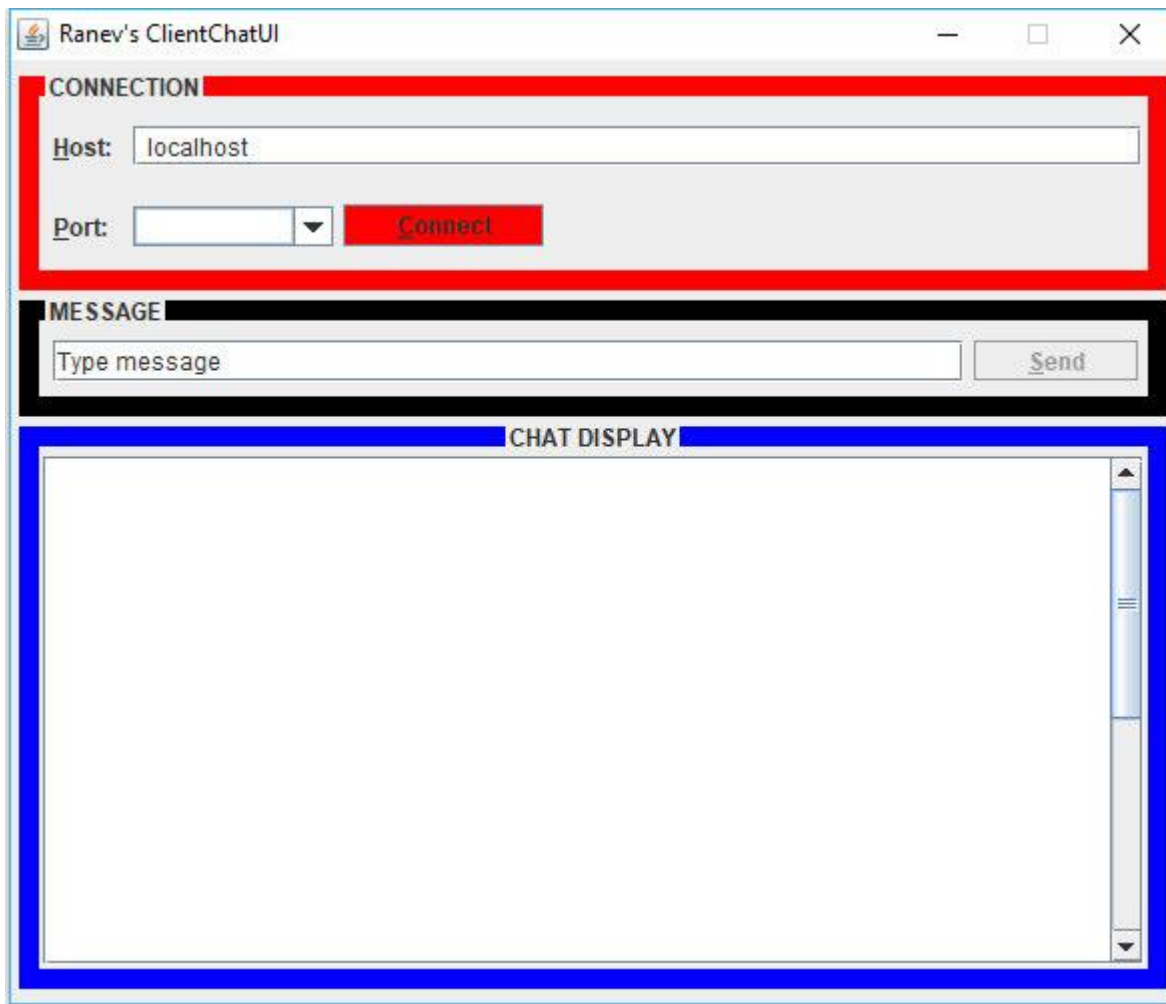


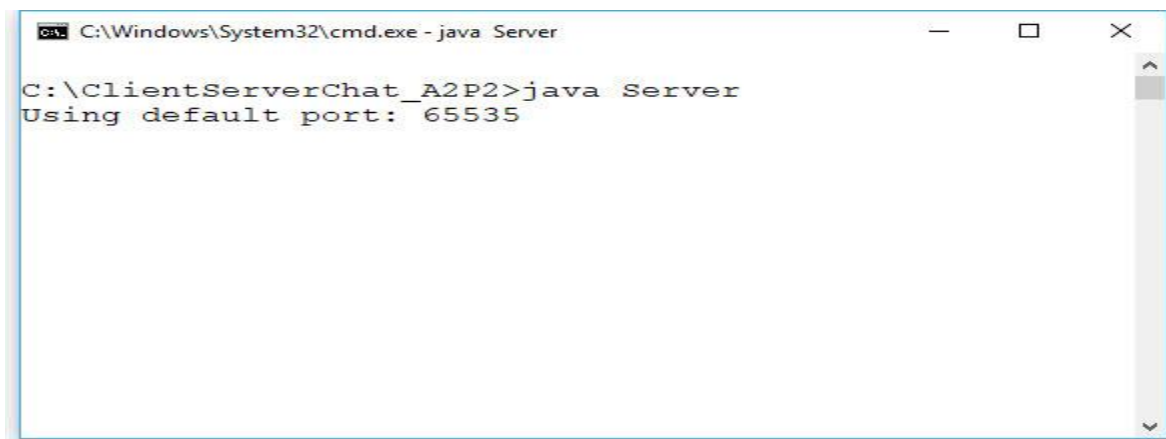
Client-Server Chat Screen Captures

1. Client and Server Started.

Chat Client Started



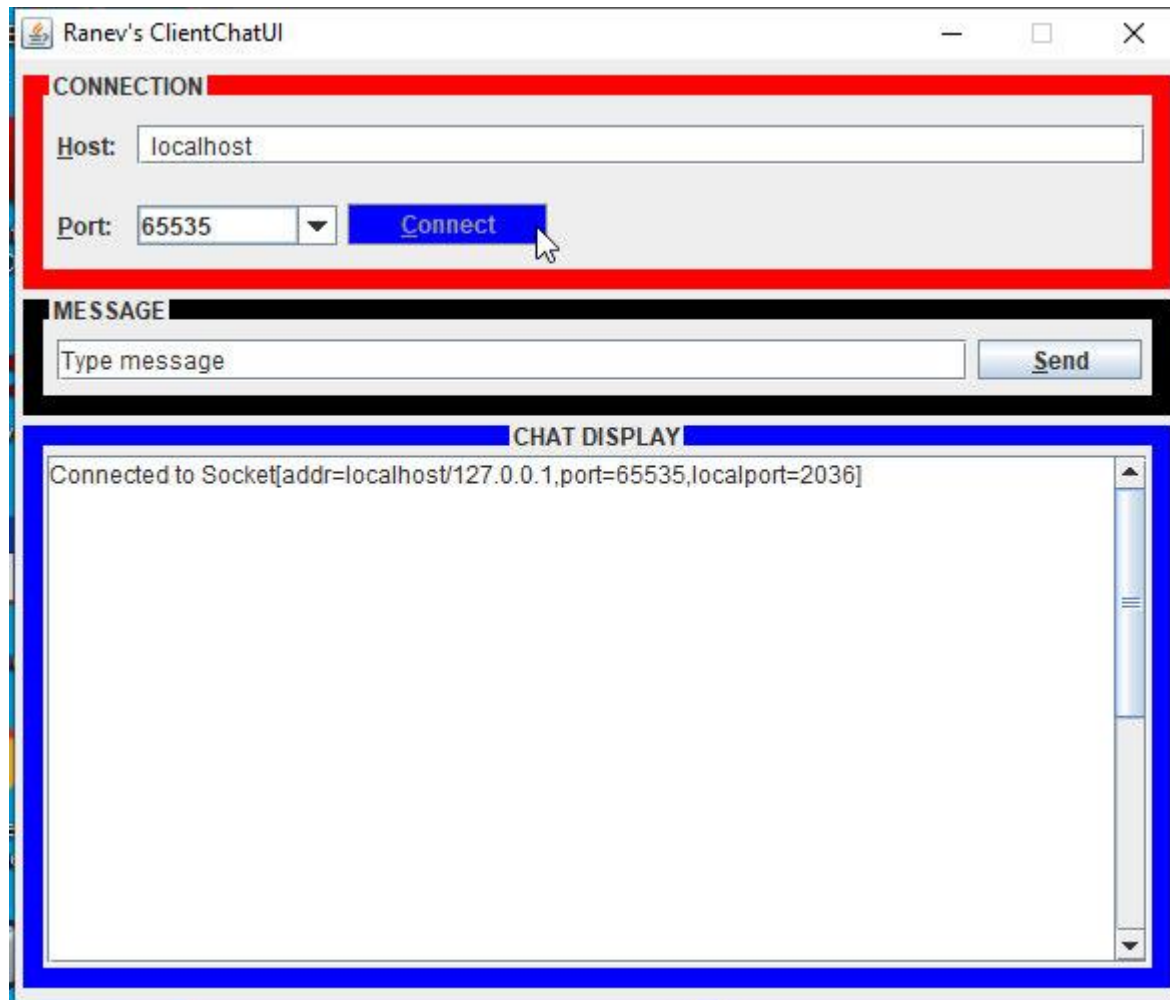
Server Started



Note: If port 65535 is has already been bound by other application or by your OS, try some other port. For example: 65000.

2. Client and Server Connected.

Chat Client Connected on localhost and port 65535.



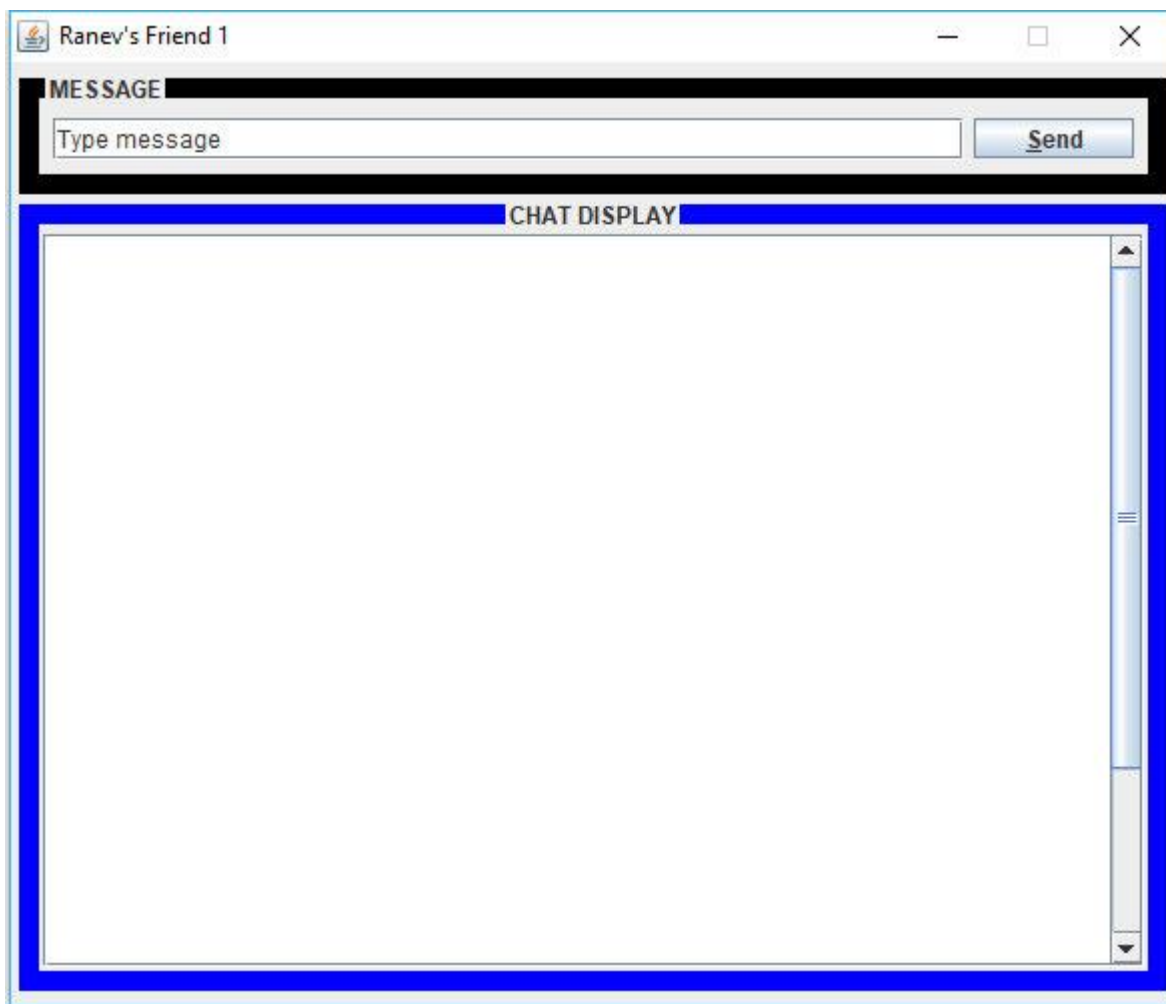
Server Connected to a Chat Client

```
C:\Windows\System32\cmd.exe - java Server

C:\ClientServerChat_A2P2>java Server
Using default port: 65535
Connecting to a client Socket[addr=/127.0.0.1,port=2036,localport=65535]
```

The server launches the Server Chat Client.

3. Server Chat GUI after connection on port 65535.

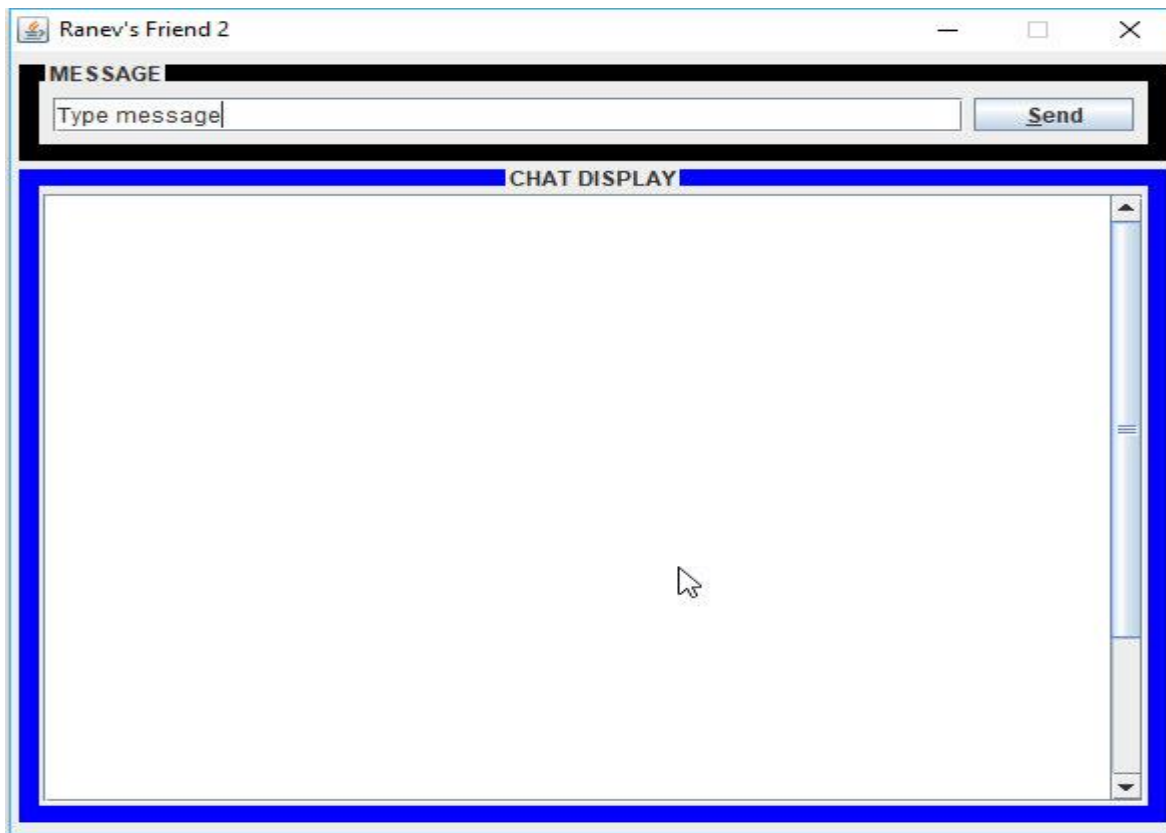


4. Server Connected to three different Chat Clients on port 65535.

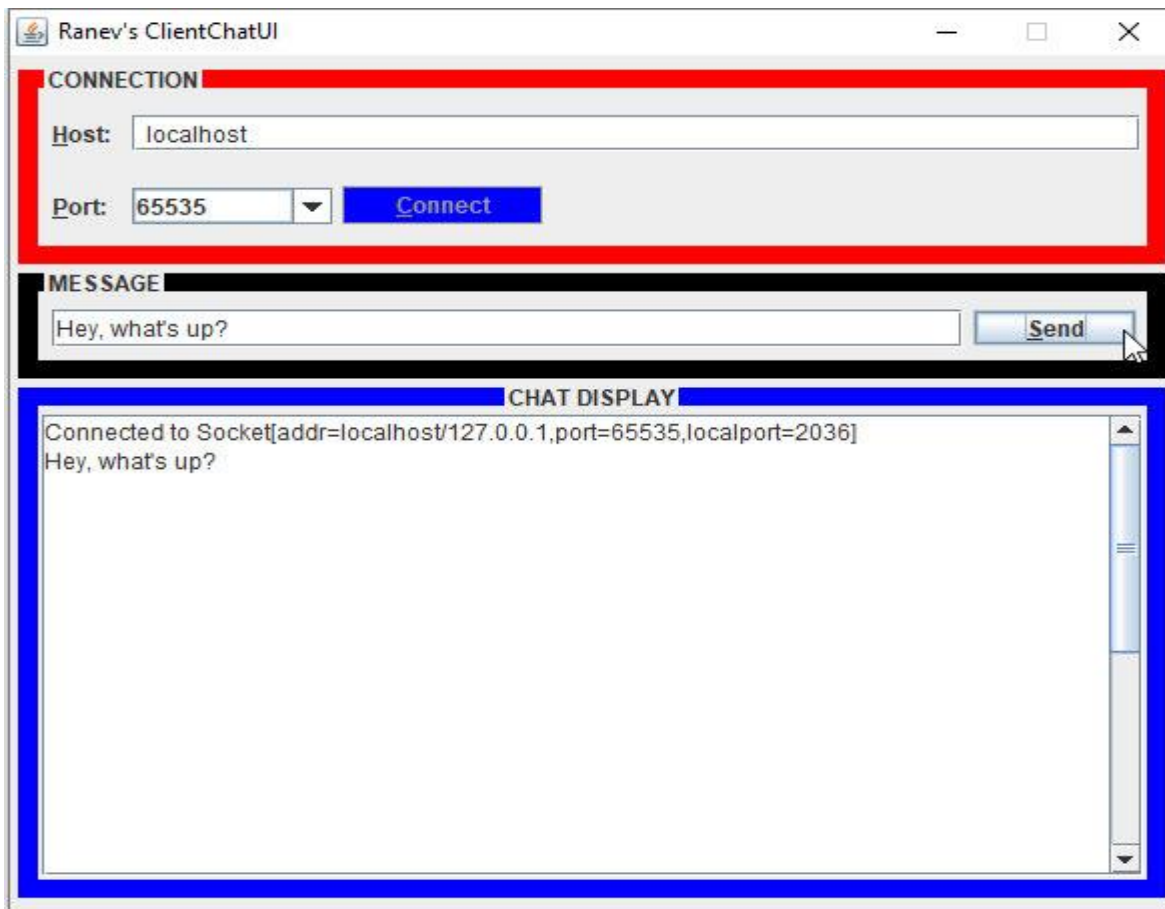
```
C:\Windows\System32\cmd.exe - java Server

C:\ClientServerChat_A2P2>java Server
Using default port: 65535
Connecting to a client Socket[addr=/127.0.0.1,port=2036,localport=65535]
Connecting to a client Socket[addr=/127.0.0.1,port=2037,localport=65535]
Connecting to a client Socket[addr=/127.0.0.1,port=2038,localport=65535]
```

5. Server Chat GUI for the second and third client.



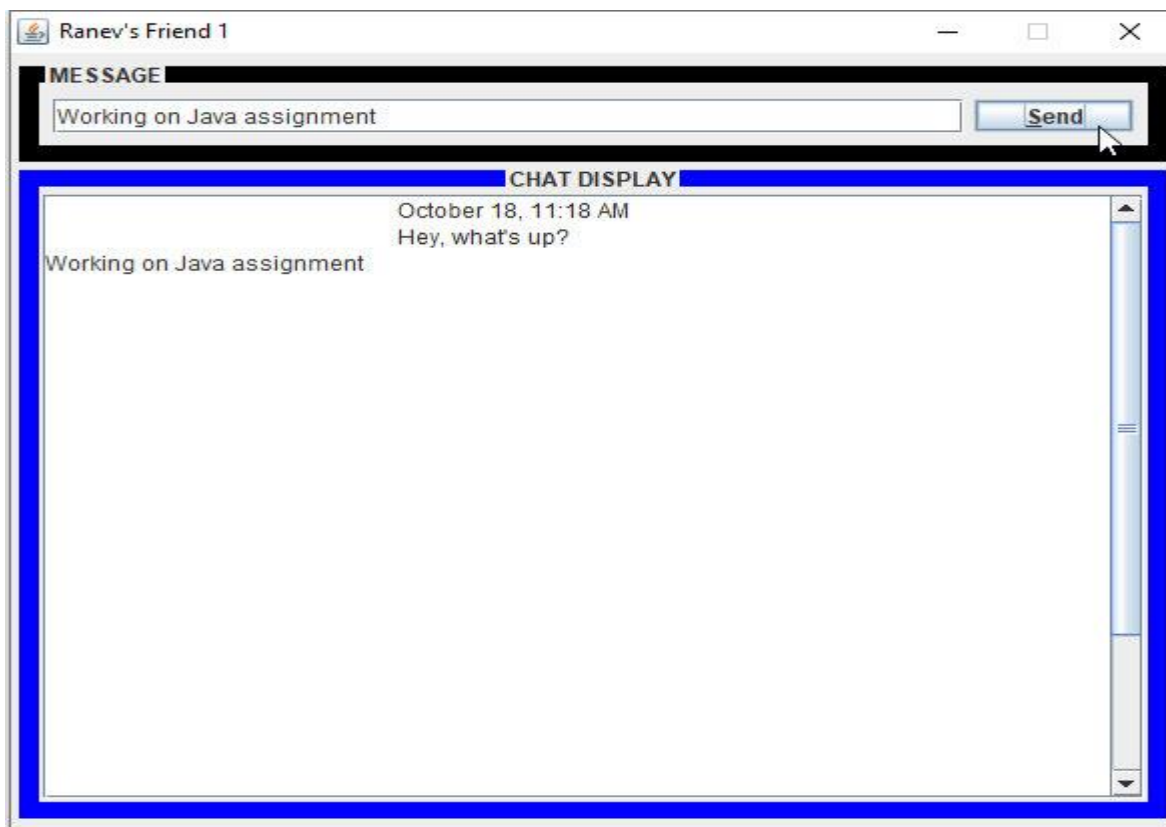
6. Client and Friend exchanging messages. Client starts the conversation.



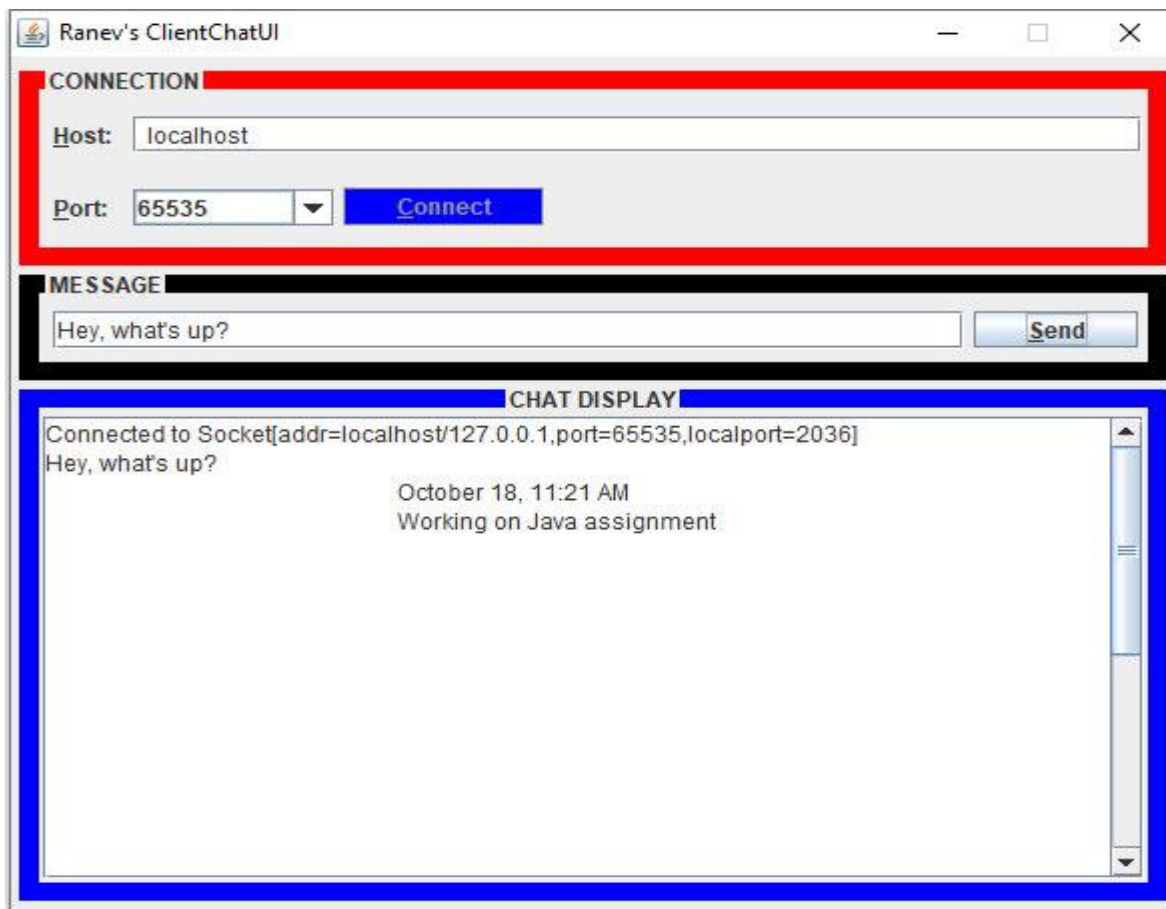
Friend 1 receiving the message



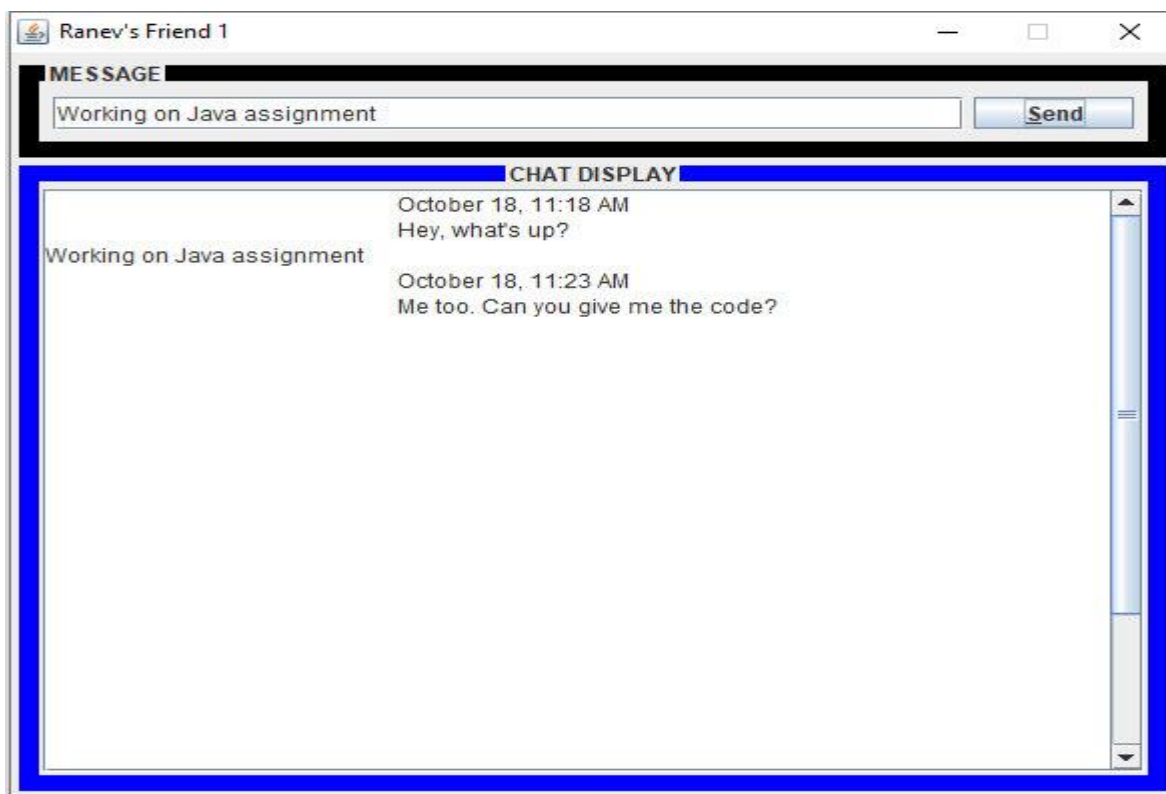
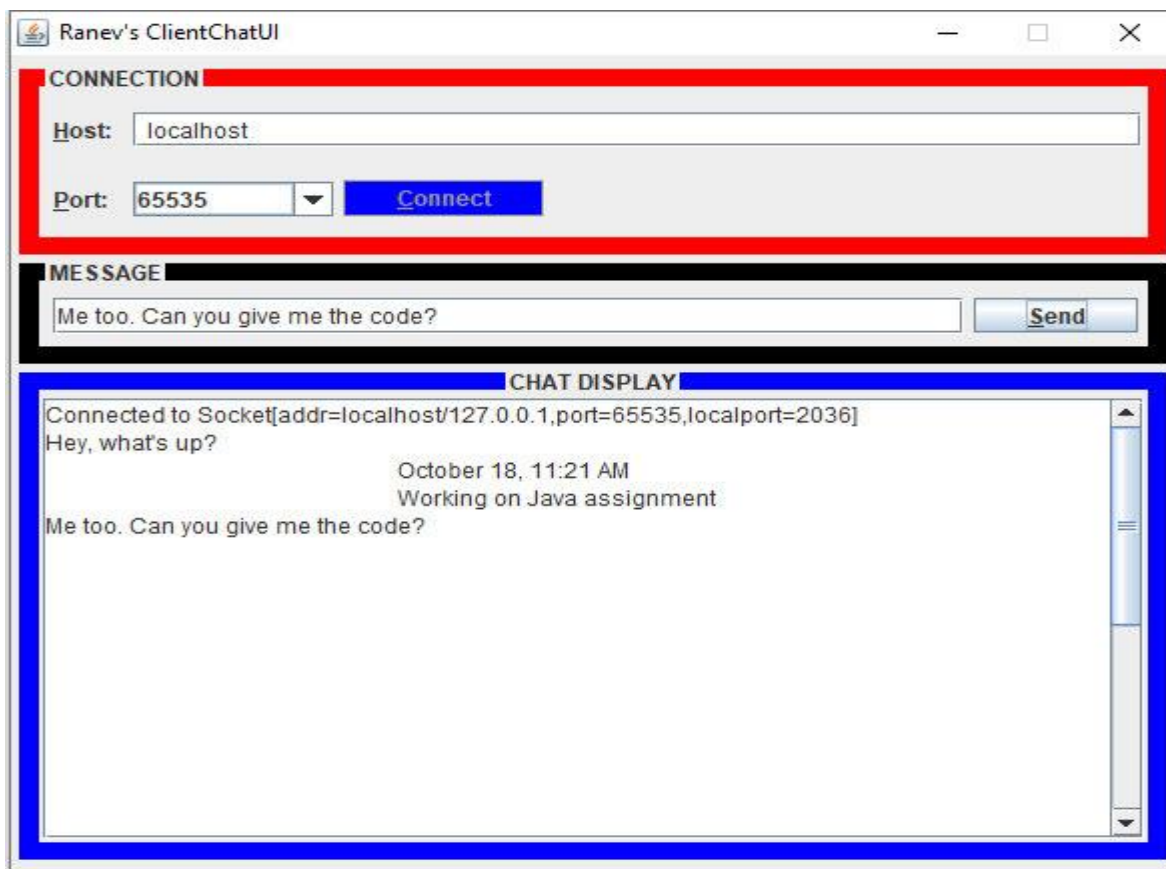
Friend 1 responding to the message

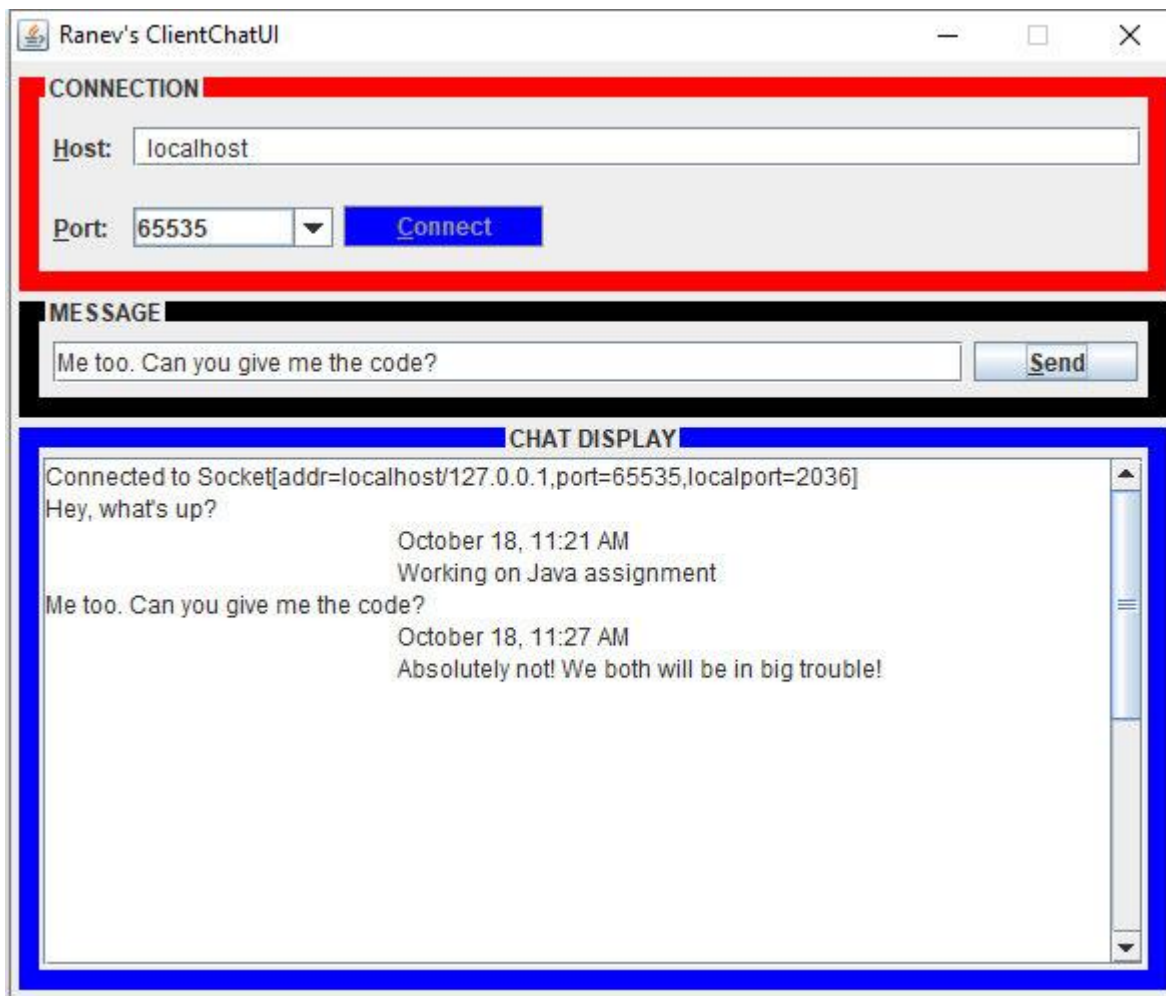
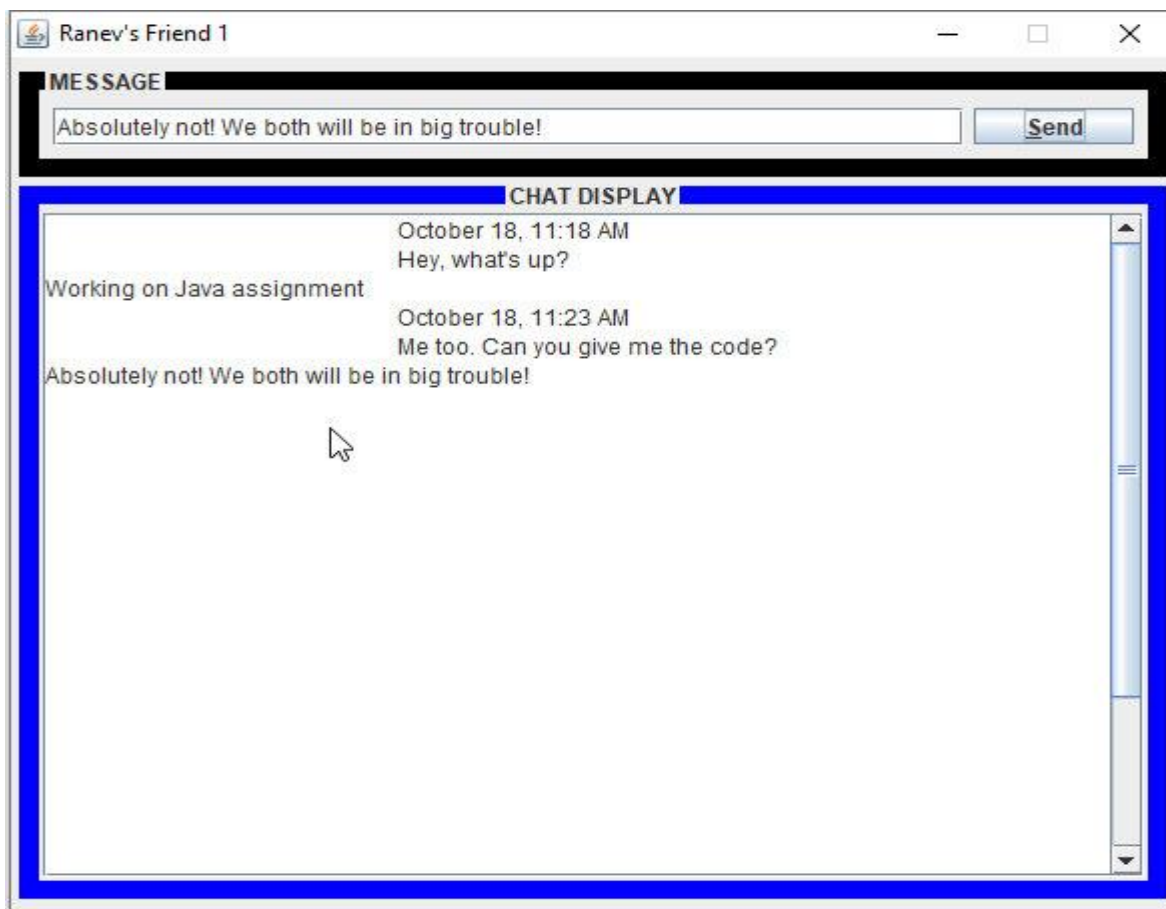


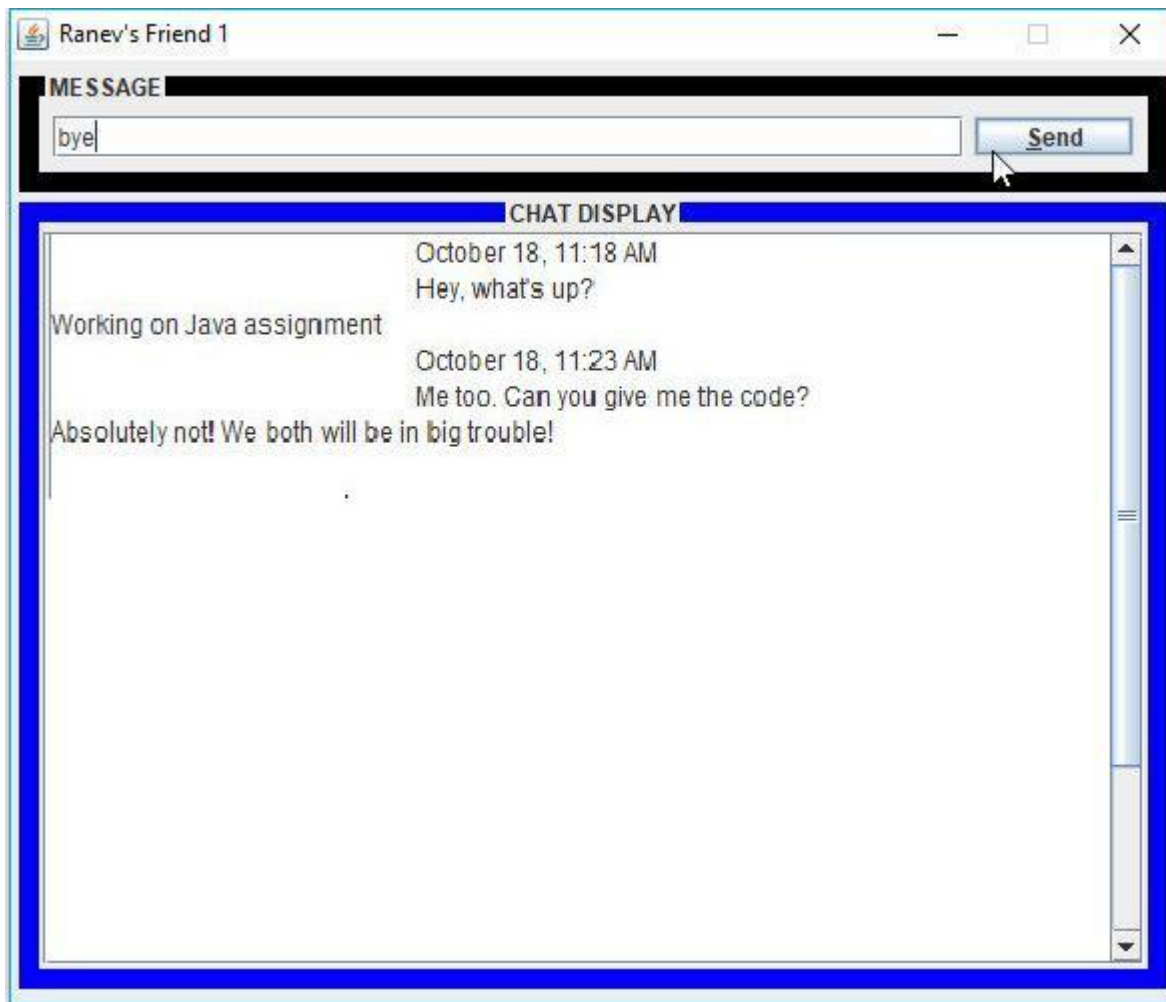
Client receiving the message



Client and Friend exchanging messages





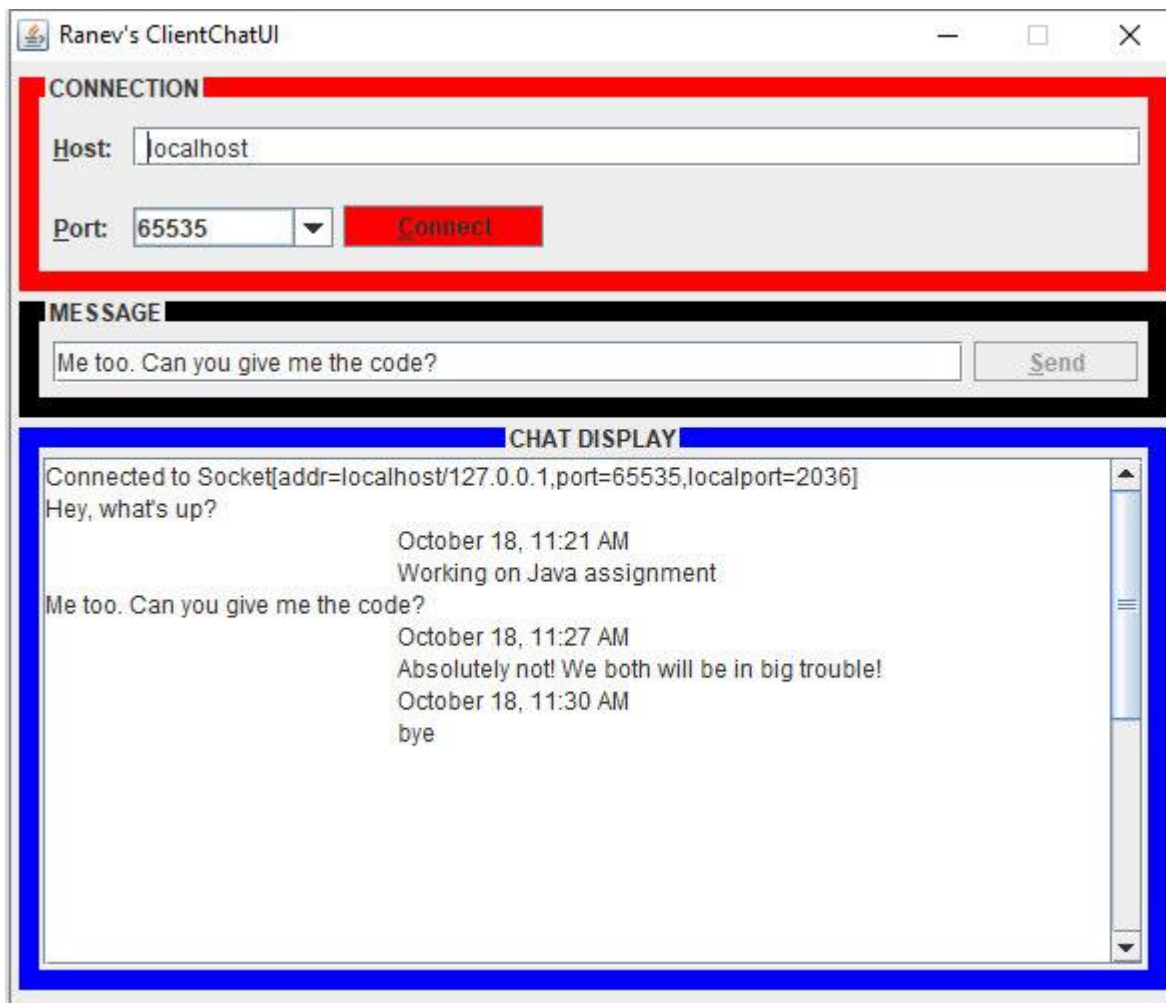


After sending `bye` the server Chat GUI (Friend 1) will receive a `closeChat()` call and will close.

A message `Server UI closed!` should be displayed on the console.

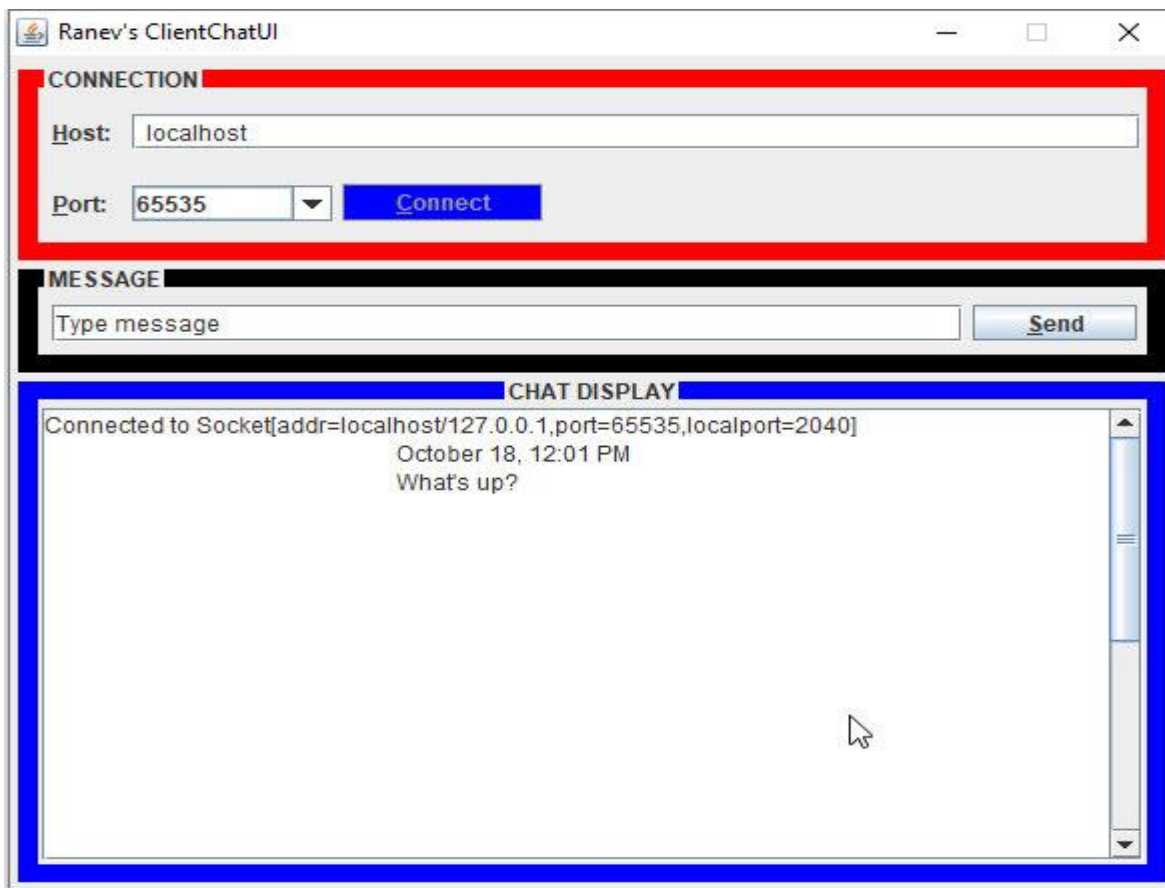
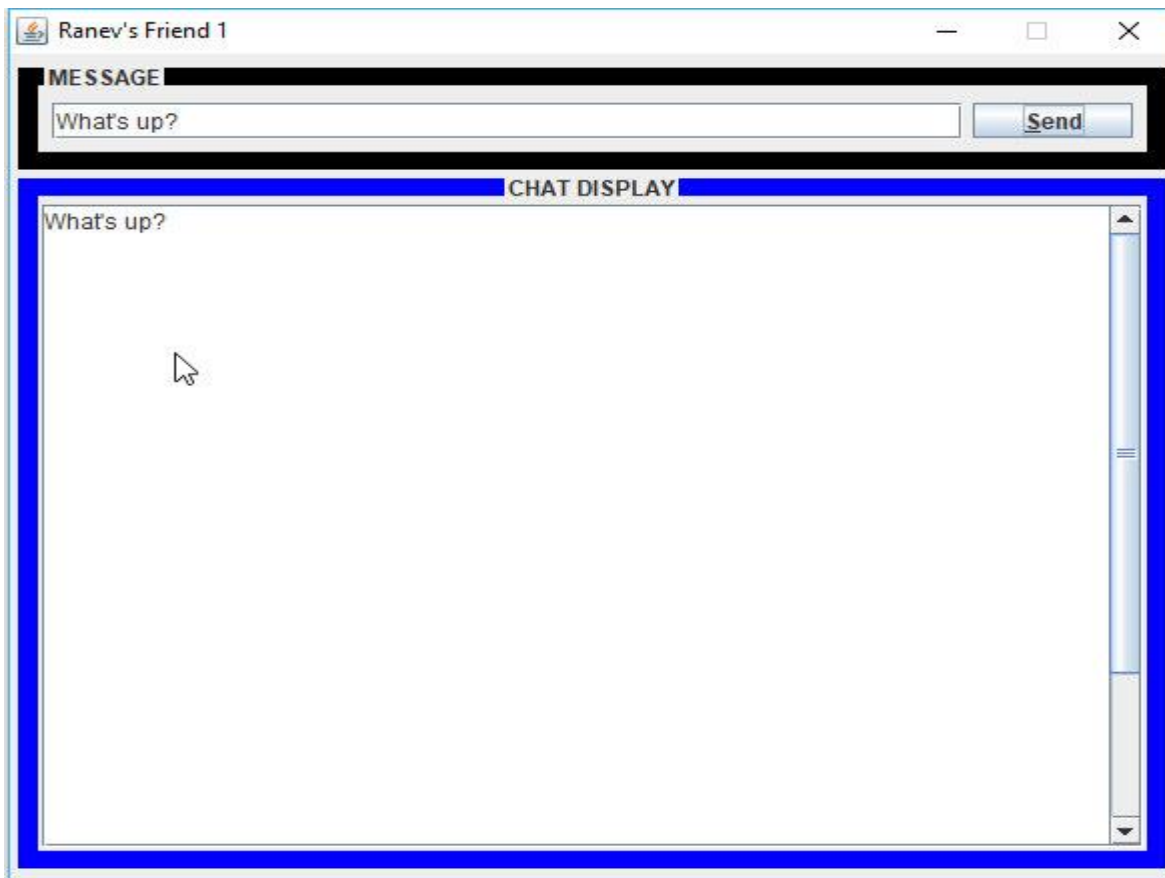


Client after receiving the `bye` message.

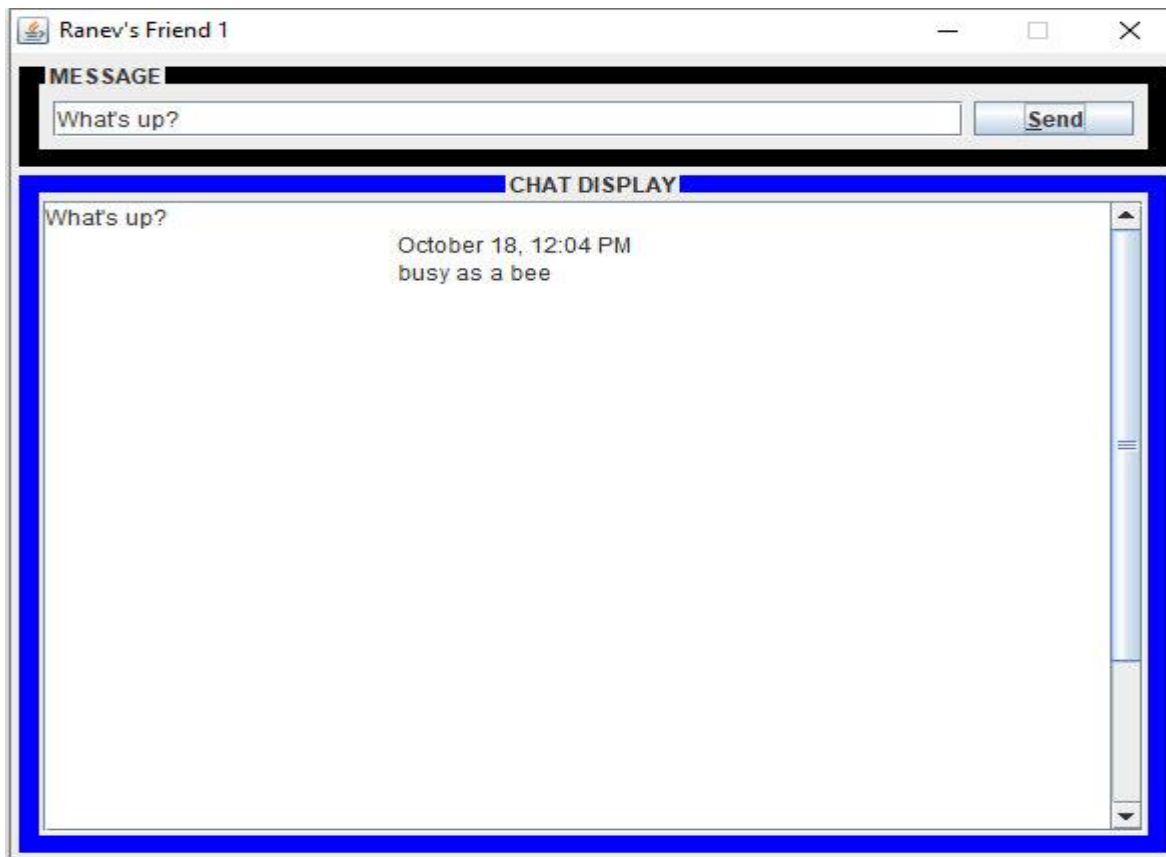
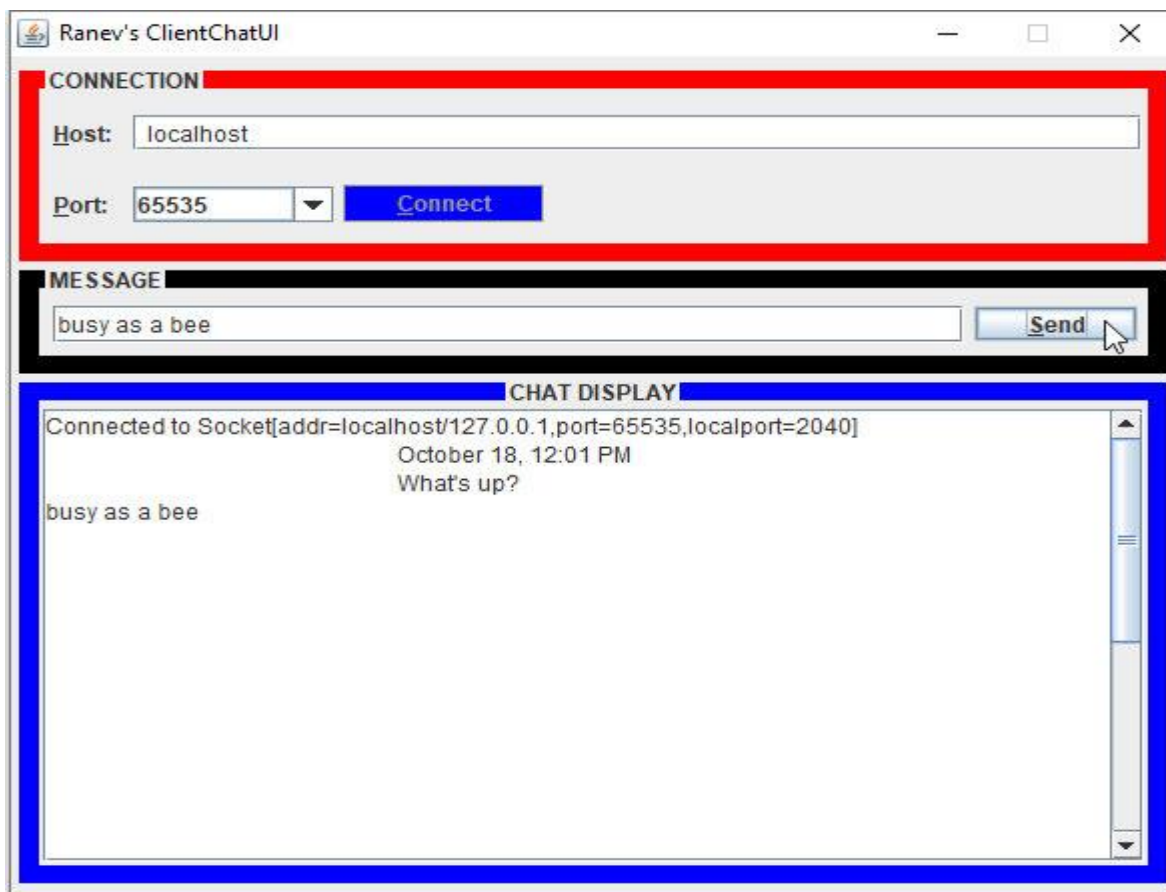


The Connect button is enabled and the Send button is disabled. The Client can make another connection to the server.

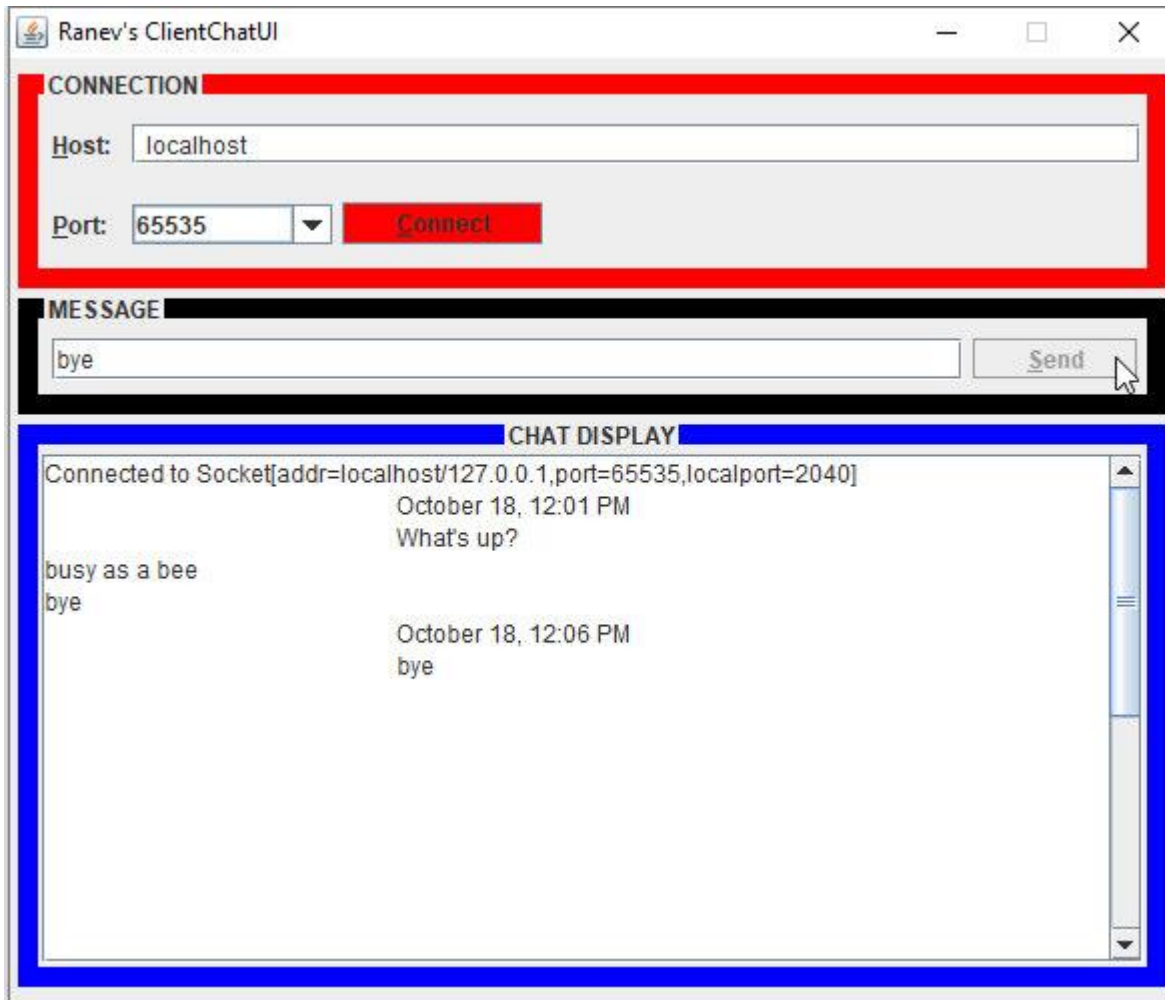
7. Client and Friend exchanging messages. Friend starts the conversation.



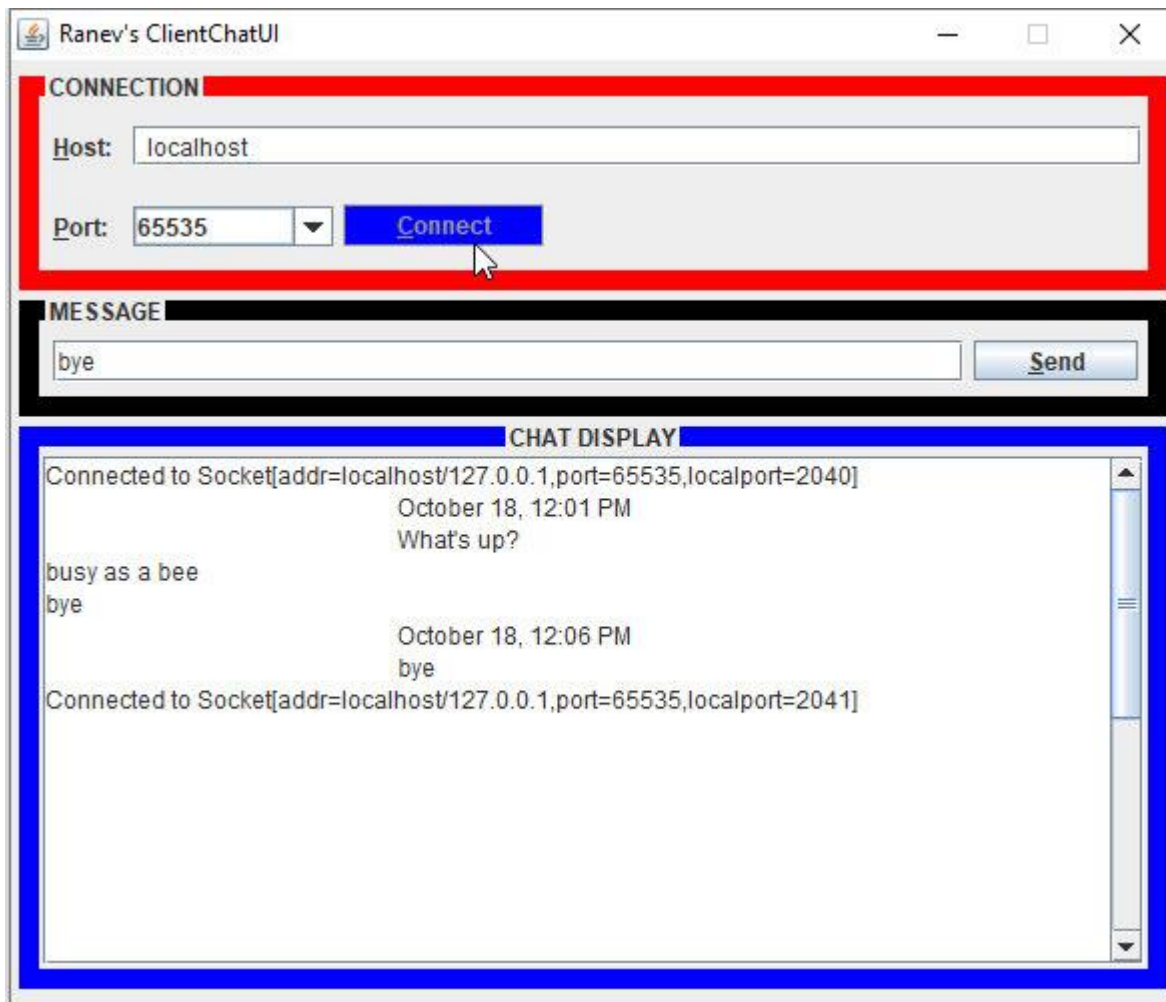
Friend and Client exchanging messages



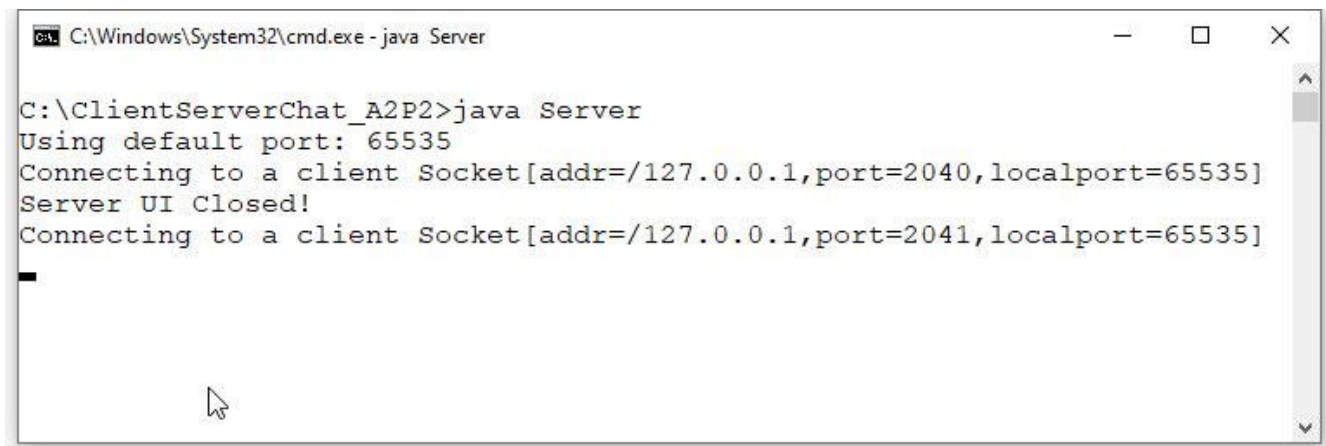
Client sending `bye` message. The Friend receiving the message will be closed but before closing it will send a confirmation message `bye`.



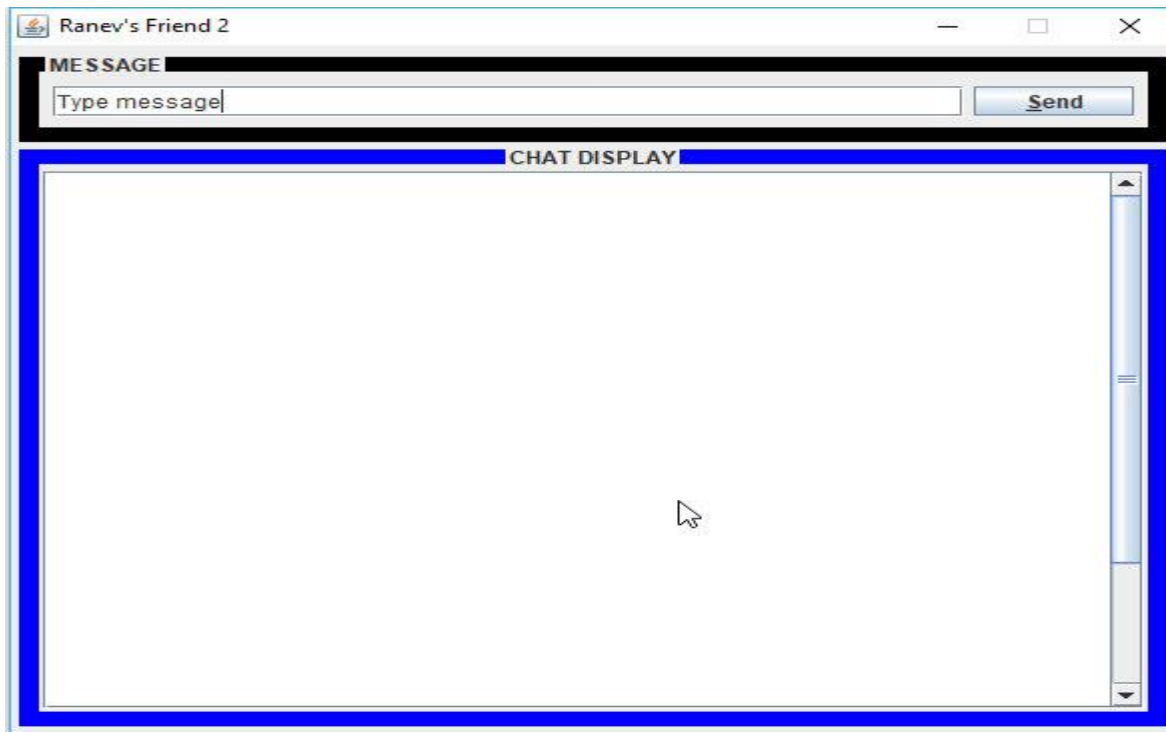
9. Client connects to another Friend.



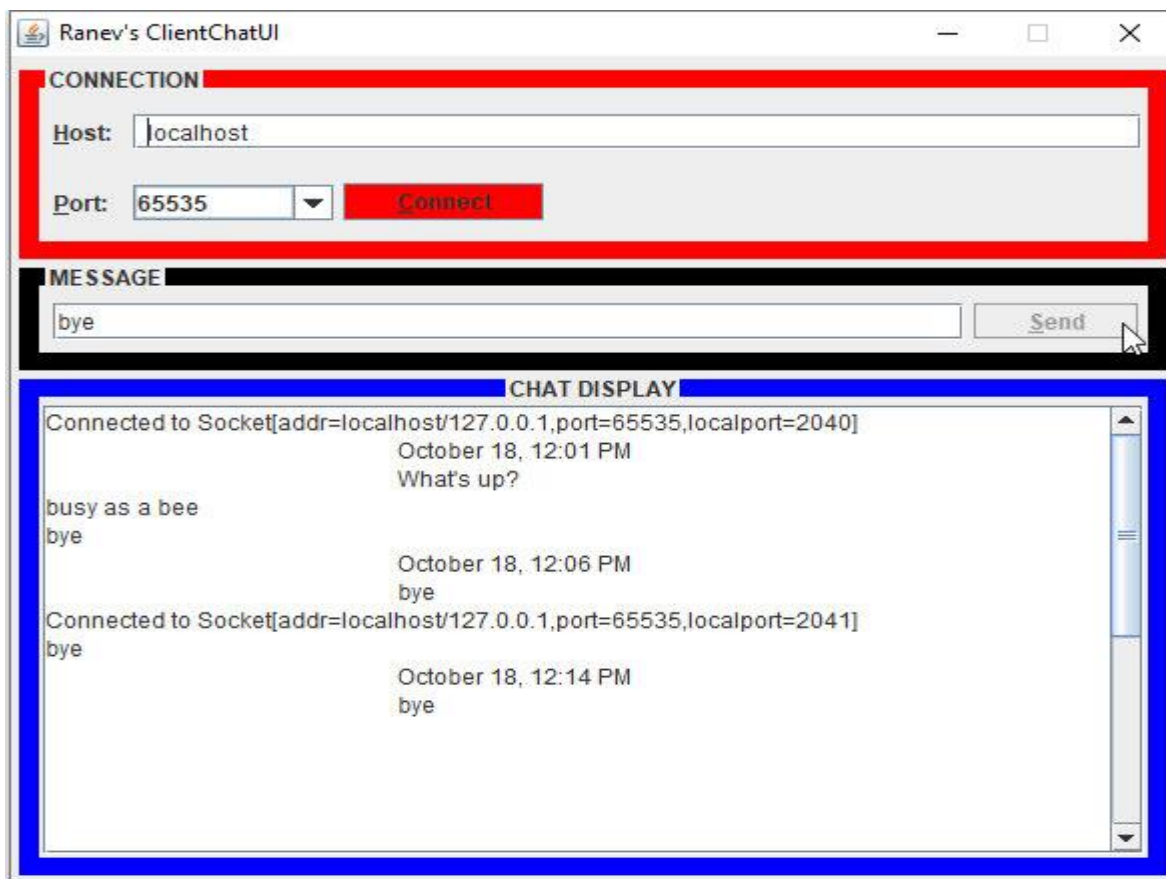
Server establishes a new connection and starts a new Friend



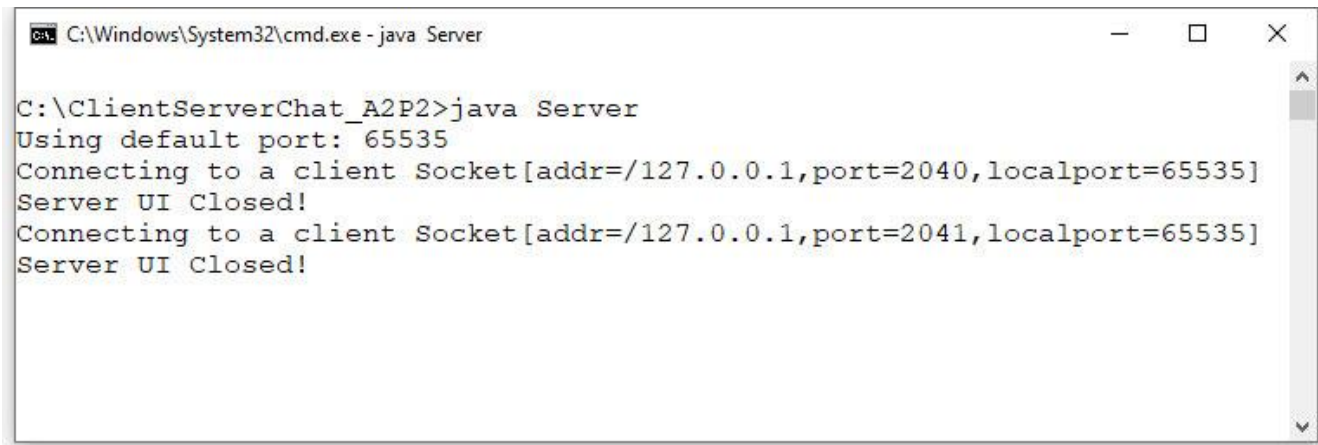
New Friend 2.



Client send `bye` to the new Friend



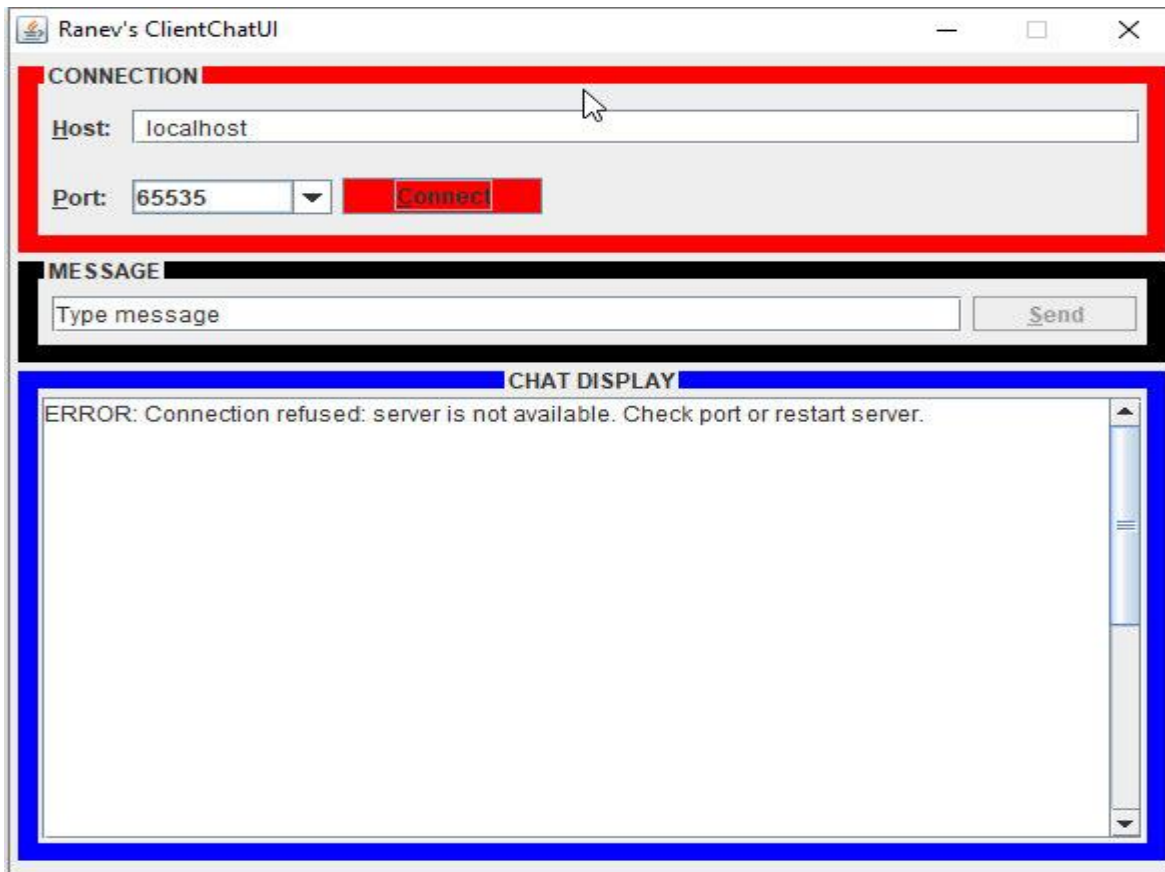
Server after the bye



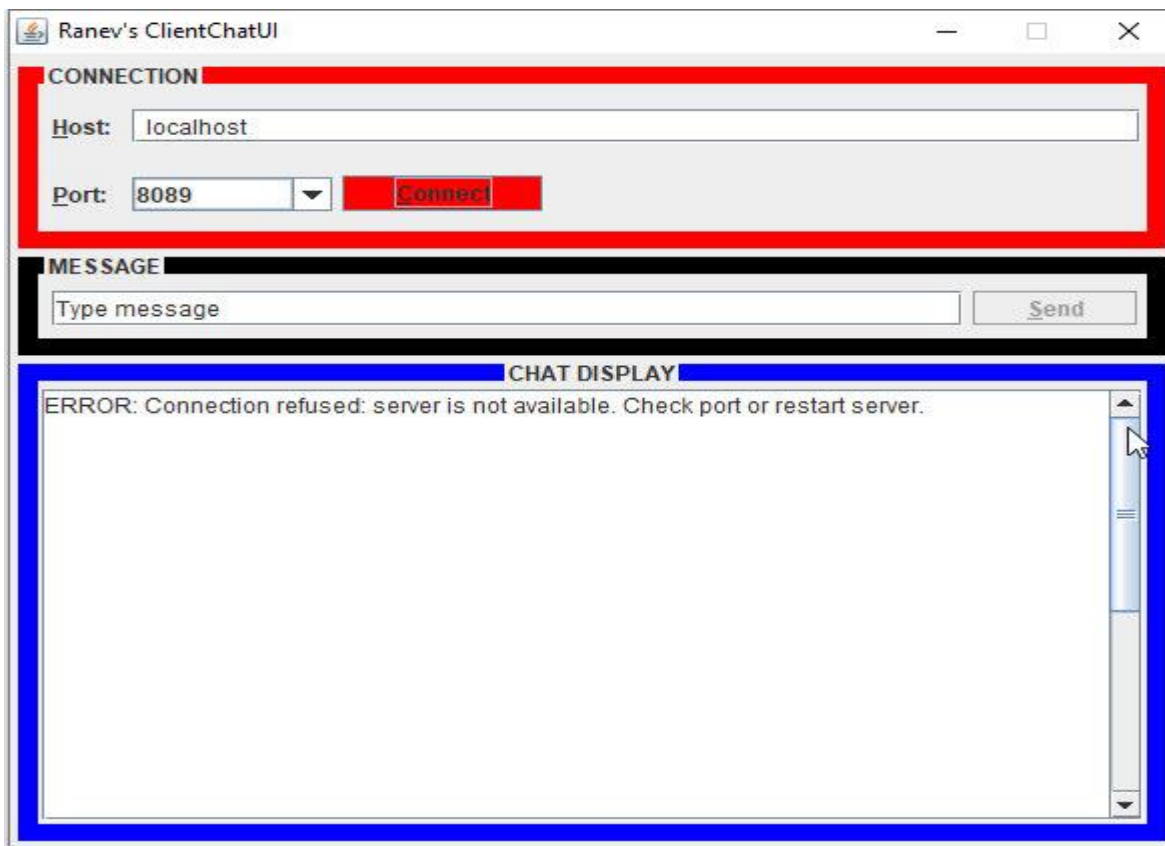
```
C:\Windows\System32\cmd.exe - java Server

C:\ClientServerChat_A2P2>java Server
Using default port: 65535
Connecting to a client Socket[addr=/127.0.0.1,port=2040,localport=65535]
Server UI Closed!
Connecting to a client Socket[addr=/127.0.0.1,port=2041,localport=65535]
Server UI Closed!
```


10. Client tries to connect to the server. Server is not available (not started)



11. Client tries to connect to the server using a wrong port. Server is started.



The JavaFX application must behave exactly the same as shown above. The GUI appearance will be a little bit different. For example, the vertical scroll bar of the chat display will not be visible (see Assignment 2 Part 1).