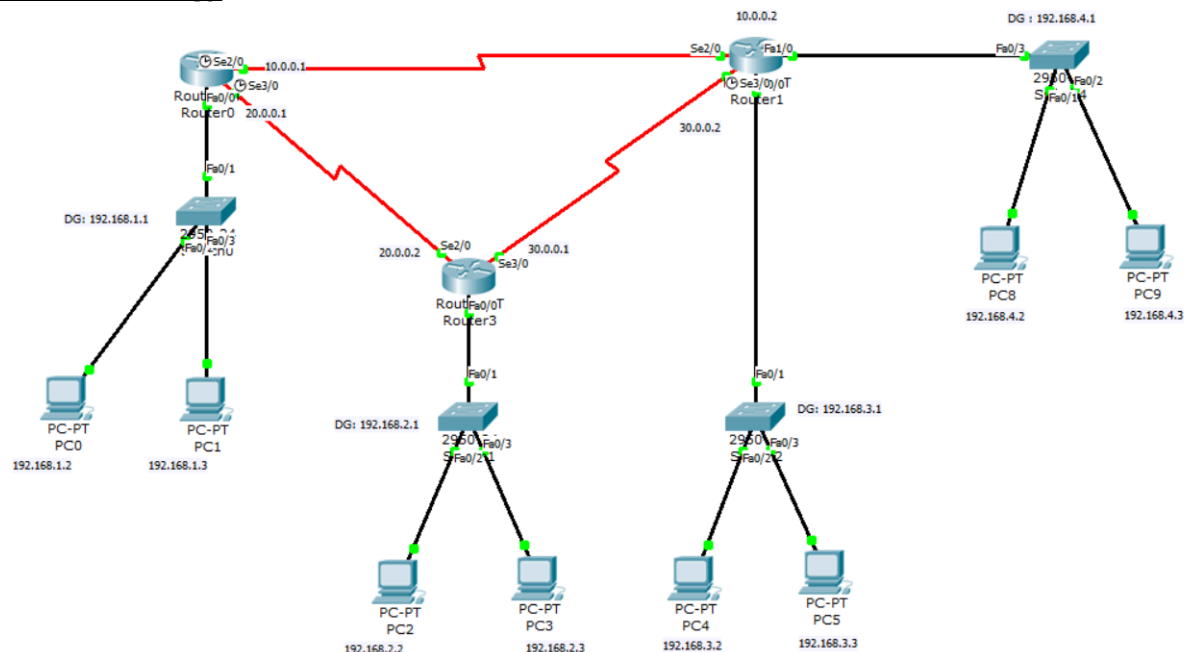


MODERN COMPUTER NETWORKS LAB EXPERIMENTS

OUTPUT :

1. Overall Topology :



2. Pinging PC4 from PC0 :

```
PC>ping 192.168.3.2

Pinging 192.168.3.2 with 32 bytes of data:

Reply from 192.168.3.2: bytes=32 time=159ms TTL=126
Reply from 192.168.3.2: bytes=32 time=158ms TTL=126
Reply from 192.168.3.2: bytes=32 time=159ms TTL=126
Reply from 192.168.3.2: bytes=32 time=150ms TTL=126

Ping statistics for 192.168.3.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 150ms, Maximum = 159ms, Average = 156ms
```

3. Successful message connection :

Fire	Last Status	Source	Destination	Type	Color	Time (sec)	Periodic	Num	Edit	Delete
	Successful	PC1	PC5	ICMP		0.000	N	0	(edit)	(delete)

4. Router 0 - CLI :

```
Router(config-router)#exit
Router(config)#router ospf 1
Router(config-router)#network 10.0.0.0 0.255.255.255 area 0
Router(config-router)#network 20.0.0.0 0.255.255.255 area 0
Router(config-router)#network 192.168.1.0 0.0.0.255 area 0
Router(config-router)#
Router(config-router)#exit
```

MODERN COMPUTER NETWORKS LAB EXPERIMENTS

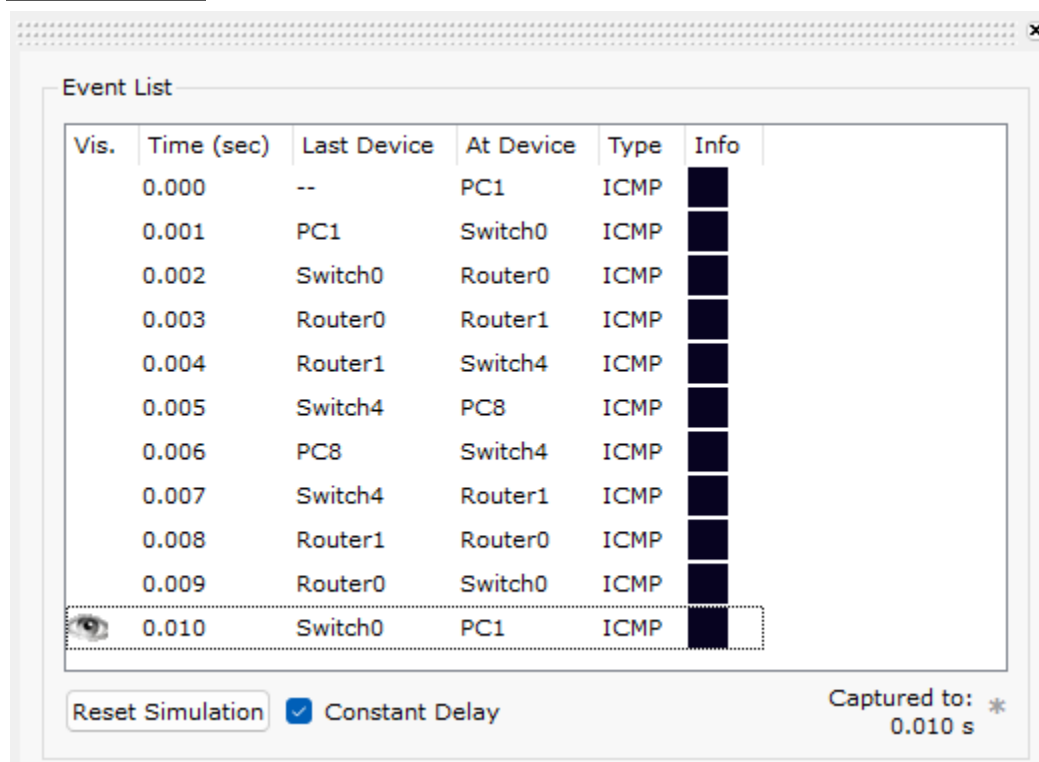
5. Router 1 - CLI :

```
Router>en
Router#configure terminal
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 30.0.0.0 0.255.255.255 area 0
Router(config-router)#network 192.168.3.0 0.0.0.255 area 0
Router(config-router)#network 192.168.4.0 0.0.0.255 area 0
Router(config-router)#exit
```

6. Router 2 - CLI :

```
Router(config-router)#exit
Router(config)#router ospf 1
Router(config-router)#network 20.0.0.0 0.255.255.255 area 0
Router(config-router)#network 30.0.0.0 0.255.255.255 area 0
Router(config-router)#network 192.168.2.0 0.0.0.255 area 0
Router(config-router)#exit
```

7. Packet Path : From PC1 to PC8 and back



The screenshot shows a window titled "Event List" with a table of network events. The table has columns: Vis., Time (sec), Last Device, At Device, Type, and Info. The events show a sequence of ICMP packets traveling from PC1 to PC8 and back. The last event, at 0.010 seconds, is highlighted with a mouse cursor. Below the table, there are buttons for "Reset Simulation" and "Constant Delay" (checked), and a status bar indicating "Captured to: * 0.010 s".

Vis.	Time (sec)	Last Device	At Device	Type	Info
	0.000	--	PC1	ICMP	
	0.001	PC1	Switch0	ICMP	
	0.002	Switch0	Router0	ICMP	
	0.003	Router0	Router1	ICMP	
	0.004	Router1	Switch4	ICMP	
	0.005	Switch4	PC8	ICMP	
	0.006	PC8	Switch4	ICMP	
	0.007	Switch4	Router1	ICMP	
	0.008	Router1	Router0	ICMP	
	0.009	Router0	Switch0	ICMP	
	0.010	Switch0	PC1	ICMP	

Reset Simulation ☒ Constant Delay

Captured to: * 0.010 s