PING PROGRAM

AIM

Implement your client using TCP/UDP sockets ping program

PROCEDURE

Server → Listen Incoming ping requests cy responds to them

CODE

```python
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" Recieved from {addr}:
                {data.decode ()}")
            s.sendto (b"Pong", addr)
if __name__ == "__main__":
    start_server ()
```

Client Side

Sends a ping request to server
& waits for response

CODE

```python
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))
            data, addr = s.recvfrom (1024)
            end = time.time ()
            print (f" Received {data.decode()}
                    from {addr} in {end - start :.2f}
                    seconds ")
        except socket.timeout :
            print ("Request Time Out")

if __name__ == "__main__":
    ping-server ()
```

OUTPUT:

UDP service running on 127.0.0.1:12345

Received message from ('127.0.0.1', 54716): Ping

Received message from ('127.0.0.0.1', 48016): Ping

Received message from ('127.0.0.1', 48702): Ping

RESULT

Thus Ping Program was successfully executed cy the output is verified