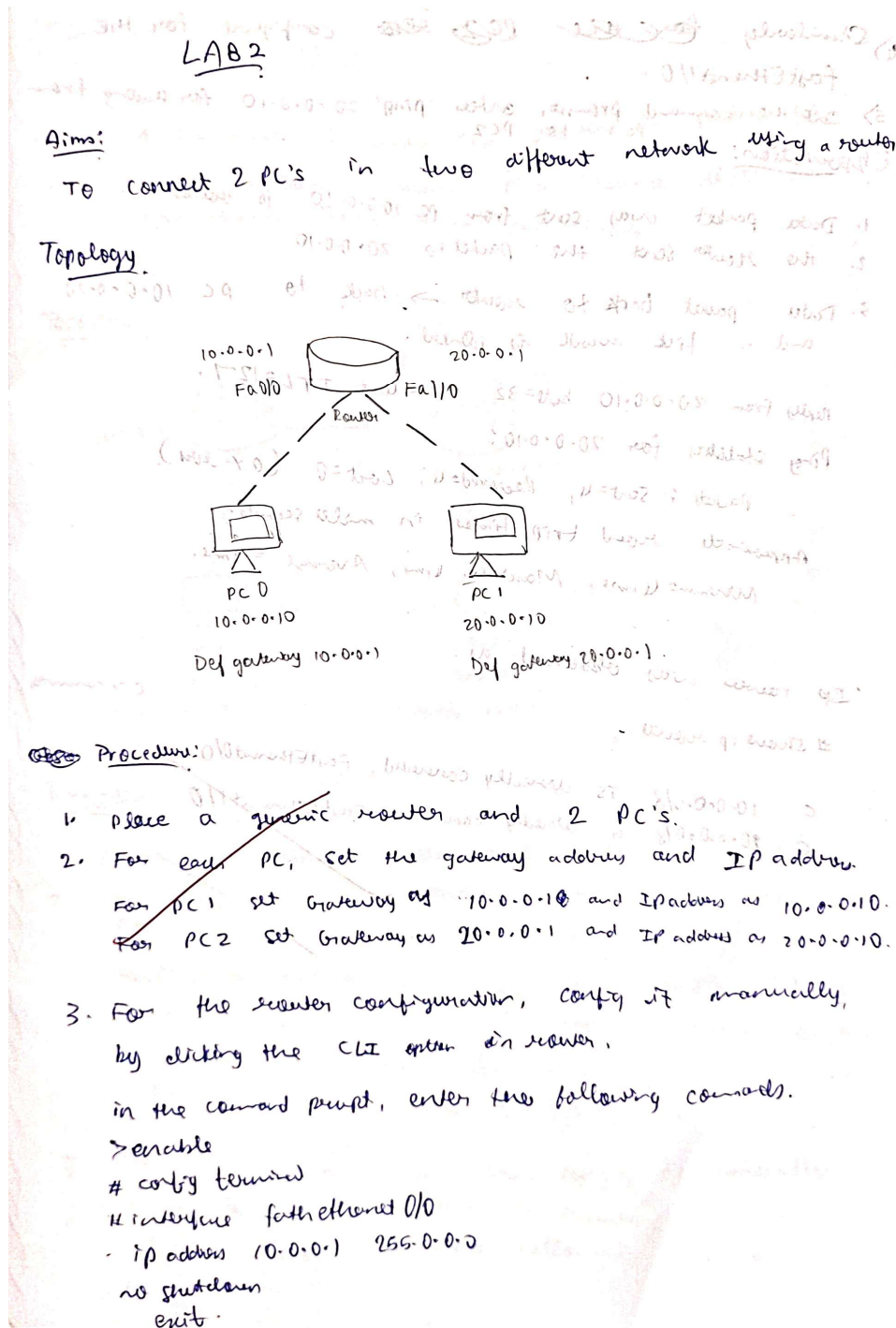## Program 2

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 2

Aims:
To connect 2 PC's in two different network using a router

Topology

```
     10.0.0.1                20.0.0.1
       Fa0/0         Fa1/0
              Router

   PC 0                    PC 1
   10.0.0.10               20.0.0.10

 Def gateway 10.0.0.1      Def gateway 20.0.0.1
```

Procedure:

1. Place a generic router and 2 PC's.
2. For each PC, set the gateway address and IP address.
   For PC 1 set Gateway as 10.0.0.10 and IP address as 10.0.0.10.
   For PC 2 set Gateway as 20.0.0.1 and IP address as 20.0.0.10.

3. For the router configuration, config it manually, by clicking the CLI option in router.
   in the command prompt, enter the following commands.
   >enable
   # config terminal
   # interface fastethernet 0/0
   - ip address (10.0.0.1) 255.0.0.0
   no shutdown
     exit.

4) Similarly ~~for the~~ ~~PC2~~ ~~PC2~~ configure for the
   FastEthernet 1/0.

5) Int the command prompt, enter 'ping' 20.0.0.10 for sending from
   PC1 to PC2.

Observation:

1. Data packet was sent from PC 10.0.0.10 to router.
2. The router sent the packet to 20.0.0.10.
3. Data packet back to router → back to PC 10.0.0.10
   and a tick mark is blinked.

   Reply from 20.0.0.10 byte=32 time=4ms TTL=127.

   Ping statstry for 20.0.0.10:

   Packets : Sent=4, Received=4, Lost=0 (0 r. loss).

   Approximate road trip times in milli seconds:

   Minimum= 4ms, Maximum= 4ms, Average = 4ms.

   'Ip router was observed as

   # show ip route   C => connected

   C   10.0.0.0/8 is directly connected, FastEthernet 0/0.
   C   20.0.0.0/8 is directly connected, FastEthernet 1/0.

Screen Shots: