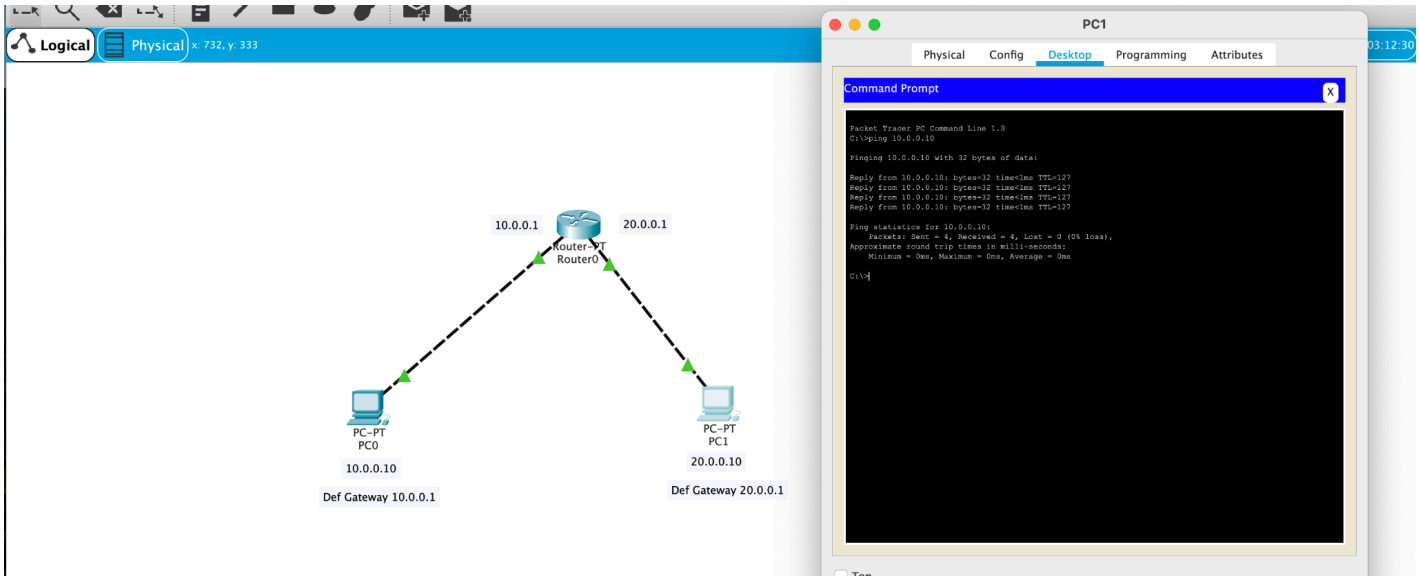
Experiment 2:
Q)CONFIGURE IP ADDRESS TO ROUTERS IN PACKET TRACE
2a)



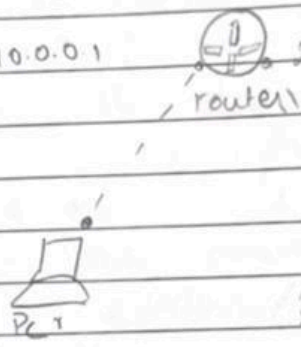
Q2) Configure IP addrs to routers in Packet tracer. Explore the following Date 8/10/24 Page
messages

Experiment-2

Aim: Single routers.

Connect two PCs on two different networks using a router.

Topology:



1. PC0: connected to the router interface Fa0/0 using crossover cable
   IP: addrss: 10.0.0.10
   Default gateway: 10.0.0.1

2. PC1: connected to the router interface Fa 0/1 using crossover cable
   ip: address: 20.0.0.10
   dg gateway: 20.0.0.1

3. Router: interface Fa0/0 connected to PC0
   interface Fa 1/0 connected to PC1

Date __/__/__
Page _____

IP address of Fa 0/0: 10.0.0.1
IP address of Fa 1/0: 20.0.0.1

Procedure:

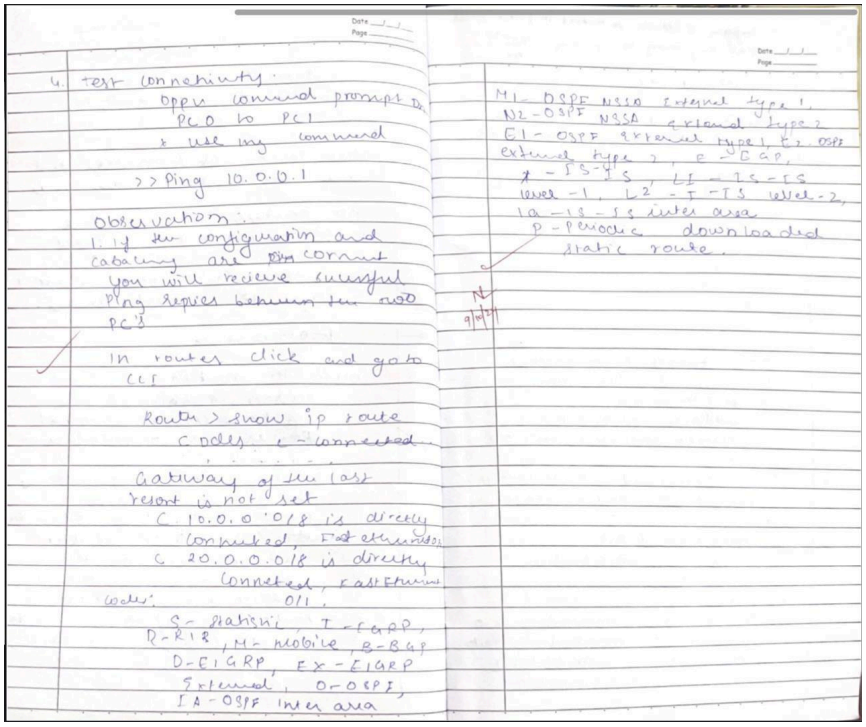
1. Open cisco packet tracer and place one routers in the work

PC0: routers Fa0/0 interface
PC1: routers Fa 0/0 interface.

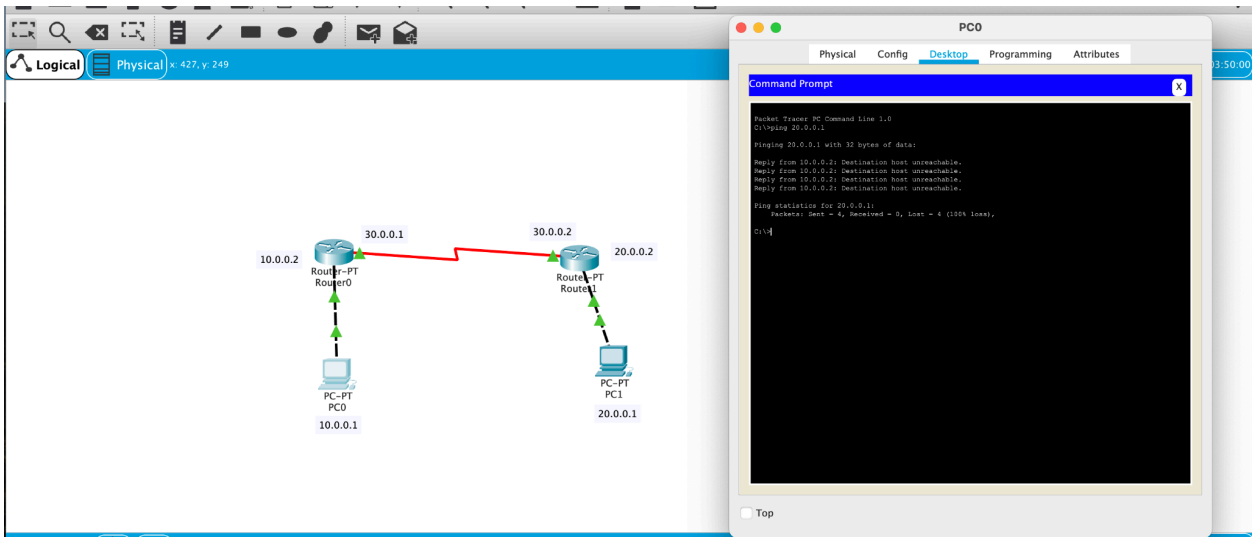
2. Use straight - copper straight Through to connect device.

~~PC0 => router~~

3. Config the router
   Router> enable
   Router# config terminal
   Router(config)# interface fa 0/0
   Router(config)# ip address 10.0.0.1 255.0.0.0
   Router(config-if)# no shutdo
   Router(config)# interface fast ethernet 0/1
   router(config-if)# ip adders 20.0.0.1 255.0.0.0
   Router(config-if)# no shutdown
   Router(config-if)# exit



2b)CONFIGURE IP ADDRESS TO ROUTERS IN PACKET TRACING



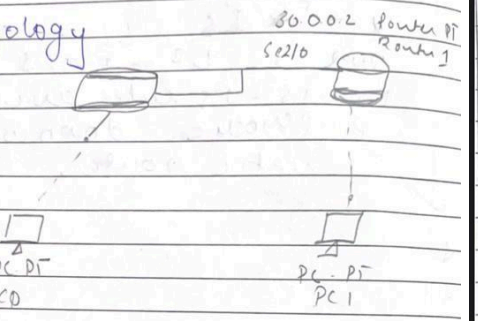
9) Configure IP address to routers in packet tra
Explore the following messages: ping response

Date / /
Page

Experiment 2b

Aim: To connect two PC's on two networks via two routers

Topology



PC 0: connected to router's interface FC 0/0 using cross-over cable
IP address: 10.0.0.1
Default gateway 10.0.0.2

PC 1 - connected to routing interface Fa 1/0 using cross-over cable.
IP address: 20.0.0.1
Def gateway: 20.0.0.2

Router 0:
Interface Fa 0/0 connected to PC-0
Se 2/0 connected to Rout

Date / /
Page

Configure router 2 similarly

Router > enable
router # configure terminal
Router (config)# interface fastethernet 1/
Router (config-if)# ip address 20.0.0.2
255.0.0.0
Router (config-if)# exit

Router (config)# interface serial 2/0
Router (config-if)# ip address 30.0.0.2
255.0.0.0
Router (config-if)# no shut down

Configure the PC's
For PC 0:
* click on PC 0 and set the IP address to 10.0.0.1, subnet mask to 255.0.0.0 and default gateway to 20.0.0.2

Test communicity by doing command prompt on PC 0
use the ping command to check connectivity.

Observation:
If the configuration & cabling are correct. you will recieve successful ping replies b/w two pc's

Page

Router 1
Interface Fa 1/0 connected to PC
Interface Se 2/0 connected to R-2
IP address of Fa 1/0 : 20.0.0.2
IP address of Se 2/0 : 30.0.0.1

Procedure:
open cisco packet tracer and drag the all components and workspace:
Router: Place the two routers in the middle
PC: place two PCs on either side of the routers

* use cross over cables to connect devices as follows: (2)
PC0 -> Routers Fa0/0 interface
PC1 -> Router Fa1/0 interface

configure Router 0 by clicking on the router and enter CLI
Assign IP address to the router interface:
Router > enable
Router # config terminal
Router (config) # interface fast ethernet 0/0
Router (config) # ip address 10.0.0.2 255.0.0.0

Page

Router (config)## interface serial 2/0
Router (config-if) # ip address 30.0.0.1 255.0.0.0
Router (config-if) # no shutdown

the ping results are as follows:
PC> Ping 20.0.0.1

Ping 20.0.0.1 with 32 bytes of data
Request timed out
Reply from timed out
Reply " "
Request " "

Ping statistics for 20.0.0.1
Ping xx. Packet sent = 4,
Received = 0, Lost = 4 (100% loss)

PC > ping 20.0.0.1
Pinging 20.0.0.1 with 32 bytes of data:
Reply from 10.0.0.2: Destination host unreachable
Reply from 10.0.0.2: Destination host unreachable
Reply from 10.0.0.2: Destination host unreachable
Request timed out.
Ping statistics for 20.0.0.1:
Packet: sent = 4 Received = 0
Lost = 4 (100% loss)