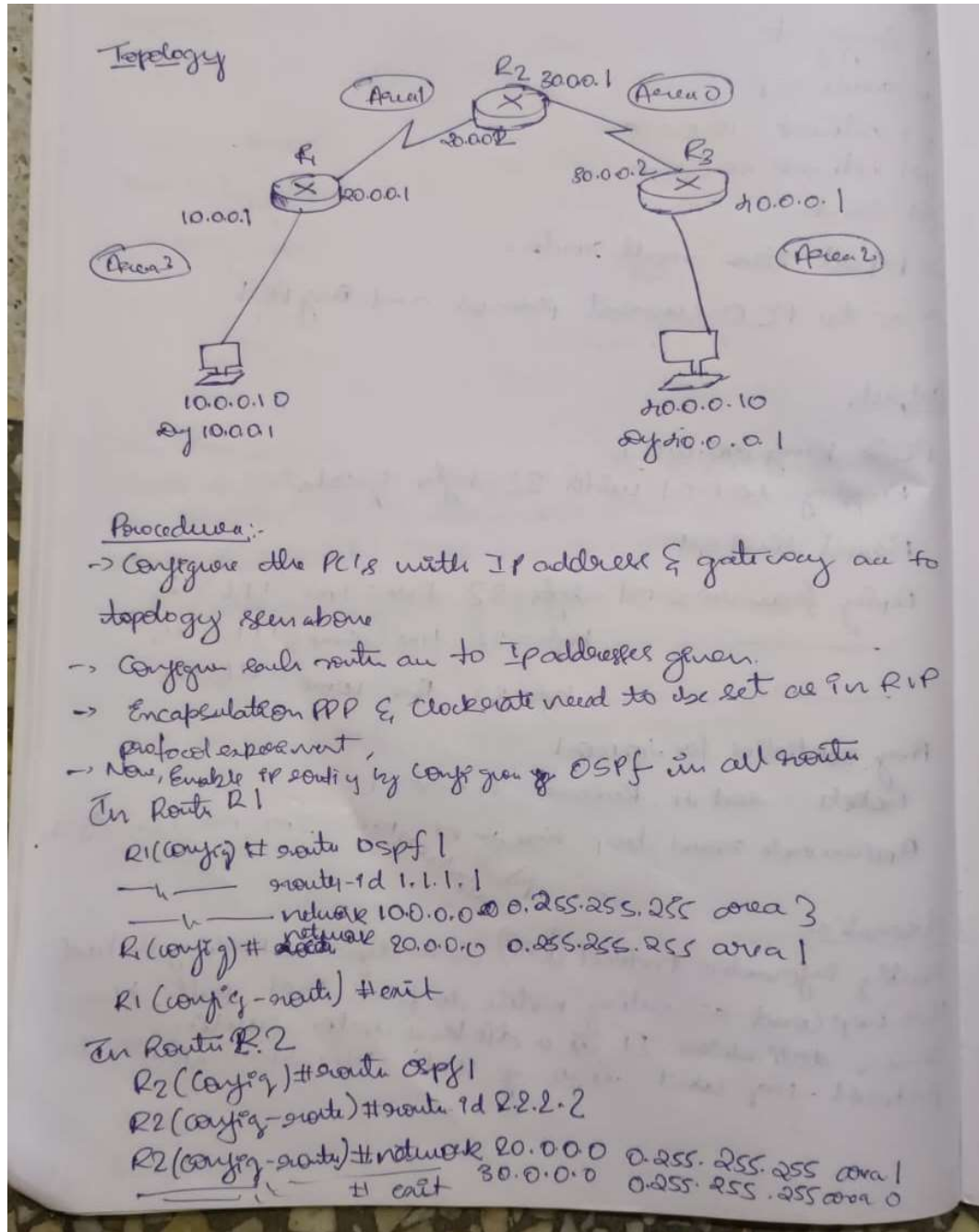


WEEK 7

Configure OSPF routing protocol.

OBSERVATION:



In Router R3

```
R3(config)#router ospf 1
R3(config-router)#router-id 33.2.3
R3(config-router)#network 30.0.0.0 0.255.255.255 area 0
R3(config-router)#network 40.0.0.0 0.255.255.255 area 2
```

```
R1(config-if)#interface loopback 0
R1(config-if)#ip address 192.16.1.252 255.255.0.0
R1(config-if)#no shut
```

```
R2(config-if)#interface loopback 0
R2(config-if)#ip address 192.16.1.253 255.255.0.0
R2(config-if)#no shut
```

```
R2(config-if)#interface loopback 0
R2(config-if)#ip address 192.16.1.254 255.255.0.0
R3(config-if)#no shut
```

In Router R1

```
R1(config)#router ospf 1
R1(config-router)#area 1 virtual-link 2.2.2.2
R1(config-router)#
```

In Router R2

```
R2(config)#router ospf 1
R2(config-router)#area 1 virtual-link 1.1.1.1
R2(config-router)#exit
```

show ip route.

Output

Ping 10.0.0.10

Pinging 10.0.0.10 with 32 bytes of data:

Reply from 10.0.0.10:

bytes = 32 time = 15ms TTL = 125

Reply from 10.0.0.10: bytes = 32 time = 2ms TTL = 125

Reply from 10.0.0.10: bytes = 32 time = 9ms TTL = 125

Ping statistics for 10.0.0.10:

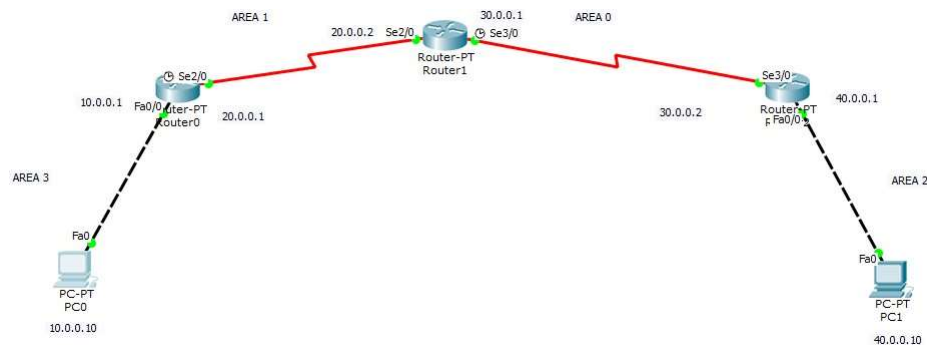
Packets: sent = 4, received = 3, lost = 1

Approximate Round Trip time in ms

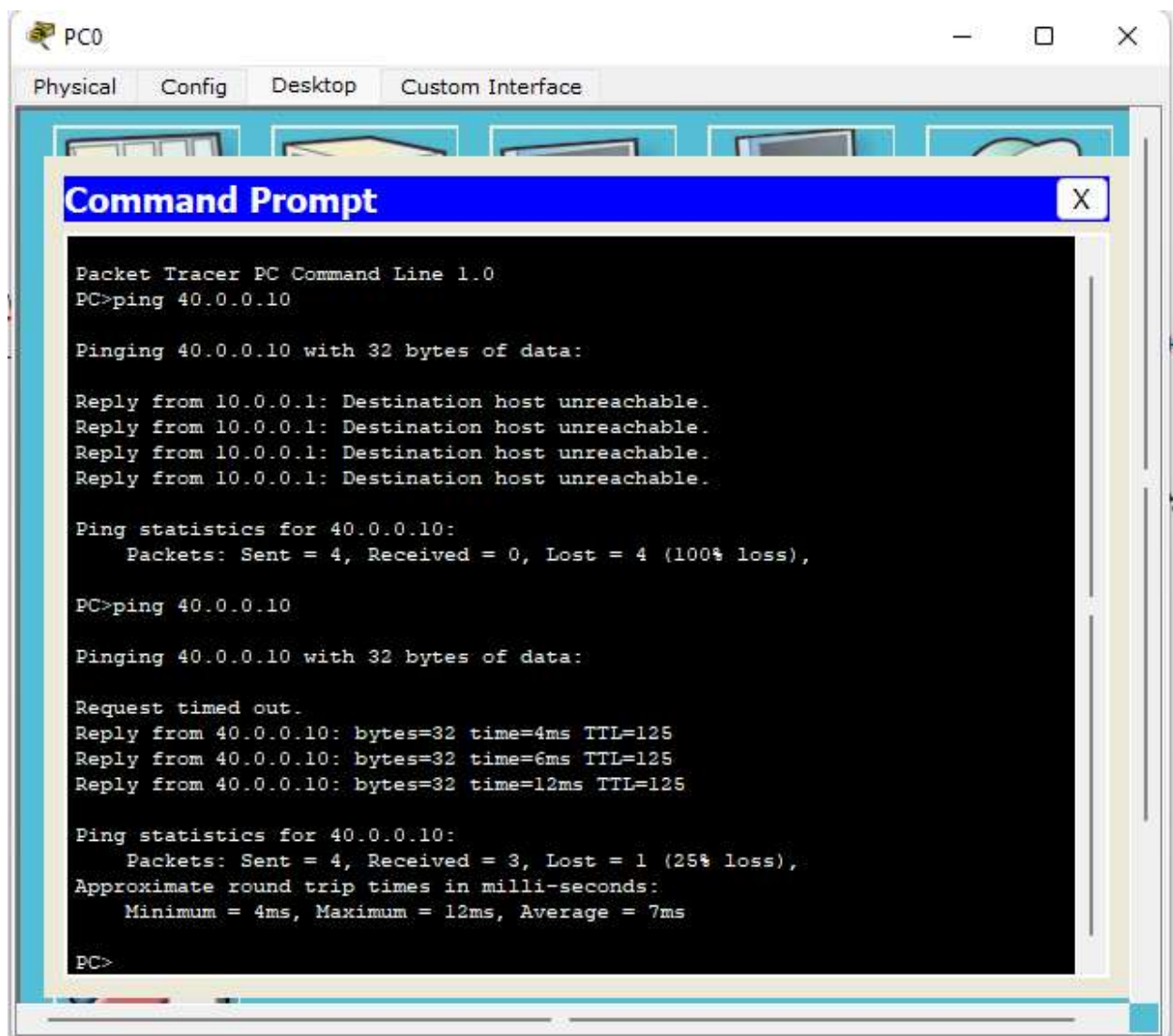
Min = 2ms, Max = 15ms, Avg = 8ms

NP
gobons

TOPOLOGY:



OUTPUT:



Cisco Packet Tracer Student - C:\Users\Admin\Desktop\18M21CS047\ospf.pkt

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type	Info
	20.002	Router1	Router1	OSPF	
	20.003	Router1	Router2	OSPF	
	22.376	Router0	Router0	OSPF	
	22.377	Router0	Router1	OSPF	
	22.378	Router0	Router0	OSPF	
	22.379	Router0	PC0	OSPF	
	22.380	Router2	Router2	OSPF	
	22.381	Router2	PC1	OSPF	
	22.383	Router1	Router1	OSPF	

Reset Simulation Constant Delay Captured to: 22.383 s

Play Controls: Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

ACL Filter AND BGP, CDP, DHCP, DHCPv6, DNS, DTP, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, LACP, NTP, NETFLOW, NTP, OSPF, OSPFv6, PAgg, PAgg, RADIOS, RDP, RDPv6, RTP, SCTP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TFTP, Telnet, UDP, VTY

Edit Filters Show All/None

Time: 00:09:30.703 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

Scenario 0

New Delete

Toggle PDU List Window

Event List Simulation

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC1	ICMP		0.000	N	0	(edit)	(delete)

(Select a Device to Drag and Drop to the Workspace)

22°C Mostly cloudy

ENG IN 11:03 27-07-2023