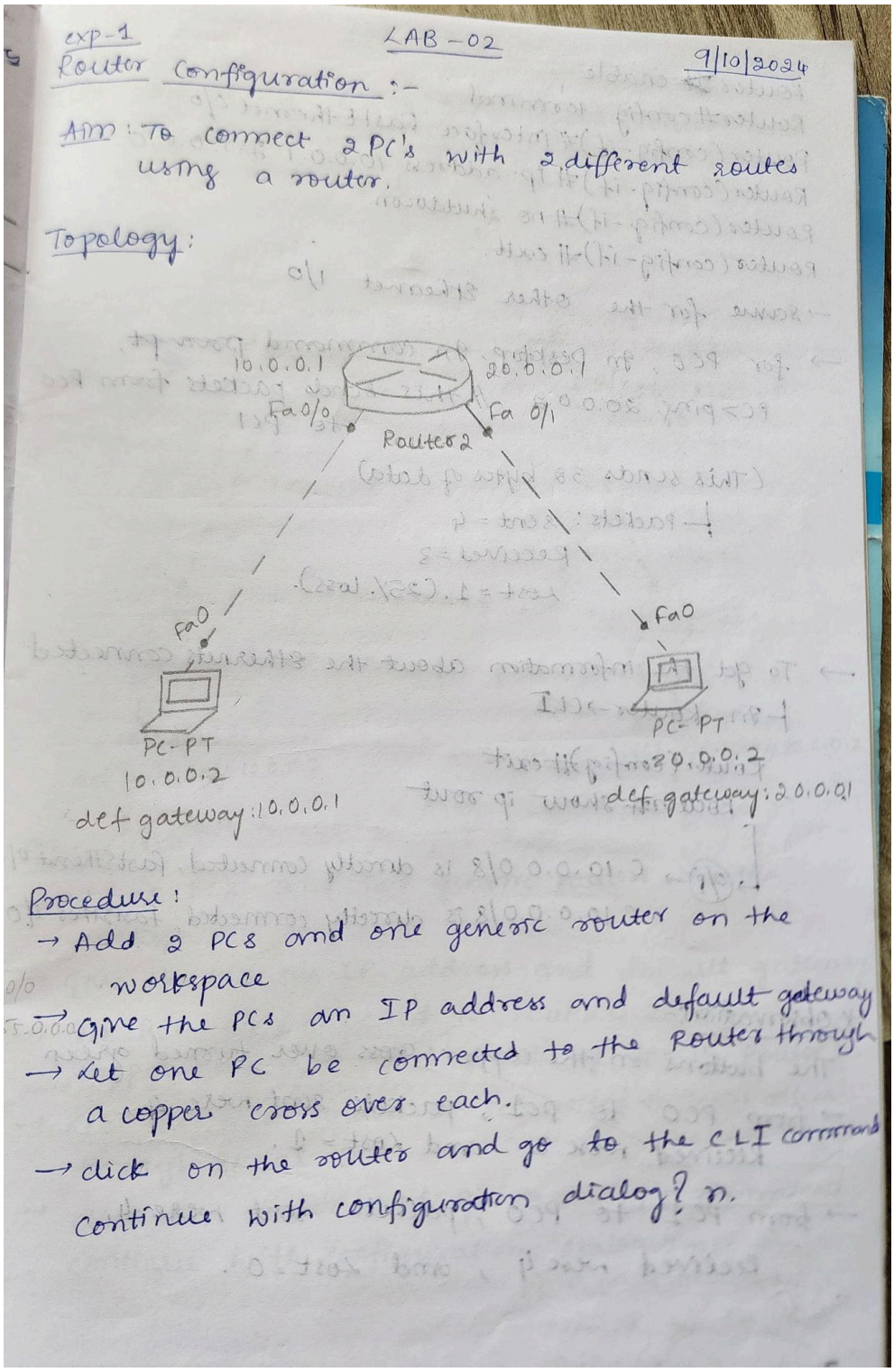
9|10|2024 Week-2(Experiment 2a)

Observation Book:



exp-1 LAB-02 9/10/2024

Router Configuration :-

Aim : To connect 2 PC's with 2 different routes using a router.

Topology :

Procedure :

→ Add 2 PCs and one generic router on the workspace

→ Give the PCs an IP address and default gateway

→ Let one PC be connected to the Router through a copper cross over each.

→ click on the router and go to the CLI continue with configuration dialog? n.

Router# enable
Router# config terminal
Router(config-if)# interface FastEthernet 0/0
Router(config-if)# ip address 10.0.0.1 255.0.0.0
Router(config-if)# no shutdown
Router(config-if)# exit.

→ same for the other Ethernet 1/0

→ for PC0, in Desktop, in command prompt,
PC> ping 20.0.0.2 // this sends packets from PC0 to PC1

(This sends 32 bytes of data)
└ packets: sent = 4
Received = 3
Lost = 1. (25% loss).

→ To get the information about the Ethernets connected
└ in Router → CLI

Router(config)# exit
Router# show ip rout

└ (O/P) → C 10.0.0.0/8 is directly connected, FastEthernet 0/0
C 10.0.0.0/8 is directly connected, FastEther 1/0

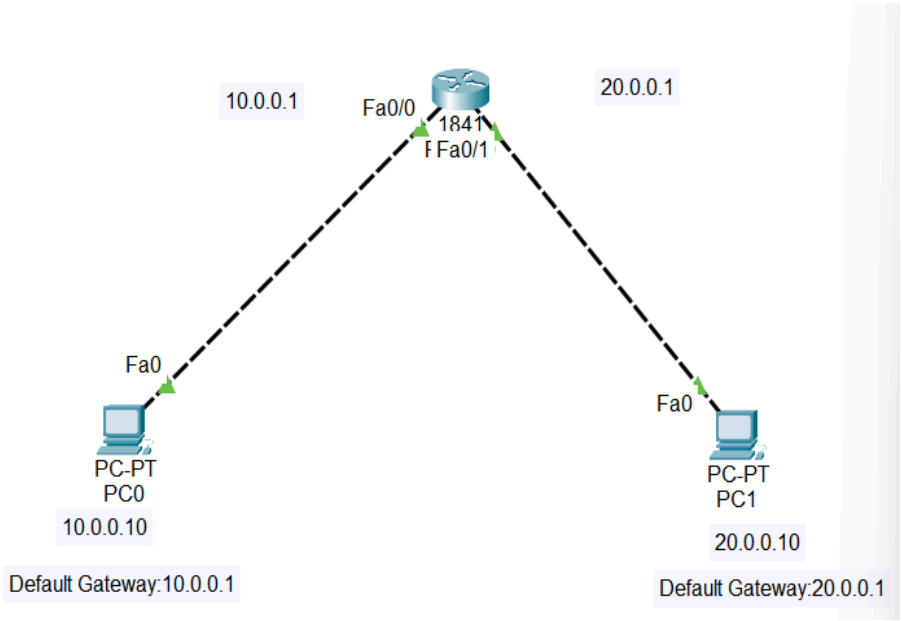
* Observation:-

The buttons on the copper cross over turned green

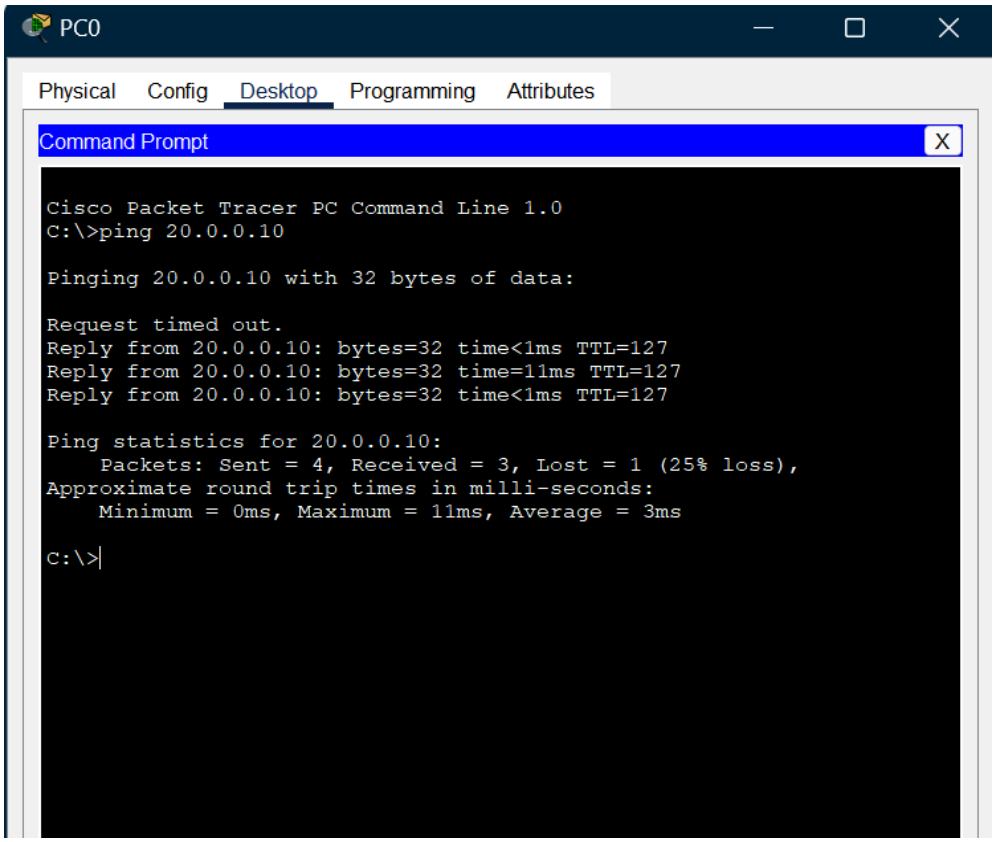
→ from PC0 to PC1, packets sent were 4, Received were 3, and Lost = 1.

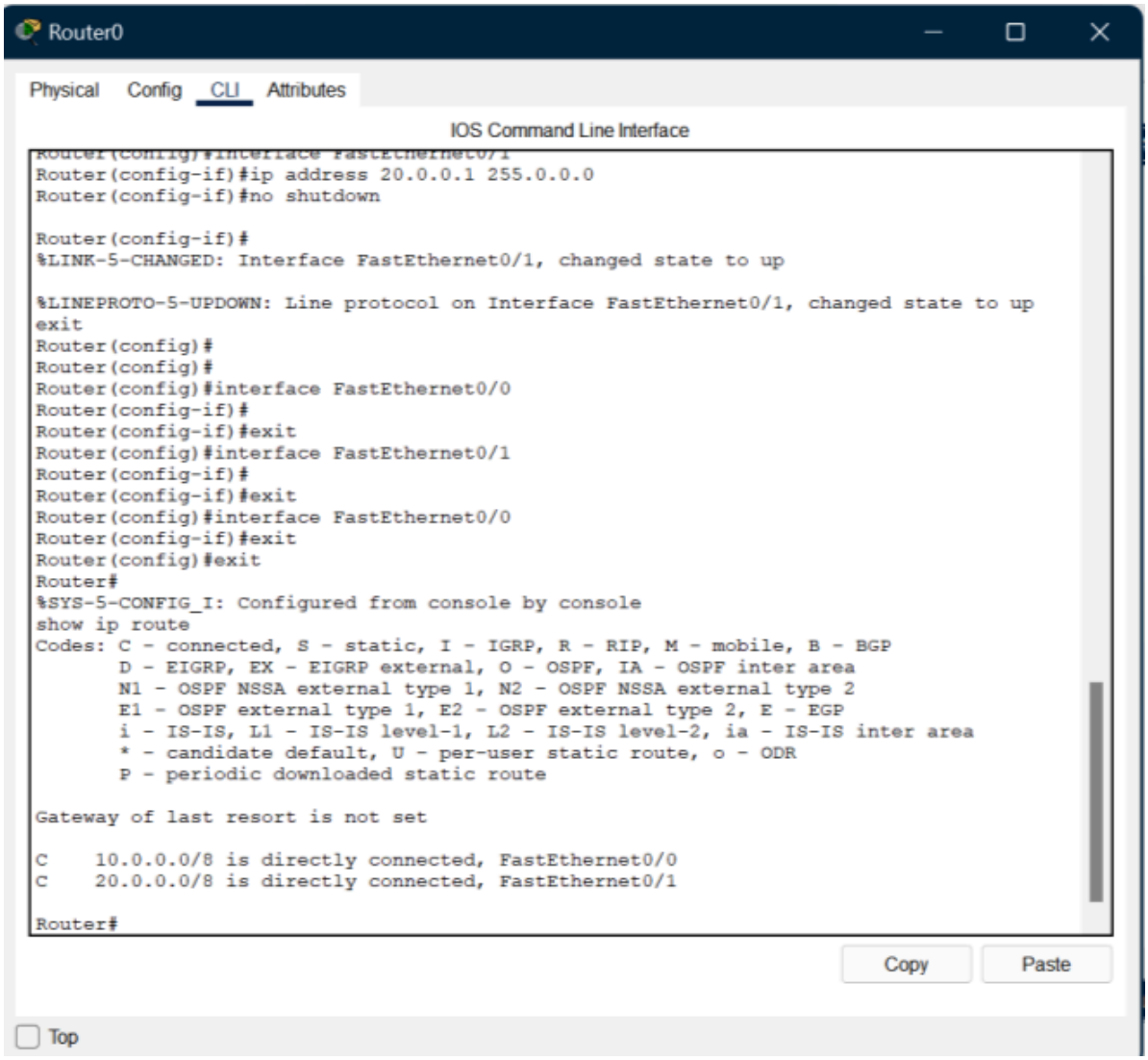
→ from PC1 to PC0, packets sent were 4, Received were 4, and Lost = 0.

Topology:



Output:




Router0
Physical
Config
CLI
Attributes
IOS Command Line Interface
Router(config)#interface FastEthernet0/1
Router(config-if)#ip address 20.0.0.1 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
exit
Router(config)#
Router(config)#
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
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, FastEthernet0/0
C 20.0.0.0/8 is directly connected, FastEthernet0/1
Router#
Copy
Paste
Top