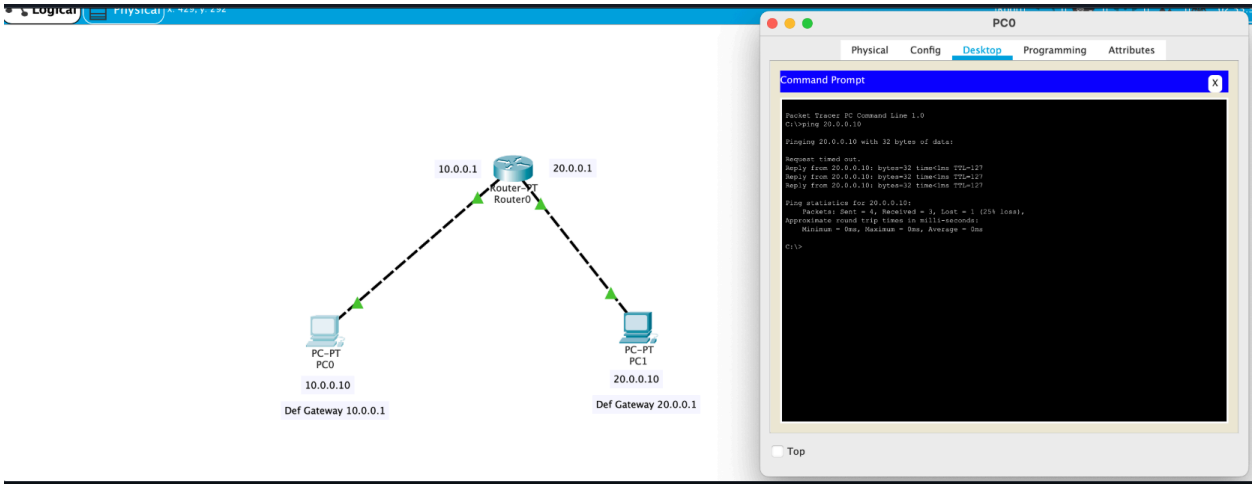
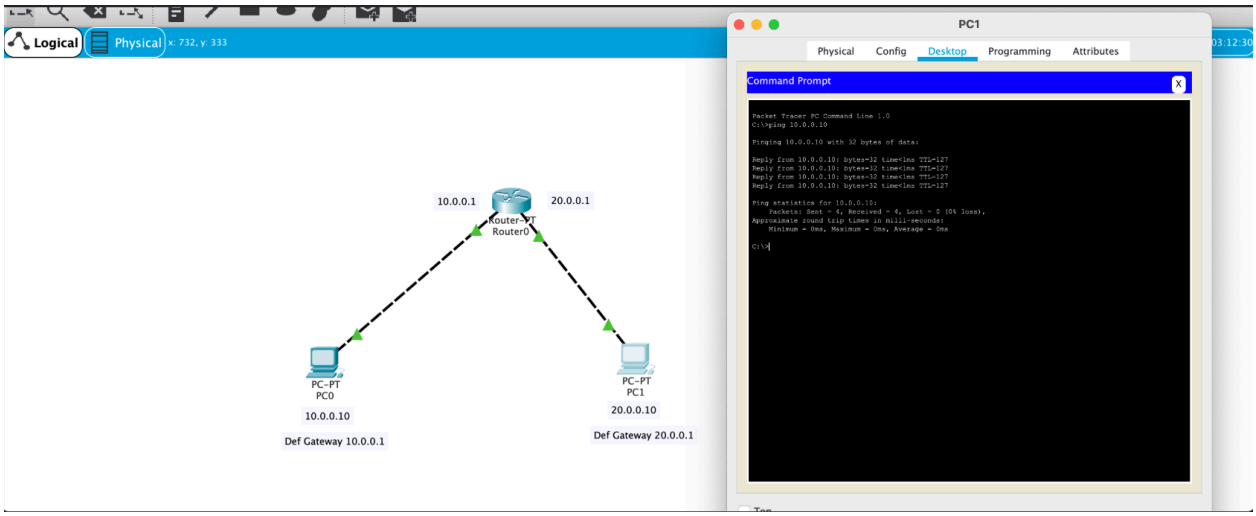

Logical
Physical
10.0.0.1
20.0.0.1
Router-PT
Router0
PC-PT
PC0
10.0.0.10
Def Gateway 10.0.0.1
PC-PT
PC1
20.0.0.10
Def Gateway 20.0.0.1
PC0
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 20.0.0.10
Pinging 20.0.0.10 with 32 bytes of data:
Request timed out.
Reply from 20.0.0.10: bytes=32 time<1ms TTL=127
Reply from 20.0.0.10: bytes=32 time<1ms TTL=127
Reply from 20.0.0.10: bytes=32 time<1ms TTL=127
Ping statistics for 20.0.0.10:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
Top

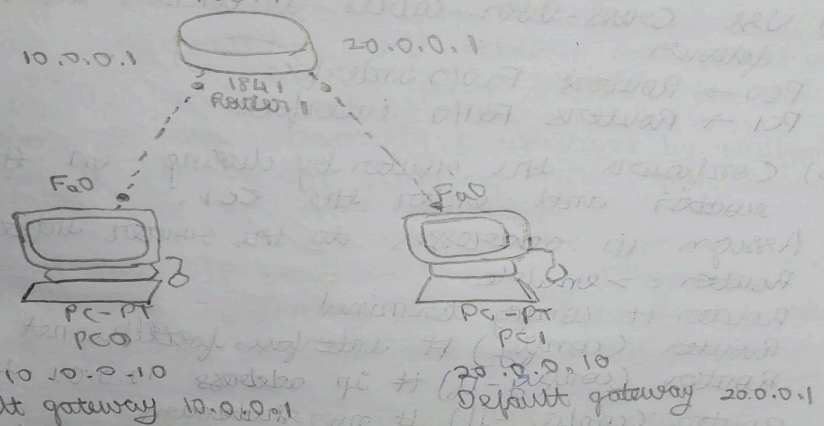

Logical
Physical
x: 732, y: 333
10.0.0.1
20.0.0.1
Router-PT
Router0
PC-PT
PC0
10.0.0.10
Def Gateway 10.0.0.1
PC-PT
PC1
20.0.0.10
Def Gateway 20.0.0.1
PC1
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 10.0.0.10
Pinging 10.0.0.10 with 32 bytes of data:
Reply from 10.0.0.10: bytes=32 time<1ms TTL=127
Reply from 10.0.0.10: bytes=32 time<1ms TTL=127
Reply from 10.0.0.10: bytes=32 time<1ms TTL=127
Reply from 10.0.0.10: bytes=32 time<1ms TTL=127
Ping statistics for 10.0.0.10:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>

LAB - 2 - EXPERIMENT 2-a 16/10/24

AIM:

Configure IP address to routers in packet tracer. Explore the following messages : ping response, destination unreachable, request timed out, reply

TOPOLOGY:



1) PC0 : Connected to routers interface Fa0/0 using a cross-over cable

IP address : 10.0.0.10
Default gateway : 10.0.0.1

2) PC1 : Connected to the routers interface Fa1/0 using a cross-over cable

IP address : 20.0.0.10
Default gateway : 20.0.0.1

3) Router :
Interface Fa0/0 connected to PC0
Interface Fa1/0 connected to PC1
IP address of Fa0/0 : 10.0.0.1
IP address of Fa1/0 : 20.0.0.1

Procedure :

1) Open cisco packet tracer and drag the following components onto the workspace
Router : Place one router in the middle
PCs : Place two PCs on either side of the router

2) Use Cross-Over cables to connect the devices as follows
PC0 → Routers Fa0/0 interface
PC1 → Routers Fa1/0 interface

3) Configure the router by clicking on the router and enter the CLI.
Assign IP addresses to the router interfaces
Router > enable
Router # config terminal
Router (config) # interface fastethernet 0/0
Router (config-if) # 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-if) # no shutdown

4) Configure the PCs.
For PC0 :
- Click on PC0 and set the IP Address to 10.0.0.10, subnet mask to 255.0.0.0 and default gateway to 10.0.0.1

For PC1 :
- Click on PC1 and set the IP address to 20.0.0.10 subnet mask to 255.0.0.0 and default gateway to 20.0.0.1

5) Test connectivity by opening the command prompt on PC0 and PC1
Use the ping command to check connectivity
From PC0, ping PC1's IP (20.0.0.10)
From PC1, ping PC0's IP (10.0.0.10)

Observation:

1) If the configurations and cabling are correct you will receive successful ping replies b/w the two PCs
2) If there is no connectivity, troubleshoot by verifying correct IP addressing, cabling type, both routes interfaces are up and running.

Router # show ip route

Codes - C - Connected, S - static I - IGRP, R - RIP, M - mobile B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, O - ODR
P - periodic downloaded static route

Gateway of last resort is not set
C 10.0.0.0/8 is directly connected, FastEthernet 0/0
C 20.0.0.0/8 is directly connected, FastEthernet 0/1

Pung 20.0.0.10

Pinging 20.0.0.10 with 32 bytes of data:-

Reply from 20.0.0.10: bytes=32 time=0ms TTL=6

Reply from 20.0.0.10 bytes=32 time=0ms TTL=6

Reply from 20.0.0.10 bytes=32 time=0ms TTL=

Reply from 20.0.0.10 bytes=32 time=0ms TTL=

Ping statistics for 20.0.0.10:

Packets: Sent=4, Received=4, Lost=0 (0% Los

Approximate round trip times in milli-seconds

Minimum =0ms, Maximum =3ms, Average =0

9/10/24