Date: 23/10/24

Aim:

To implement your own ping program.

Code:

```
import socket
def start_server (host = '127.00.1', port=12345):
    with socket. socket ( socket. AF_ INET, socket_
        socket _ DGRAM ) as S:
        S.bind((host,port))
        print (f "UDP server running on {host}:{port}")
        while True:
            data, addr = S. recvfrom (1024)
            print ( "Received message from {addr}:
                            {data. decode (13;
            S. sendto ( 'Pong', addr)
if __name__ == "__main__":
    start_server ()
```

Client. Py

```
import socket
import time
def ping_server ( host = '127.0.01', port=12345):
    with socket. socket ( socket. AF_INET, socket.Sock_
                                    DGRAM) as S:
```

```
clientsocket.settimeout(2)
    start = time.time()
    sendTo('ping', (host, port))
    except socket.timeout:
        print("Request timed out")
if __name__ == "__main__":
    ping.server()
```

O/P

```
python server.py
UDP server running on 127.0.0.1:12345
Received message from ('127.0.0.1', 53009) ping
python client.py
Received pong from ('127.0.0.1', 12345) in
    0.00 seconds
```

Result:

Thus the ping program is executed successfully
and O/P is verified.