

# **Computer Networks Assignment Report**

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Ques\_1

## I<sup>st</sup> Feature

Both client and server can talk to each other concurrently i.e. client and server can send and receive any number of messages as they want. Also if both of says “bye” then client would be disconnected and server would continue running and wait for another client to start conversation.

## II<sup>nd</sup> Feature

If server do not wish to recieve messages from client then he types “mute” to stop all messages from client. But if afterwards he wants to continue chat with client he types “unmute”. If client did send lot of messages while server was on mute then these messages would be shown at once to server when he unmutes it.

Ques\_2

references:

<https://www.geeksforgeeks.org/multithreading-in-cpp/>  
slides of computer networks course

A)

Server and client both are able to send messages one by one to each other without any echo.

B)

Client 1 and client 2 can talk to each other concurrently using server which send client 1 messages to client 2 and client 2 messages to client 1.

In above parts the messages recieved and sent through client and server are concurrent. I used threading to point to different function which are responsible for receiving as well as sending data thus they work independently.

Ques\_3

References:

<https://realpython.com/python-sockets/>

<https://pythontic.com/modules/socket/getaddrinfo>