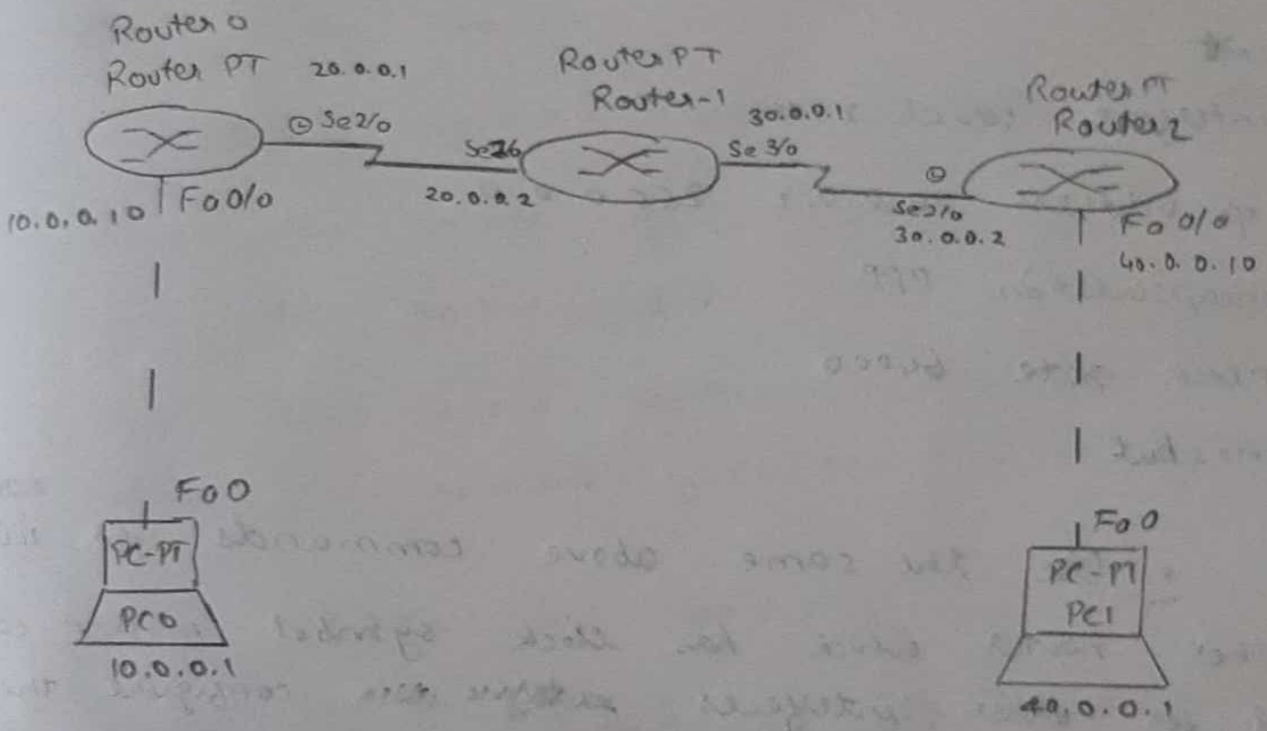
11/2/22

Lab 5

RIP

Aim: Configuring RIP routing Protocal in Routers

Topology:



Procedure:

- Place 3 generic routers, 2 generic PC's and place notes to indicate respective ip addresses.
- Use copper cross over to connect between Router and PC and serial DCE to connet between two routers.
- Set IP address, Subnet and Gateway of the PC's as 10.0.0.1, 255.0.0.0, 10.0.0.10 and 40.0.0.1, 255.0.0.0, 40.0.0.10 respectively.

• For interfacing PC0 and routers 3 and serial DCE of router 3 enter the commands in CLI

> enable
> config-t
> interface fastethernet 0/0
> no shut
> exit
> interface serial 2/0
> ip address 20.0.0.1 255.0.0.0
> encapsulation PPP
> clock rate 64000
> no shut

• Use the same above commands for interfacing another router which has clock symbol in DCE cable and for other interfaces configure the router by entering the same commands except for RIP "clock rate 64000" command.

• Set the RIP protocal when the lights turn green.

> Router RIP
> network 10.0.0.0
> network 20.0.0.0
> exit

• Repeat the commands to all routers with IP address that the router is directly connected to.

Observation:

Learning Outcome:

Instead of using static IP routing for all routers by using RIP protocal routing becomes easy when large number of routers are present.

Result: Ping 40.0.0.1

pinging 40.0.0.1 with 32 Bytes of data:

Reply from 40.0.0.1 : bytes = 32 time = 14ms TTL = 125

Reply from 40.0.0.1 : bytes = 32 time = 2ms TTL = 125

Reply from 40.0.0.1 : bytes = 32 time = 14ms TTL = 125

Reply from 40.0.0.1 : bytes = 32 time = 12 ms TTL = 125

Ping statistics for 40.0.0.1:

Packets : sent = 4 , Received = 4, Lost = 0 (0% loss)

Approximate round trip times in milliseconds:

minimum = 2ms, maximum = 14 ms, Average = 10 ms

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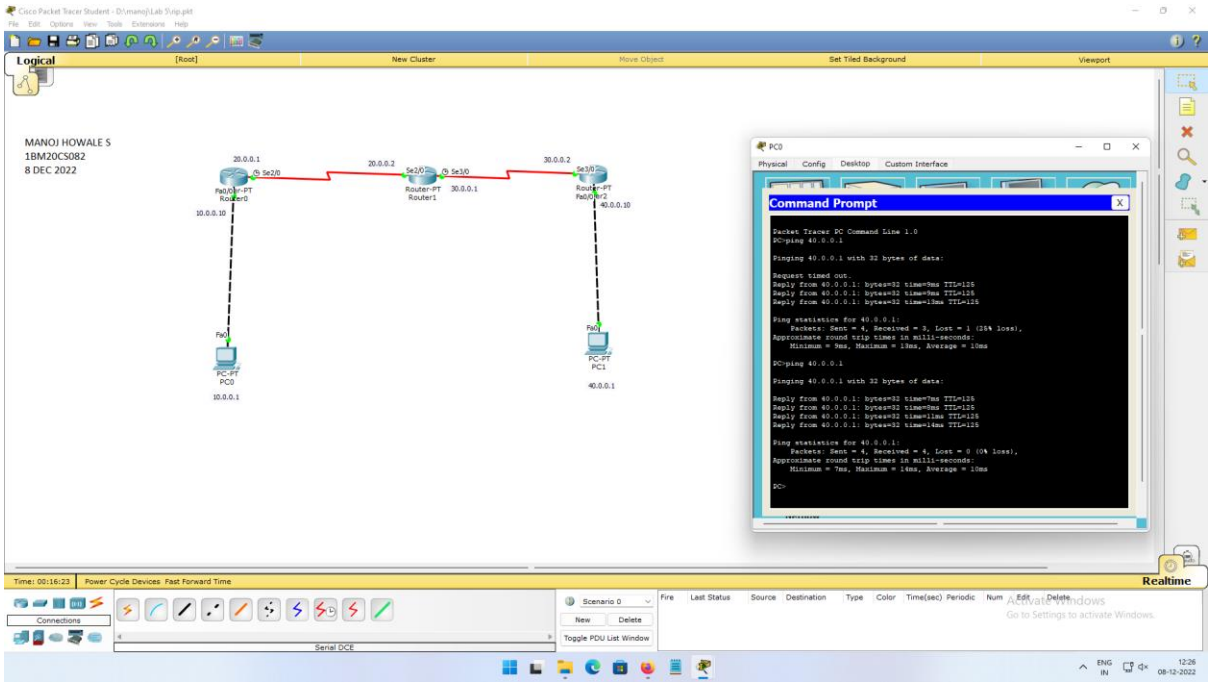
RIP OUTPUT


MANOJ HOWALE S
1BM20CS082
8 DEC 2022
Command Prompt
Packet Tracer PC Command Line 1.0
PC>ping 40.0.0.1
Pinging 40.0.0.1 with 32 bytes of data:
Request timed out.
Reply from 40.0.0.1: bytes=32 time=9ms TTL=125
Reply from 40.0.0.1: bytes=32 time=9ms TTL=125
Reply from 40.0.0.1: bytes=32 time=13ms TTL=125
Ping statistics for 40.0.0.1:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 9ms, Maximum = 13ms, Average = 10ms
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=7ms TTL=125
Reply from 40.0.0.1: bytes=32 time=8ms TTL=125
Reply from 40.0.0.1: bytes=32 time=13ms TTL=125
Reply from 40.0.0.1: bytes=32 time=14ms TTL=125
Ping statistics for 40.0.0.1:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 7ms, Maximum = 14ms, Average = 10ms
PC>