TCP Group Chat using Socket Programming

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Description: TCP group chat server where there is a single server and multiple clients and that server accepts the connections from multiple clients and enables them to chat with each other. A Client sends the message to the server and the server forwards the message to other connected clients. Everything is happening in a non-blocking way that is the client need not wait for the server to send a reply to the earlier message before sending another message.

Instructions on running the program:

Platform Used: Linux with G++

Compiling the Codes: g++ file_name.cpp –pthread

For Server: g++ server.cpp –pthread

For Client: g++ client.cpp –pthread

Running the Server: ./a.out Port_Num

Running the Client: ./a.out User_Name Port_Num

- Ctrl+C to be used for stopping the Client and Server
- Port_Num provided to the client should be same as that provided to the Server
- User_Name is just a unique identity for the Client

Screenshot of the output for the Group Chat: