

## Program 2

**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:**

LAB-21.

Aim To connect 2 PCs with 2 different routers using Router.

Topology

Default Gateway: 10.0.0.10

Default Gateway: 20.0.0.10

Procedure:

- (i) Add 2 PCs and 1 generic router
- (ii) Connect PC to router using cross-over wire
- (iii) Set up IP addresses, gateway, subnet mask of both the PCs (in fast ethernet & settings (gateways))
- (iv) In router set up its IP address (both board & on 40, 0/0)
- (v) open CLI of router and type:  
continue with configuration dialog n.

Router # enable  
Router # config terminal  
Router (config) # interface Fast Ethernet 0/0  
Router (config-if) # ip address 10.0.0.10 255.0.0.0  
Router (config) # no shutdown  
exit

do the same for the other Fast Ethernet 1/0.

(vi) Click on PC → Desktop + Command Prompt  
Type ping 20.0.0.1 (this sends packet from PC0 to PC1)

Observation:

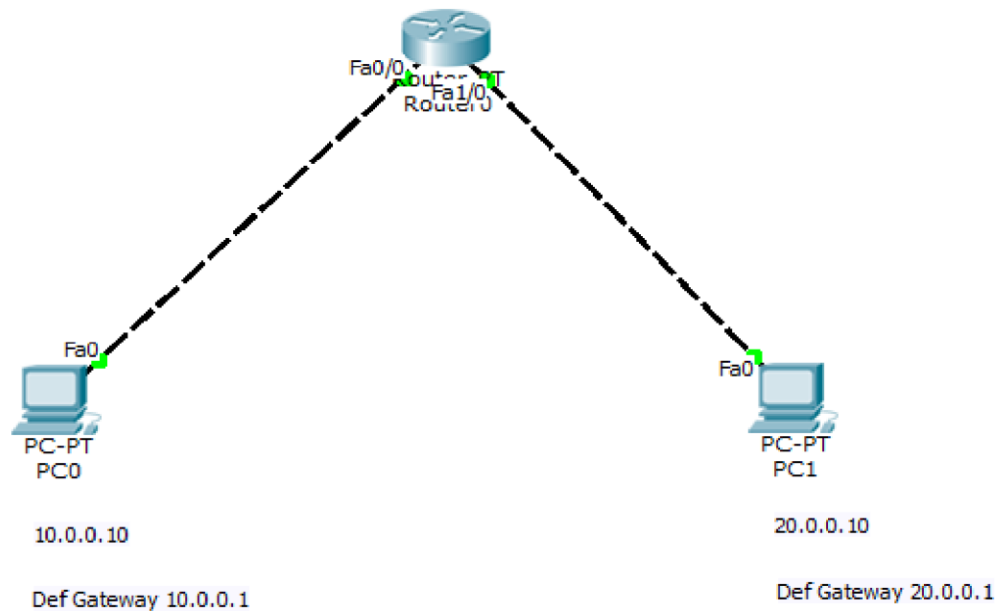
This sends 32 bytes of data  
(sent = 4, lost = 0)

In router CLI

Router (config) # exit  
Router # show ip route

C 10.0.0.0/8 is directly connected, Fast Ethernet 0/0  
C 20.0.0.0/8 is directly connected, Fast Ethernet 4/0

## Screenshots:



PC0

Physical Config Desktop Custom Interface

### Command Prompt

```
Pinging 20.0.0.10 with 32 bytes of data:

Request timed out.
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms 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

PC>ping 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=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127
Reply from 20.0.0.10: bytes=32 time=0ms TTL=127

Ping statistics for 20.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>
```