AIM :

Implement your own ping program

SOURCE CODE :

Server . py .

```
import socket
def start - server( host = '127.0.0.1,
                            port = 12345):
    with socket . socket (socket. AF -INET,
                socket : SOCK _DGRAM )as s.
        s . bind ( (host , port))
        print (f" UDP server running on
{ host }: { port })

        while true :
            data addr = s. recvfrom (1024)
            print (f" Received message from
                    {addr} :  {data decode()}")
            s. sendto ( b'pong ,addr)
if (- name - =="-main -":
    start - server ():
```

Client : PY

```
import socket
import time
def ping-server (host = ' 127.0.0.1',
                 port = 12345):

    with socket . socket (socket. AF-INET,
                socket SOCK-DGRAM) as S:

    try:
        S. settimeout (2)
        Start = time. time ( )
        S. sendto (b' Ping ', (host, port))
    except socket. timeout:
        print (" Request time. out") .
    if (-name-- == " -- main --":
        ping-server().
```

Output: python server. PY
UDP server running on 127.0.0.1: 12345
Recieved Message from ('127.0.0.1' 5300)
ping.

python client : PY
Recieved Pong from (127.0.0.1'/12345) in
0.00 seconds

Result: Thus the program is successfully
executed and output is verified