0.0/8 [110/128] via 10.1.1.2, 00:00:54, Serial2/0
O IA 155.10.0.0/16 [110/129] via 10.1.1.2, 00:00:54, Serial2/0
C    192.168.1.0/24 is directly connected, FastEthernet0/0

Router#
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 Serial2/0
Router(config-if)#

```

Router 7 configuration:

Router7

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet0/0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0001.433B.8772

IP Configuration

IPv4 Address 155.10.1.1

Subnet Mask 255.255.0.0

Tx Ring Limit 10

Equivalent IOS Commands

O IA 10.0.0.0/8 [110/128] via 20.1.1.2, 00:01:34, Serial2/0

C 20.0.0.0/8 is directly connected, Serial2/0

C 155.10.0.0/16 is directly connected, FastEthernet0/0

Router#

Router#

Router#configure terminal

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

Router(config)#interface Serial3/0

Router(config-if)#

Router(config-if)#exit

Router(config)#interface FastEthernet0/0

Router(config-if)#

☐ Top

Physical **Config** CLI Attributes

GLOBAL	Serial2/0
Settings	
Algorithm Settings	
ROUTING	
Static	
RIP	
INTERFACE	
FastEthernet0/0	
FastEthernet1/0	
Serial2/0	
Serial3/0	
FastEthernet4/0	
FastEthernet5/0	

Port Status	<input checked="" type="checkbox"/> On
Duplex	<input type="radio"/> Full Duplex
Clock Rate	2000000
IP Configuration	
IPv4 Address	20.1.1.1
Subnet Mask	255.0.0.0
Tx Ring Limit	10

Equivalent IOS Commands

```
Router#
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Serial3/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
```

☐ Top

Physical Config CLI Attributes

IOS Command Line Interface

```
Router>EN
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router ospf 1
Router(config-router)#network 20.1.1.0 0.255.255.255 area 1
Router(config-router)#network 155.10.1.0 0.0.255.255 area 1
Router(config-router)#
00:21:12: %OSPF-5-ADJCHG: Process 1, Nbr 20.1.1.2 on Serial2/0 from LOADING to FULL,
Loading Done

Router(config-router)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#write
Building configuration...
[OK]
Router#sh ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
        i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
        * - candidate default, U - per-user static route, o - ODR
        P - periodic downloaded static route

Gateway of last resort is not set

O IA 10.0.0.0/8 [110/128] via 20.1.1.2, 00:01:34, Serial2/0
C    20.0.0.0/8 is directly connected, Serial2/0
C    155.10.0.0/16 is directly connected, FastEthernet0/0

Router#
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z
```

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Router 6 configuration:

Router6

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

Serial2/0

Port Status ☒ On

Duplex ☐ Full Duplex

Clock Rate 2000000

IP Configuration

IPv4 Address 10.1.1.2

Subnet Mask 255.0.0.0

Tx Ring Limit 10

Router6

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

Serial3/0

Port Status ☒ On

Duplex ☐ Full Duplex

Clock Rate 1200

IP Configuration

IPv4 Address 20.1.1.2

Subnet Mask 255.0.0.0

Tx Ring Limit 10


```
Router>EN
Router# conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router ospf 1
Router(config-router)#network 10.1.1.0 0.255.255.255 area 0
Router(config-router)#network 20.1.1.0 0.255.255.255 area 1
Router(config-router)#exit
Router(config)#
00:21:13: %OSPF-5-ADJCHG: Process 1, Nbr 155.10.1.1 on Serial3/0 from LOADING to FULL,
Loading Done
write
^
% Invalid input detected at '^' marker.

Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
write
Building configuration...
[OK]
Router#sh ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

C    10.0.0.0/8 is directly connected, Serial2/0
C    20.0.0.0/8 is directly connected, Serial3/0
O    155.10.0.0/16 [110/65] via 20.1.1.1, 00:01:49, Serial3/0

Router#
```

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