

EXP NO.: 12)b) chat client server

Aim:

To implement chat client server using TCP/UDP Packet sockets.

Source code:

TCP server.py:

```
import socket
```

```
import threading
```

```
def handle_receive(client_socket):
```

```
    while True:
```

```
        try:
```

```
            message = client_socket.recv(1024).decode()
```

```
            if message:
```

```
                print("client:", message)
```

```
            else:
```

```
                break
```

```
        except:
```

```
            break
```

```
def handle_send(client_socket):
```

```
    while True:
```

```
        message = input("server: ")
```

```
        client_socket.send(message.encode())
```

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

```
server_socket.bind(("localhost", 5555))
```

```
server_socket.listen(1)
```

```
print("server is waiting for connection...")
```

```
client_socket, addr = server_socket.accept()
```

```
print(f"connected by {addr}")
```

receive - thread

handle

send - thread

handle - thread

receive - thread

send - thread

receive - thread

send - thread

client - socket

server - socket

TCP client

```
import socket
```

```
import threading
```

```
def handle
```

```
while
```

```
try
```

```
message
```

```
def handle
```

```
while
```

```
message
```

```
client
```

```
client_socket
```

```
client_socket
```


t server

ent server using

socket):

et.recv(1024).decode()

message)

ket):

or: ").

essage.encode())

ocket.AF_INET,

(FAM)

"", 5555))

connection...")

cket.accept()

```
receive_thread = threading.Thread(target=
```

```
handle_receive, args=(client_socket,))
```

```
send_thread = threading.Thread(target=
```

```
handle_send, args=(client_socket))
```

```
receive_thread.start()
```

```
send_thread.start()
```

```
receive_thread.join()
```

```
send_thread.join()
```

```
client_socket.close()
```

```
server_socket.close()
```

TCP client.py:

```
import socket
```

```
import threading
```

```
def handle_receive(client_socket):
```

```
while True:
```

```
try:
```

```
message = client_socket.recv(1024).decode()
```

```
if message:
```

```
print("server:", message)
```

```
else:
```

```
break
```

```
except:
```

```
break
```

```
def handle_send(client_socket):
```

```
while True:
```

```
message = input("client: ");
```

```
client_socket.send(message.encode())
```

```
client_socket = socket.socket(socket.AF_INET,
```

```
socket.SOCK_STREAM)
```

```
client_socket.connect(("localhost", 5555))
```

```
print("connected to the server")
```



```
receive_thread = threading.Thread(target=
handle_receive, args=(client_socket,))
send_thread = threading.Thread(target=
handle_send, args=(client_socket,))
receive_thread.start()
send_thread.start()
receive_thread.join()
send_thread.join()
client_socket.close()
```

output:

server.py output:

server is waiting for connection...

connected by ('127.0.0.1', <client-port>)

server: Hello, client!

client: Hi, server!

server: How are you?

client: I am good, thanks!

client.py output:

connected to the server

client: Hi, server!

server: Hello, client!

client: I am good, thanks!

server: How are you?

~~Result:~~

Thus, the program for chat client server using TCP/UDP was successfully executed and the output verified.

cket-callback,
x=0)

Exp No.: 15 Webalizer Tool

Aim:

To analyze the different types of web logs using Webalizer tool.

Procedure:

1. Run webalizer window version
2. Input web log file (download from web)
3. Press Run webalizer

Thus, the different types of web logs using Webalizer tool was successfully analyzed.

packet sniffing