9/10/25 Experiment - 12

a) AIM : Implement echo client server using TCP / UDP sockets.

client

```
import socket
import time

def ping_server (host = '127.0.0.1', port = 1234):
    with socket.socket (socket.AF_INET, socket.
                        SOCK_DGRAM) as s :
        try :
            s.sendto (b'Hello', (host, port))
        except s.timeout :
            print ("Request timed out")

ping_server()
```

Result : The message hello is succesfully sent to the server.

b) AIM : Implement chat client server using TCP / UDP sockets.

Algorithm :

```
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 ( " Received message from
                    {addr} : { data. decode ()}")

start - server ()
```

output :

```
UDP server running on 127.0.0.1 : 12345
Received Message from ('127.0.0.1', 52345):
                                    Hello.
```

Result : The chat client server using TCP / UDP socket is implemented successfully.

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