

Receive Until Delimiter (Server)

Description

In this problem, you are tasked with testing the connection between a client and server. The client will send a message to the server and the server echoes back the message to the client. In this problem, the server will continue to receive messages in 16 byte chunks from the client until the client sends a delimiter in the form of a line break (`'\r\n'`) to end the message.

Input

There is no input in this problem. The client will send a predetermined message to the server running at localhost (127.0.0.1) on port 12345 then receive the same message from the server.

Output

The client should output both the original message sent and the response received from the server to standard output.

```
Test handle_client_connection ...
```

```
Got a connection from ('127.0.0.1', 12345)
```

```
send called with: call(b'Hello Server!\nThis is a message from one of  
your Client.\nIf you are reading this please call me back.\r\n')
```

```
close called with: call()
```

```
Test start_server ...
```

```
Listening on 127.0.0.1:12345 ...
```

```
Got a connection from ('127.0.0.1', 12345)
```

```
bind called with: call(('127.0.0.1', 12345))
```

```
listen called with: call(1)
```

Method

Your task is to implement and run both the server and client programs as provided. Ensure the client successfully connects to the server, sends the message, receives a response, and prints the exact expected output.

- Server Program: The server should start, bind to the specified localhost and port, listen for incoming connections, accept one client connection, receive the message in 16 bytes chunks from the client until a delimiter is found, then send the message back to the client, and then close the connection. It must handle a single client connection before shutting down for the purpose of this problem.

- Client Program: The client should connect to the server's specified host and port, send the message "Hello Server!\nThis is a message from one of your Client.\nIf you are reading this please call me back.\r\n" to the server, receive the response, print both the original message and the response in the specified format, and then close the connection.