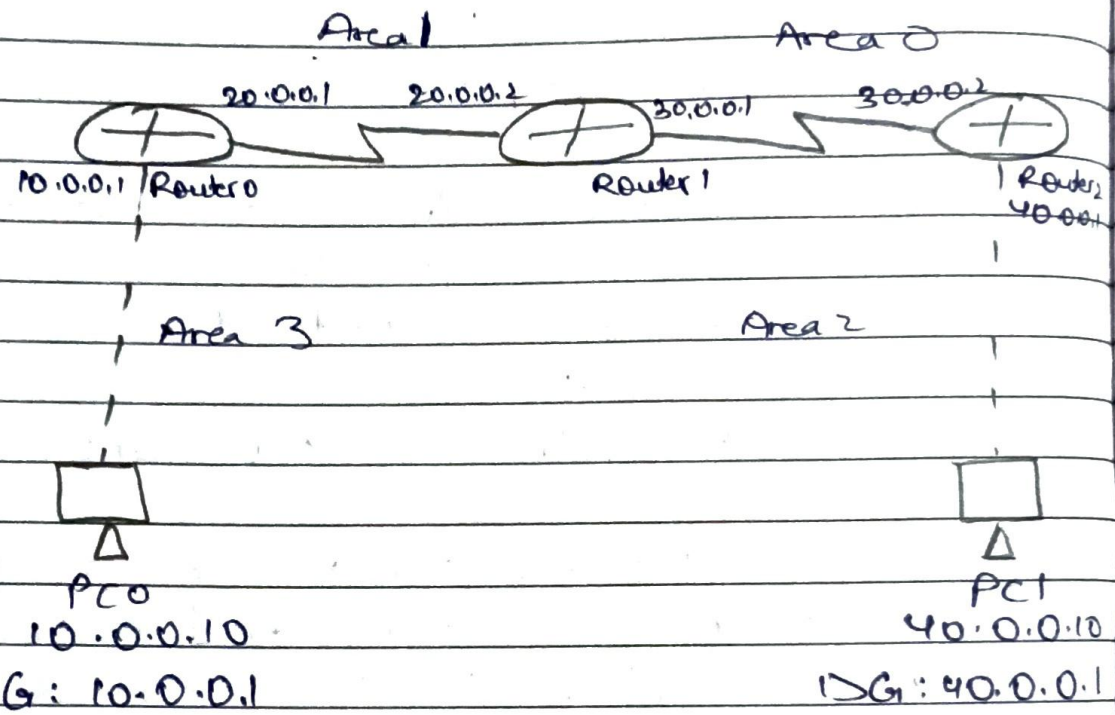
PAGE NO :
DATE : 27-11-24

LAB-07 Exp: 9

- Objective: Configure Openstate shortest Path Protocol in Routers.

- Topology:



- Procedure:

i) Place 2 PC's and 3 routers.

ii) Connect the PC's to two different routers and connect the router using a another router.

iii) Set the ip addresses of the end systems along with their gateways.

iv) configure the ip addresses of routers.

v) Go to CLI and perform:

if clock is present on the port:

interface serial

PAGE NO :
DATE :

(config-if)# encapsulation PPP
(config-if)# clock rate 64000
(config-if)# no shut

if clock is not present
(config-if)# encapsulation PPP
(config-if)# no shut

vi) Giving id's to Routers:-
Router 0:
(config)# router ospf 1
router-id 1.1.1.1
network 10.0.0.0 0.255.255.255 area 3
network 20.0.0.0 0.255.255.255 area 1

Router 1:
router ospf 1
router-id 2.2.2.2
network 20.0.0.0 0.255.255.255 area 1
network 30.0.0.0 0.255.255.255 area 0

Router 2:
router ospf 1
router-id 3.3.3.3
network 30.0.0.0 0.255.255.255 area 0
network 40.0.0.0 0.255.255.255 area 2

vii) Giving Loopbacks:
Router 0:
(config-if)# interface loopback 0
ip add 170.16.1.252 255.255.0.0
no shut

PAGE NO :
DATE :

Router 1 :

interface loopback 0
ip add 26.16.1.253 255.255.0.0
no shut

Router 2: # interface loopback 0
ip add 26.16.1.254 255.255.0.0
no shut

viii) create virtual link between R1 and R2

In R1 :

(config)# router ospf 1
area 1 virtual link 2.2.2.2
exit

In R2

(config)# router ospf 1
area 1 virtual link 1.1.1.1
exit

ix) Ping PC0 to PC1

- Observation:

1) All the devices are connected succesfully

2) Ping 40.0.0.10 from PC0

ping statistics for 40.0.0.10

Packets: Sent:4, Received:4, Lost:0 (0%