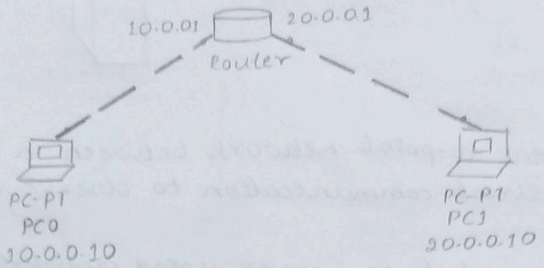
LAB-2

LAB:02 09/10/2024

EXPERIMENT:02



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

Topology: Connect 2 PC's to a router using 2 copper cross-over wires.

Procedure:
- Add 2 PC's and one generic router on the workspace
- Wire the PC's and IP address and default gateway.
- Let 1 PC be connected to the router through a copper cross over each.
- Click on the router, desktop and CLI commands and proceed with the following commands:

```
Router>enable
Router# config terminal
Router(config)# interface fastethernet 0/0
Router(config)# ip address 10.0.0.1 255.0.0.0
Router(config)# no shutdown
exit.
```

- Click on the PC → Desktop → Command Prompt.

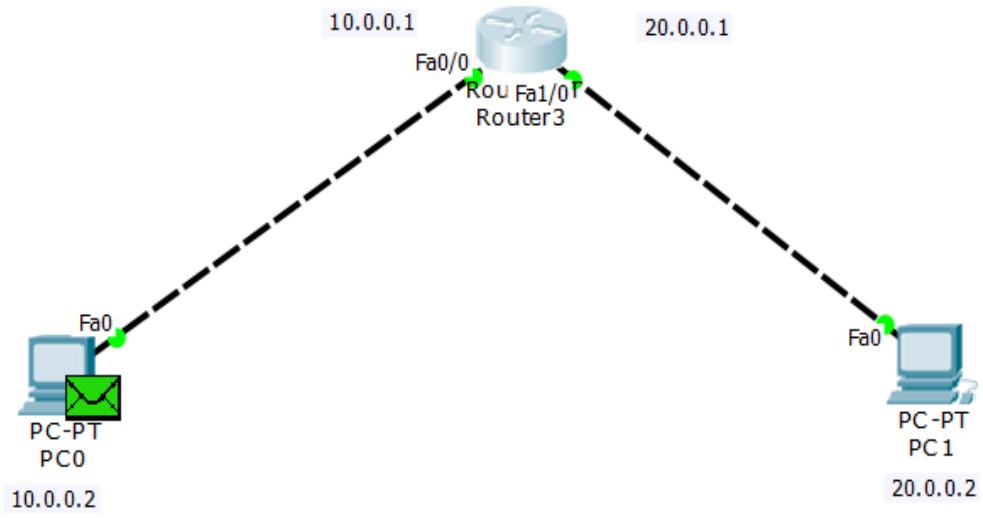
```
ping 20.0.0.10
```

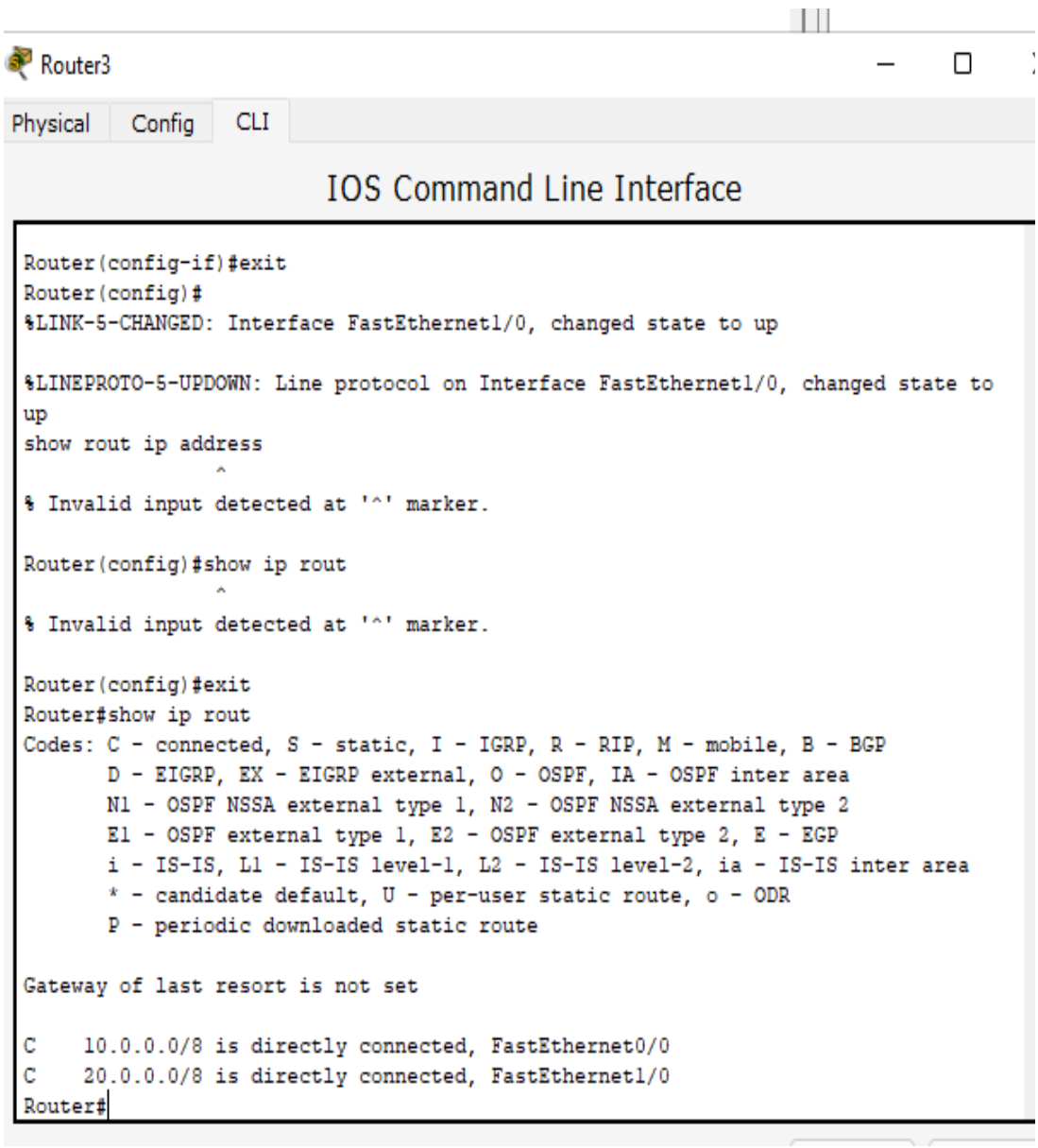
Observation:
- The buttons on the copper cross-over turned green.
- Packets were sent from one PC to the other
- PC received all packets.

Output:

```
Router#show ip route
C   10.0.0.0/8 is directly connected, FastEthernet0/0
C   20.0.0.0/8 is directly connected, FastEthernet1/0.
```

TOPOLOGY




Router3
Physical
Config
CLI
IOS Command Line Interface
Router(config-if)#exit
Router(config)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
show rout ip address
^
% Invalid input detected at '^' marker.
Router(config)#show ip rout
^
% Invalid input detected at '^' marker.
Router(config)#exit
Router#show ip rout
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, FastEthernet1/0
Router#

```
Packet Tracer PC Command Line 1.0
PC>ping 10.0.0.2

Pinging 10.0.0.2 with 32 bytes of data:

Reply from 10.0.0.2: bytes=32 time=4ms TTL=127
Reply from 10.0.0.2: bytes=32 time=4ms TTL=127
Reply from 10.0.0.2: bytes=32 time=4ms TTL=127
Reply from 10.0.0.2: bytes=32 time=4ms TTL=127

Ping statistics for 10.0.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 4ms, Maximum = 4ms, Average = 4ms

PC>
```