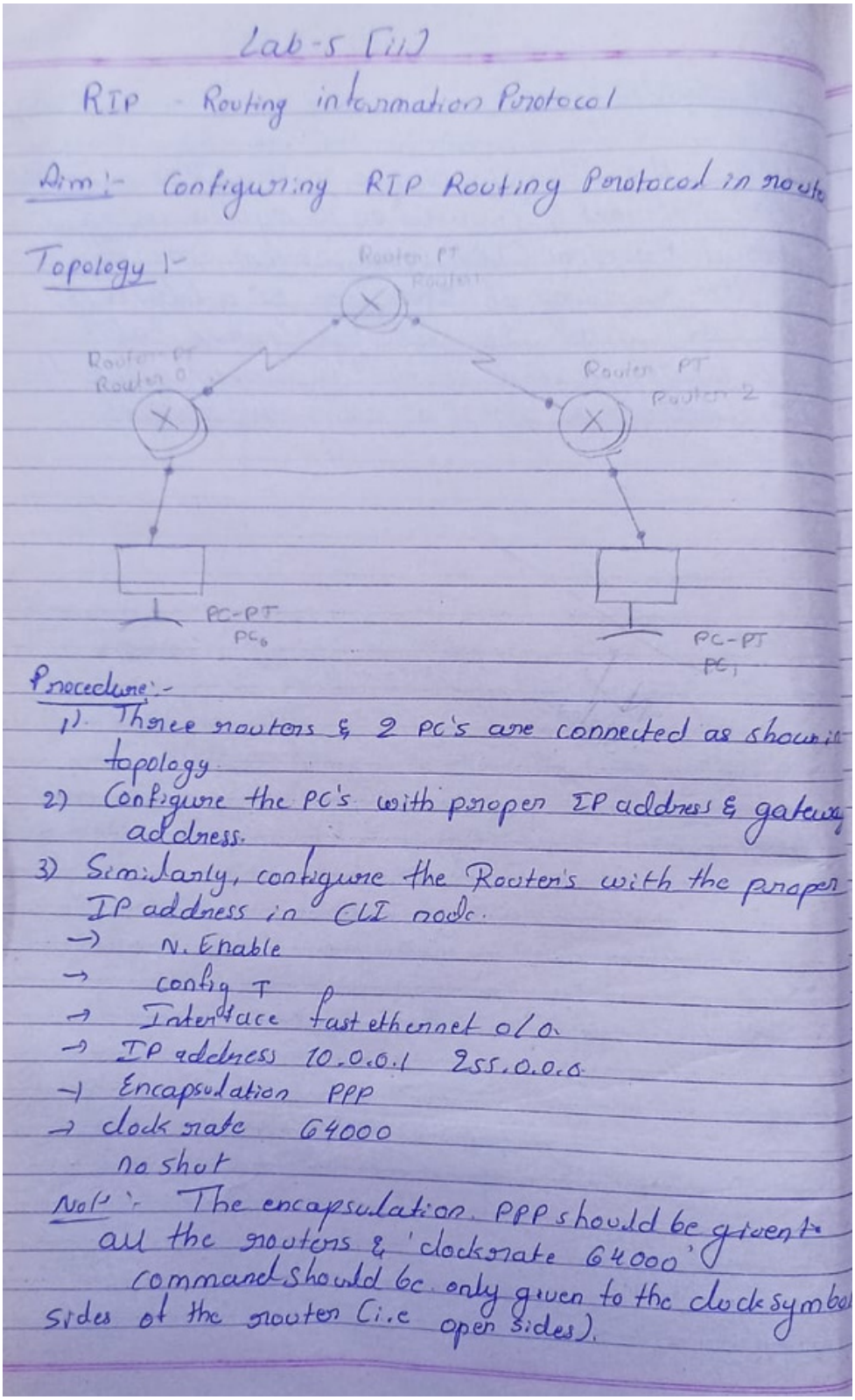
WEEK 6

Configure RIP routing Protocol in Routers. OBSERVATION:



Lab-5 [ii]

RIP - Routing information Protocol

Aim:- Configuring RIP Routing Protocol in router

Topology:-

Procedure:-

1) Three routers & 2 PC's are connected as shown in topology.
2) Configure the PC's with proper IP address & gateway address.
3) Similarly, configure the Router's with the proper IP address in CLI mode.
   - → N. Enable
   - → config T
   - → Interface fastethernet 0/0.
   - → IP address 10.0.0.1 255.0.0.0
   - → Encapsulation PPP
   - → clock rate 64000
   - no shut

Note:- The encapsulation PPP should be given to all the routers & 'clockrate 64000' command should be only given to the clock symbol sides of the router (i.e open sides).

→ For making the routers to know about the others devices, in the previous 2 experiments we used a static & the other with dynamic address but here we use a Routing protocol Algorithm that itself makes the router to know other devices

→ router rip
→ network 20.0.0.0 } router 2
→ network 30.0.0.0

→ router rip
→ network 30.0.0.0 } router 3
→ network 40.0.0.0

→ router rip
→ network 10.0.0.0 } router 1
→ network 20.0.0.0

Ping output

PC > ping 40.0.0.1
Pinging 40.0.0.1 with 32 bytes of data
Reply from 40.0.0.1 : bytes=32 time:0ms TTL:128
Reply from 40.0.0.1 : bytes=32 time:0ms TTL:128
Reply from 40.0.0.1 : bytes=32 time:0ms TTL:128
Reply from 40.0.0.1 : bytes=32 time:0ms TTL:128

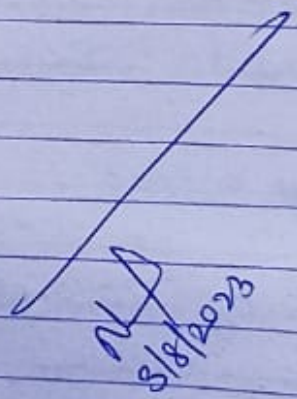
Ping statistics from 40.0.0.1

Packets sent=4 Received 4 Lost=0 (0% Loss)
Approximate round trip times in ms
minimum=0ms, maximum:0ms Average=0ms

Observation

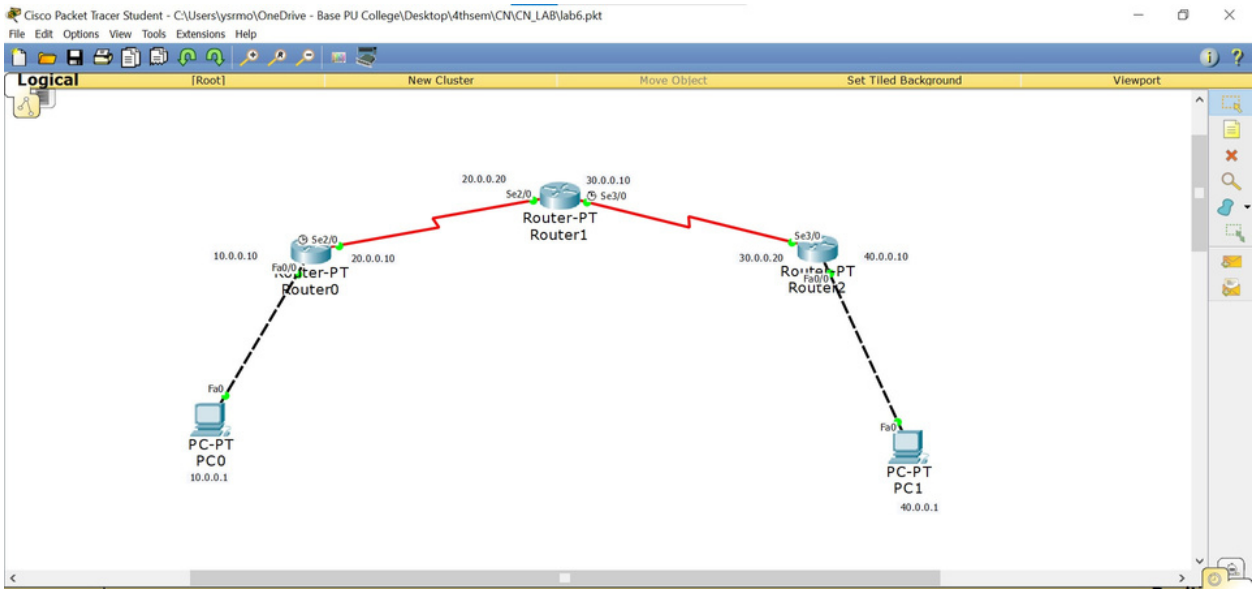
RIP is the Routing Information Pro
is a distance vector protocol that ~~was~~ uses hop
count as its primary metric. RIP defines how
router should share information when moving
traffic among an interconnected group of local
area networks.

→ The RIP protocol here, used to connect the
routers to one other & PC's using RIP protocol
& message is pinged successfully.

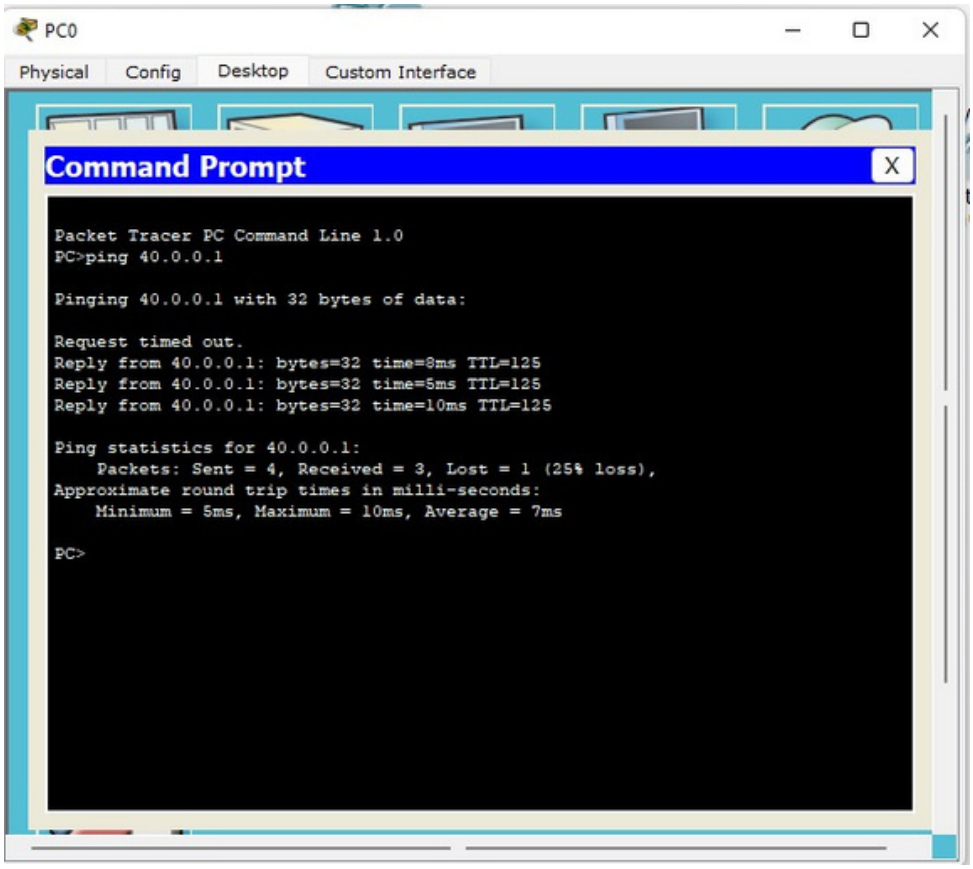


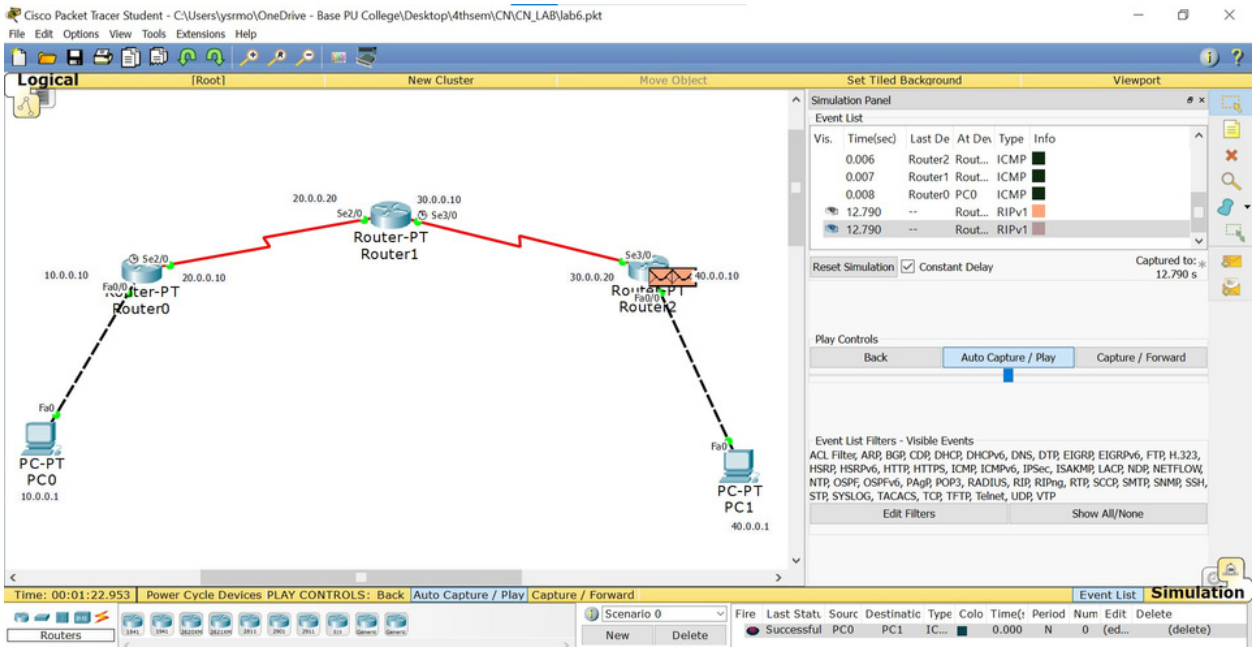
8/8/2023

TOPOLOGY:



OUTPUT:




Cisco Packet Tracer Student - C:\Users\ysrmo\OneDrive - Base PU College\Desktop\4thsem\CN\CN_LAB\lab6.pkt
File Edit Options View Tools Extensions Help
Logical
[Root]
New Cluster
Move Object
Set Tiled Background
Viewport
Router-PT
Router1
20.0.0.20
30.0.0.10
Se2/0
Se3/0
Router-PT
Router0
10.0.0.10
20.0.0.10
Router-PT
Router2
30.0.0.20
40.0.0.10
PC-PT
PC0
10.0.0.1
PC-PT
PC1
40.0.0.1
Fa0
Simulation Panel
Event List
Vis. Time(sec) Last De At De Type Info
0.006 Router2 Rout... ICMP
0.007 Router1 Rout... ICMP
0.008 Router0 PC0 ICMP
12.790 -- Rout... RIPv1
12.790 -- Rout... RIPv1
Reset Simulation
Constant Delay
Captured to: 12.790 s
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, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, LACP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, RADIUS, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, VTP
Edit Filters
Show All/None
Time: 00:01:22.953
Power Cycle Devices PLAY CONTROLS: Back
Auto Capture / Play
Capture / Forward
Event List
Simulation
Routers
Scenario 0
New
Delete
Fire Last Statu Sourc Destinatic Type Colo Time(s Period Num Edit Delete
Successful PC0 PC1 IC... 0.000 N 0 (ed... (delete)