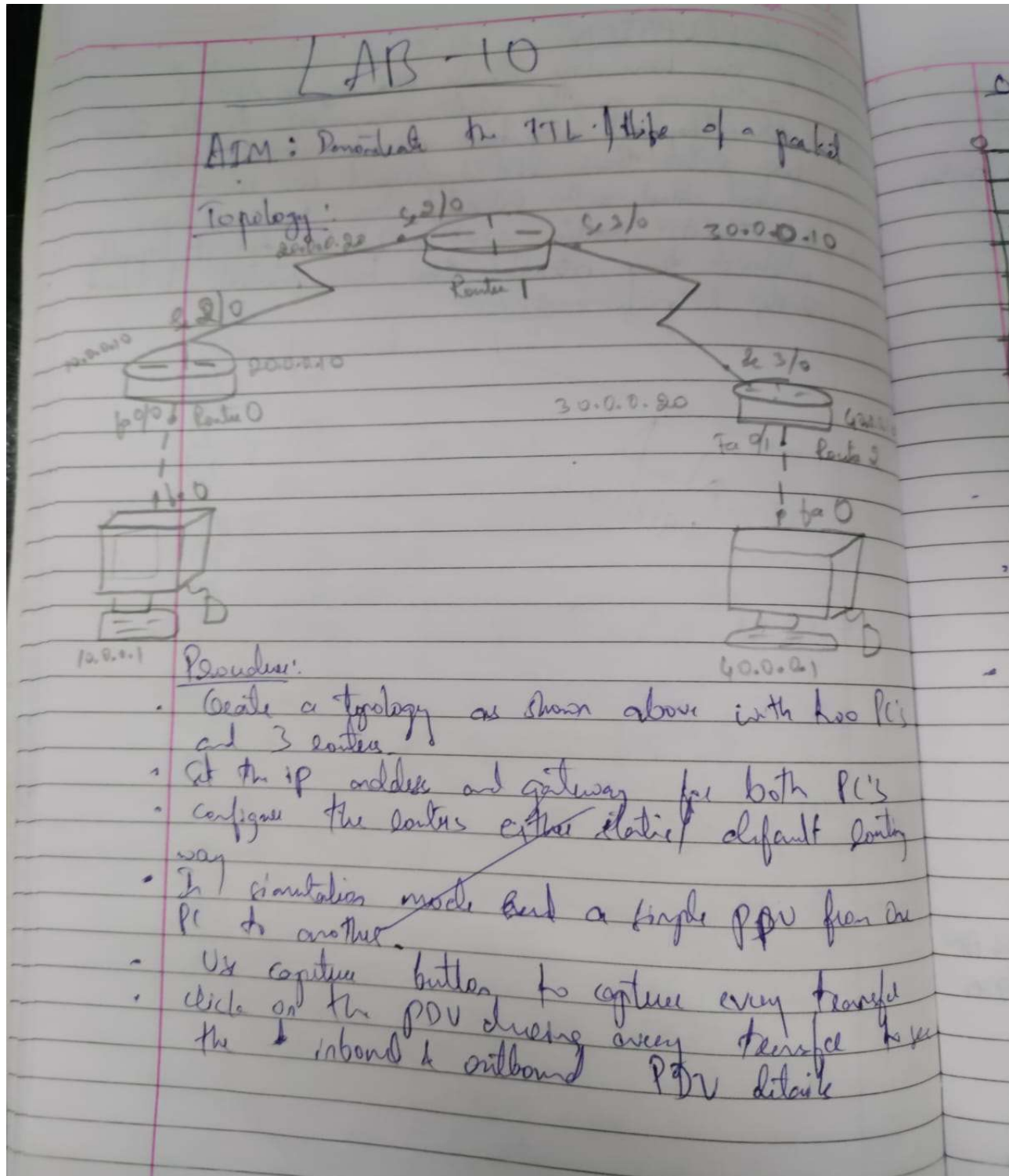


## WEEK 10

Demonstrate the TTL/ Life of a Packet.

OBSERVATION:



## OUTPUT

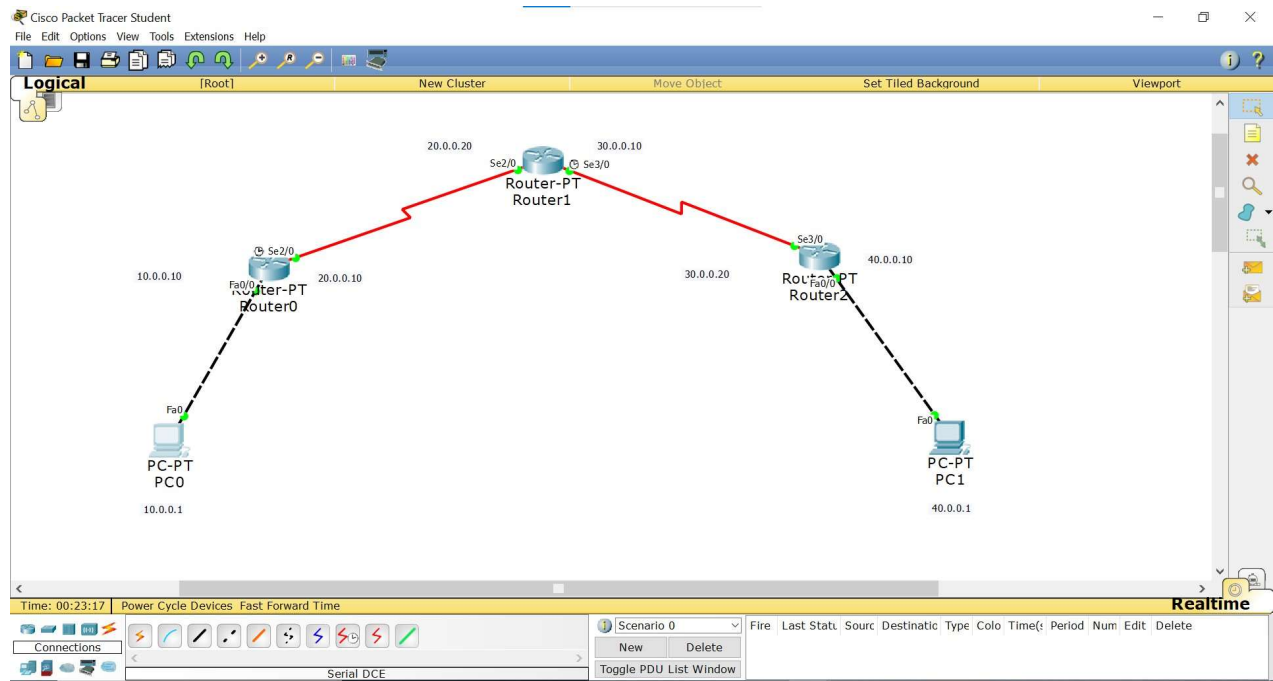
0	4	8	16	19	31
		DSCP		TL: 28	
ID: 0x6		0x		0x0	
TTL: 255		PRO: 0x1		CHKSUM	
SRC IP: 10.0.0.1					
DST IP: 40.0.0.1					
OPT: 0x0				0x0	
DATA (VARIABLE LENGTH)					

## Observations:

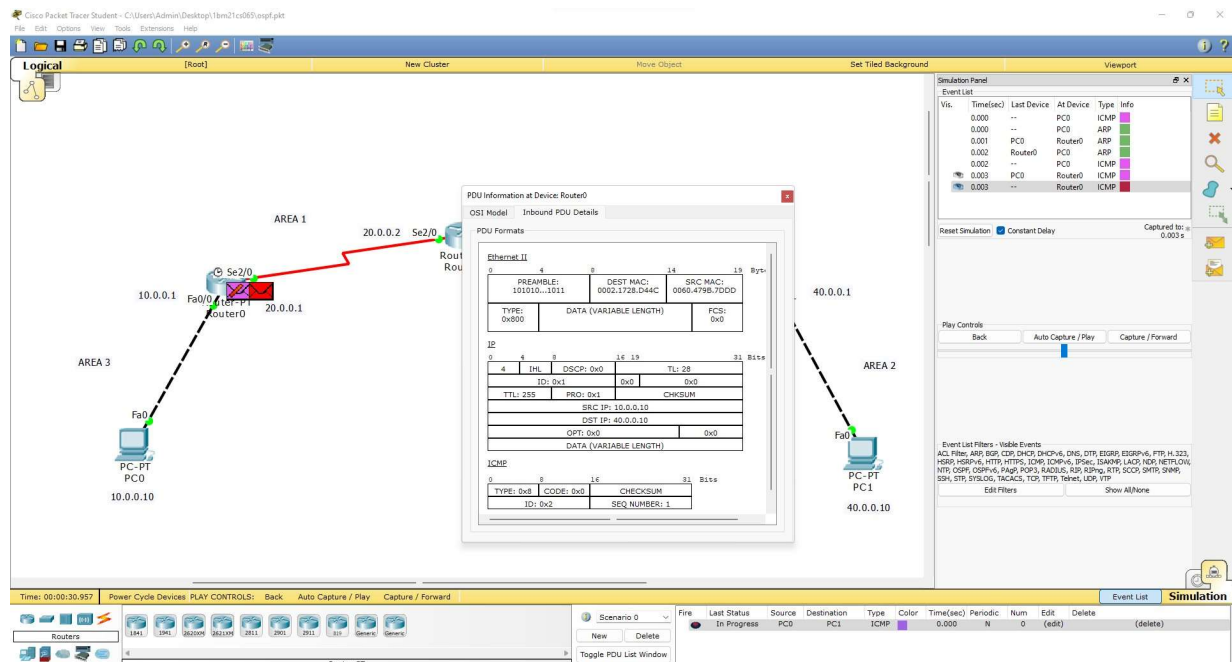
- The no. of hops the packet before being discarded as TTL
- Datagram TTL field is set by the sender & reduced by each router along the path to its destination.
- The router reduces TTL values by one while forwarding the packets.
- When the TTL value is 0, the router discards it & sends an ICMP message.

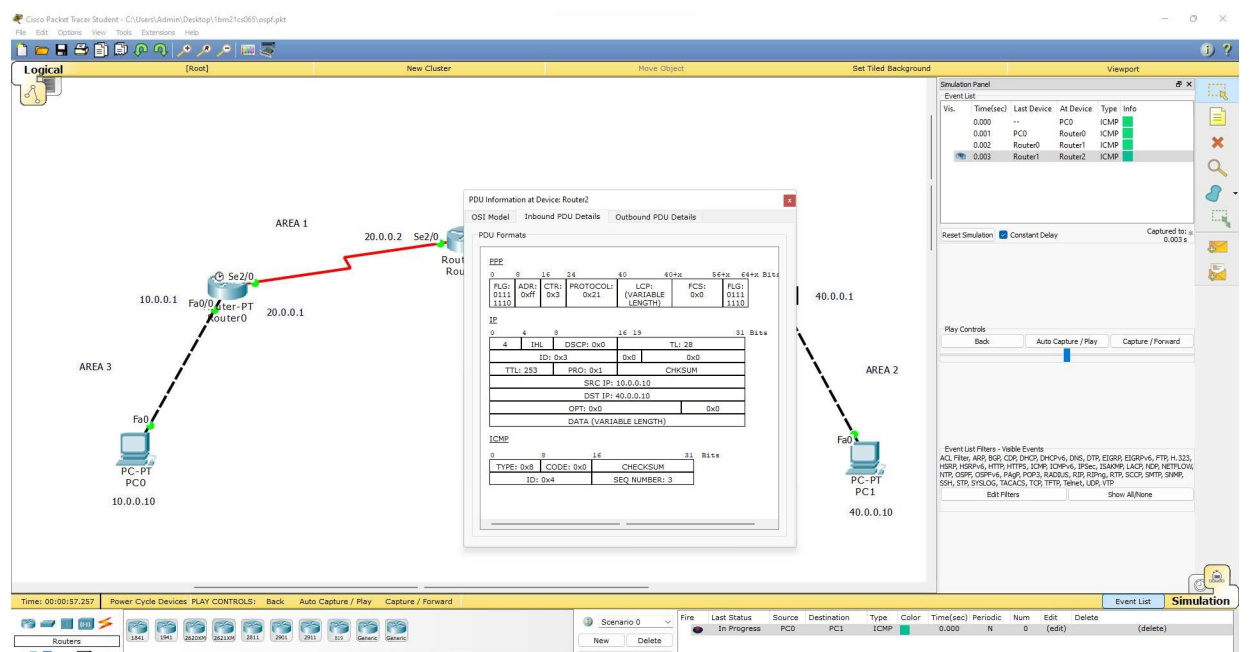
AD  
19/8/2023

# TOPOLOGY:



# OUTPUT:





Cisco Packet Tracer Student - C:\Users\Admin\Desktop\1bm21ca065.nspfile

File Edit Options View Tools Extensions Help

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

AREA 1

20.0.0.2 Se2/0

20.0.0.1

10.0.0.1 Fa0/0 Inter-PT Router0

AREA 3

PC-PT PC0 10.0.0.10

PC-PT PC1 40.0.0.10

AREA 2

40.0.0.1

PC-PT PC1 40.0.0.10

PDU Information at Device: PC1

OSI Model Inbound PDU Details Outbound PDU Details

PDU Formats

Ethernet II

PREAMBLE:		DEST MAC:		SRC MAC:	
101010...1011		0060.4789.AB50		0009.7C28.C636	
TYPE: 0x000		DATA (VARIABLE LENGTH)		FCS: 0x0	

IP

ID: 0x3		DISCP: 0x0		TTL: 28	
TTL: 252		PRO: 0x1		CHKSUM	
SRC IP: 10.0.0.10		DST IP: 40.0.0.10		OPT: 0x0	
DATA (VARIABLE LENGTH)				0x0	

ICMP

ID: 0x4		CHECKSUM		SEQ NUMBER: 3	
TYPE: 0x8		CODE: 0x0		SEQ NUMBER: 3	

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type	Info
	0.000	-	PC0	ICMP	
	0.001	PC0	Router0	ICMP	
	0.002	Router0	Router1	ICMP	
	0.003	Router1	Router2	ICMP	
	0.004	Router2	PC1	ICMP	

Reset Simulation Constant Delay Captured to: 8,004s

Play Controls

Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

ACL, Filter, ARP, BGP, CDP, DHCP, DHCPv6, DNS, DTP, EIGRP, EIGRPv6, FTP, H.323, HSRP, IGMPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, LACP, NTP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, RADIUS, RDP, RDPing, RDP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, VTP

Edit Filters Show All/None

Time: 00:00:37.228 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

Routers

Scenario 0

New Delete

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

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

Simulation