

Ex No: 126
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Client server using TCP/UDP sockets.

Aim:

To implement chat client server using
TCP/UDP sockets

a) server

```
import socket
def start_server(host='127.0.0.1', port=12345)
s = socket.socket(socket.AF_INET, socket.SOCK-
STREAM)
s.bind((host, port))
s.listen(1)
print("server is waiting for connection")
conn, addr = s.accept()
print("connected by", addr)
while True:
    data = conn.recv(1024).decode()
    if not data or data.lower() == "exit":
        print("client ended the chat.")
        break
    print("client: ", data)
    msg = input("You: ")
    conn.sendall(msg.encode())
    if msg.lower() == "exit":
        print("chat ended.")
        break
```


conn. close()

s. close()

start_server()

b) client

import socket

def start_client(host = '127.0.0.1', port = 12345):

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

s.connect((host, port))

print("connected to server.")

while True:

msg = input("you: ")

s.sendall(msg.encode())

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

print("unterminated.")

break

data = s.recv(1024).decode

if not data or data.lower() == 'exit':

print("server ended the chat.")

break;

print("server: ", data)

s.close()

start_client()

output:

server:

server is waiting for connection
connected by ('127.0.0.1', 61773)

client: Hello

You: Hi

client ended the chat.

client:

Connected to server

You: Hello

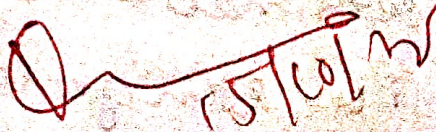
Server: Hi

You: exit

chat ended.

Result:

The Program has been executed
successfully.

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