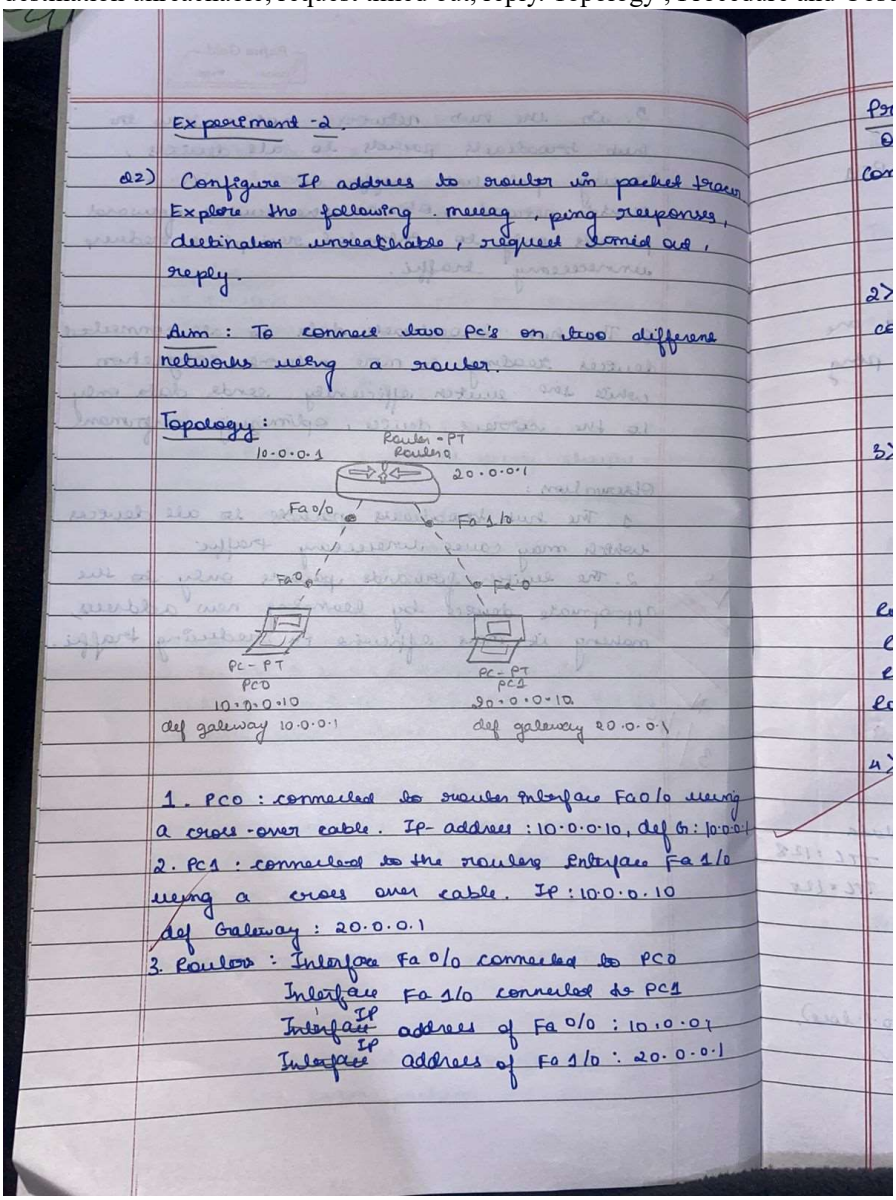
Avani.A (1BM22CS059)

EXPERIMENT- 2A:

Aim:Configure IP address to routers in packet tracer. Explore the following messages: ping responses, destination unreachable, request timed out, reply. Topology , Procedure and Observation:



Procedure:

Open cisco Pkt Tracer and drag the following components onto the workspace

1) Router : place one router
2) PCs : place two pc's

2> use (straight) copper - straight - through to connect device

PC0 - Routers Fa0/0 interface
PC1 - Routers Fa1/0 interface

3> config the routers:

Router > enable
Router # config t
Router (config) # ip address 10.0.0.1 255.0.0.0
Router (config-if) # no shutdown
Router (config) # interface fastethernet 1/0
Router (config-if) # ip address 20.0.0.1 255.0.0.0
Router (config) # no shutdown

4> Config the PCs:

PC0: IP address: 10.0.0.1
Subnet mask: 255.0.0.0
def gateway: 10.0.0.1

PC1: IP address: 20.0.0.1
Subnet mask: 255.0.0.0
def gateway: 20.0.0.1

5> Test connectivity :

- open command prompt on Pc0 to Pc1
- use ping command command

>> ping 10.0.0.10

Observation :

1. If the configurations and cabling are correct, you will recieve successful ping replies between the two Pc's

in router click and go to CLI.

Router > show ip route

Codes : C - connected.....

gateway of last resort is not set

C 10.0.0.0/8 is directly connected, fast ethernet 0/0

C 20.0.0.0/8 is directly connected, fast ethernet 1/0

2. pc> PING 10.0.0.10

Pinging 10.0.0.10 with 32 bytes of data

Reply from 10.0.0.10 bytes = 32 time 1ms TTL : 128

Reply from 10.0.0.10 bytes = 32 time 1ms TTL = 128

:

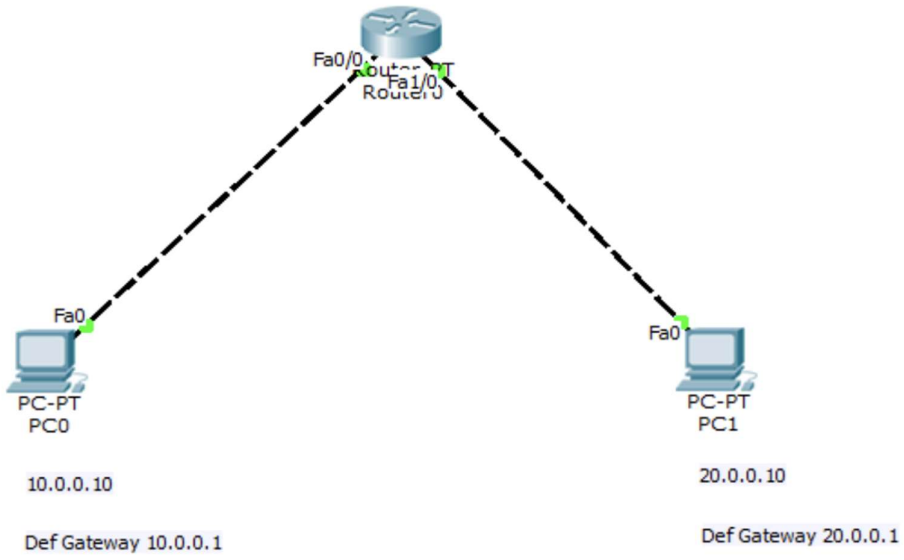
:

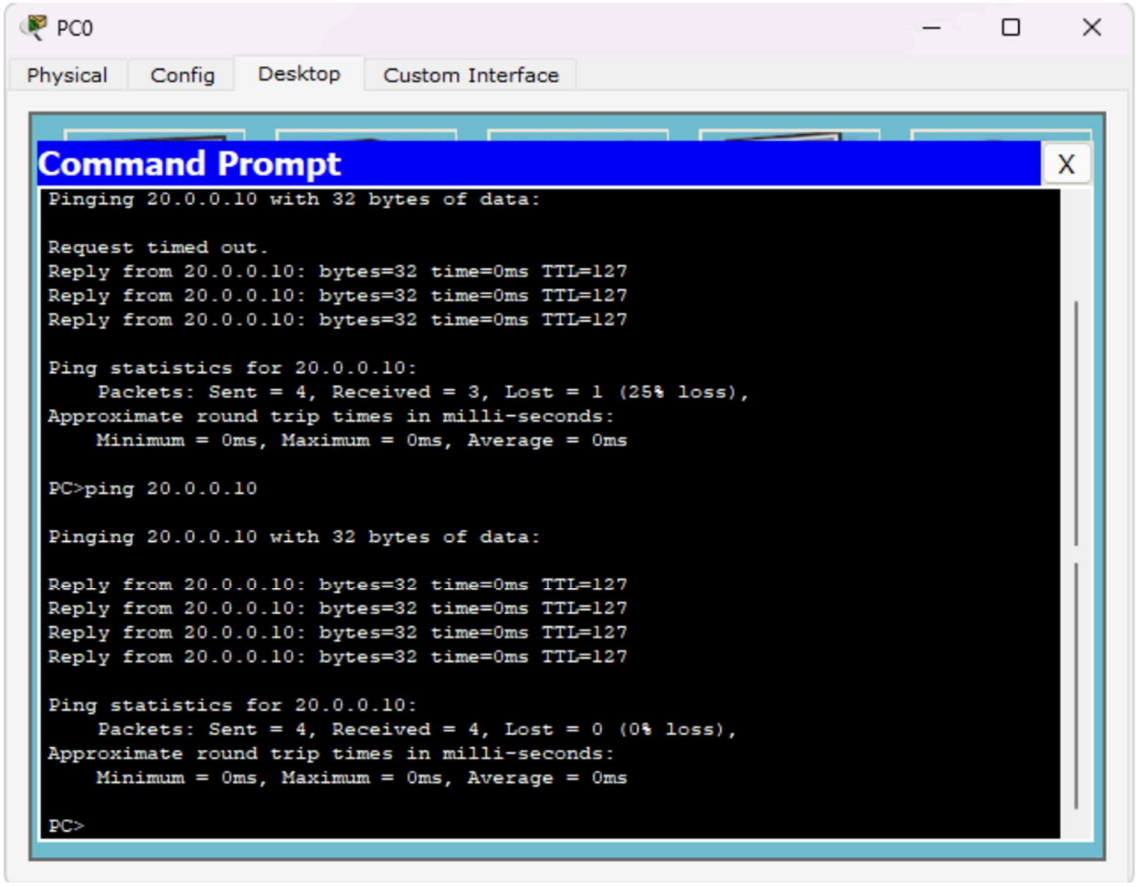
Ping statistics for 10.0.0.10 :

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

3/1/25

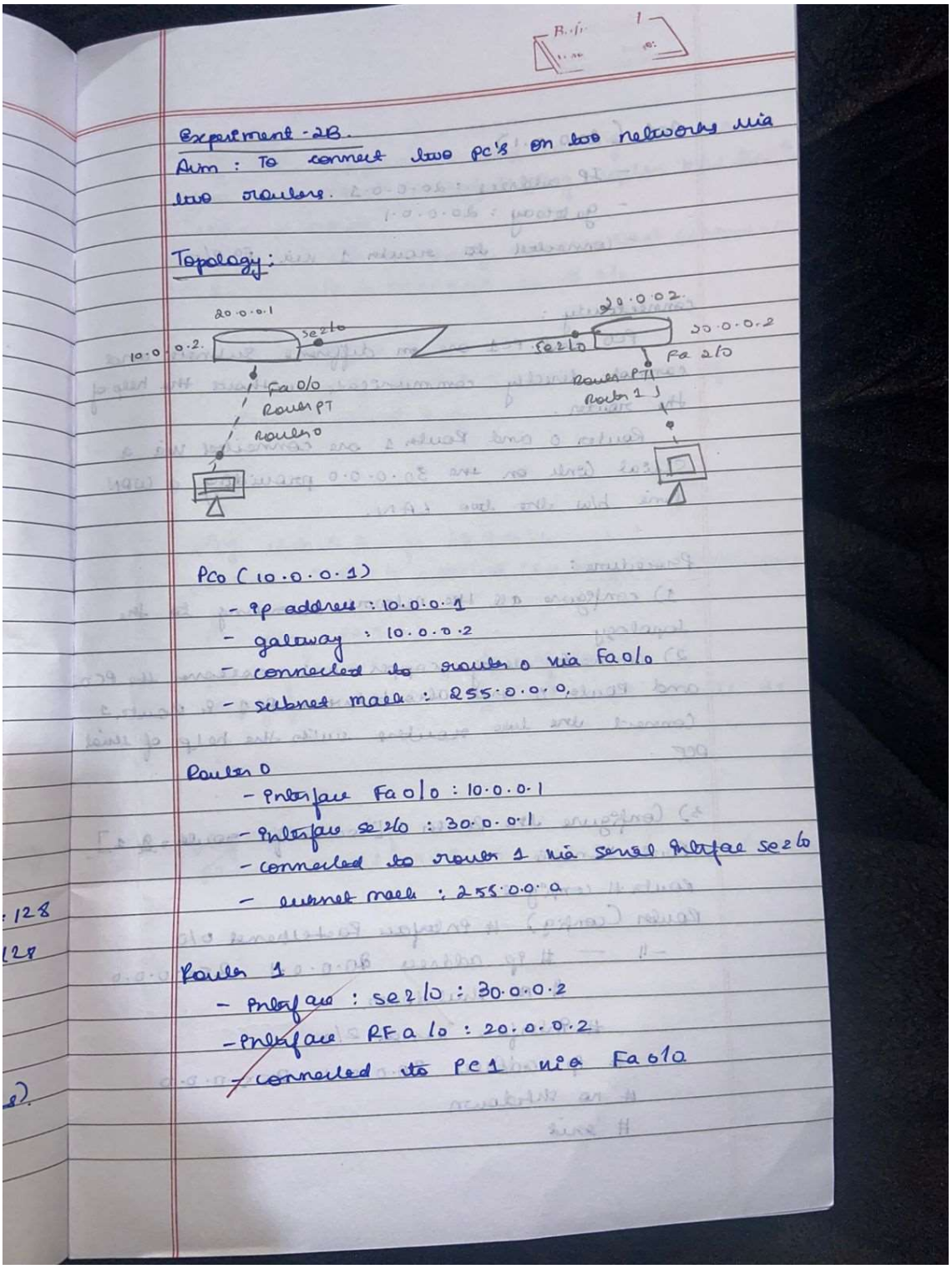
Screenshots:





EXPERIMENT-2B

Aim: To connect two PC's on two networks via two routers Topology, Procedure and Observation:



PC1 (20.0.0.1)
- IP address : 20.0.0.1
- gateway : 20.0.0.1
- connected to router 1 via Fa 0/0

connectivity :
PC0 and PC1 are on different subnets and cannot directly communicate without the help of the router.
Router 0 and Router 1 are connected via a Serial Cable on the 30.0.0.0 providing a WAN link b/w the two LAN.

Procedure :
1) configure all the network according to the topology.
2) Connect using copper-wire crossover the PC0 and Router 0 and also between PC1 & Router 1 Connect the two routers with the help of serial DCE.

3) Configure the Router : [same for router 0 & 1]
Router >enable
Router # config t
Router (config) # interface FastEthernet 0/0
-11- # ip address 20.0.0.1 255.0.0.0
no shutdown
interface serial 2/0
ip address 30.0.0.1 255.0.0.0
no shutdown
exit

observation
if
you
show
C 10.
C 30.0.
output
req
:
:
:
ping
packets
PC> P
pinging
Reply
.
.
.
ping
packet

Bafna Gold
Date: Page:

Observation:

If the configuration and cabling are correct you will receive successfull ping replies b/w two PC show ip route:

C 10.0.0.0/8 is directly connected Fast ethernet 0/0

C 30.0.0.0/8 is connected ewell 2/0

output: ping 20.0.0.1

pinging 20.0.0.1 with 32 bytes of

Request timed out

:

:

:

ping statistics for 20.0.0.1:

packets: sent = 4, Received = 0, loss = 4 (100% loss)

PC> Ping 20.0.0.1

pinging 20.0.0.1 bytes (32) of data:

Reply from 20.0.0.1: bytes = 32 time: 2ms TTL: 2x

.

.

.

ping statistic for 20.0.0.1:

packets = sent = 4ms, received = 4, lost = 0 (0% loss)

Screenshots: