

Exp NO : 12B

Implementation of chat client
server using TCP/UDP sockets

AIM :

To implement chat client server using
the TCP and UDP sockets.

Server side Algorithm:

import socket :

server = socket.socket(socket.AF_INET,
socket.SOCK_STREAM)

server.bind(("localhost", 12346))

server.listen(1)

print("Server is waiting for connection...")

conn, addr = server.accept()

print(f"Connected to {addr}")

while True:

msg = conn.recv(1024).decode()

if msg.lower() == 'bye':

print("Client disconnected")

break

print(f"Client : {msg}")

```
reply = input("you: ")
Com.send(reply.encode())
if reply.lower() == 'bye':
    break
Com.close()
```

Client side Algorithm:

```
import socket
```

```
Client = socket.socket(socket.AF_INET,
                        socket.SOCK_STREAM)
```

```
Client.connect(('localhost', 12346))
```

```
while True:
```

```
    message = input("you: ")
    Client.send(message.encode())
    if message.lower() == 'bye':
        break
```

```
    reply = Client.recv(1024).decode()
    print(f"server {reply}")
```

```
    if reply.lower() == 'bye':
        break
```

```
Client.close()
```

~~sample input and output.~~

server side :-

Server waiting for connection

connected to ('127.0.0.1', 59010)

Client : Hi server!

you : Hello client!

Client: How are you?

You: I'm fine thanks!

Client: bye

Client disconnected

Client side:

You: the server!

Server: Hello client!

You: How are you?

Server: I'm fine, thanks!

You: bye!

Result

The server listens for UDP messages and displays them along with the sender's details