# **CHAT CLIENT SERVER**

### **SERVER:**

```
Program (for server side):
import socket
HOST = '127.0.0.1' # Standard loopback interface address (localhost)
PORT = 65432 # Port to listen on (non-privileged ports are > 1023)
with socket.socket(socket.AF INET, socket.SOCK STREAM) as s:
  s.bind((HOST, PORT))
  s.listen()
  conn, addr = s.accept()
  with conn:
     print("Connected by ", addr)
     while True:
       print("\nEnter Message to Client(q or Q to quit) :")
       send data = input()
       if(send_data == "q" or send_data == "Q"):
         conn.sendall(send_data.encode())
         s.close()
         exit(0)
       else:
         conn.sendall(send_data.encode())
         recv_data = conn.recv(1024)
         if(recv_data == "q" or recv_data == "Q"):
            s.close()
            exit(0)
         else:
            print("\nRECIEVED DATA ",recv_data)
```

#### Output (for server side):

```
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~/ $ python CHATserver.py
~/ $ python CHATserver.py
Connected by ('127.0.0.1', 49744)
~/ $ python CHATserver.py
Connected by ('127.0.0.1', 49744)
Enter Message to Client(q or Q to quit) :
Hi dude
RECIEVED DATA b'Howdy, how are you?'
Enter Message to Client(q or Q to quit) :
I am doing great, How 'bout ya?
RECIEVED DATA b'I am cool '
Enter Message to Client(q or Q to quit) :
ok cool
RECIEVED DATA b'Got to go bye. See ya later.'
Enter Message to Client(q or Q to quit) :
All right then... see ya later good bye.
RECIEVED DATA b'q'
Enter Message to Client(q or Q to quit) :
~/ $ 🗌
```

## **CLIENT:**

### Program (for client side):

```
import socket
HOST = '127.0.0.1' # The server's hostname or IP address
PORT = 65432 # Port used by the Server
with socket.socket(socket.AF_INET, socket.SOCK_STREAM) as s:
  s.connect((HOST, PORT))
  while(1):
     recv_data = s.recv(1024)
    if(recv_data == "q" or recv_data == "Q"):
       s.close()
       exit(0)
     else:
       print("\n RECEIVED DATA = ", recv_data)
       print("\nEnter Message to server(q or Q to quit) : ")
       send_data = input()
       if(send_data != "q" and send_data != "Q"):
         s.sendall(send data.encode())
         s.sendall(send_data.encode())
         s.close()
         exit(0)
```

### Output (for client side):

```
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~/ $ python CHATclient.py
RECEIVED DATA = b'Hi dude'
Enter Message to server(q or Q to quit) :
Howdy, how are you?
RECEIVED DATA = b"I am doing great, How 'bout ya ?"
Enter Message to server(q or Q to quit) :
I am cool
RECEIVED DATA = b'ok cool '
Enter Message to server(q or Q to quit) :
Got to go bye. See ya later.
RECEIVED DATA = b'All right then... see ya later good bye.'
Enter Message to server(q or Q to quit) :
~/ $ [
```