**ASSIGNMENT**

**REPORT COL334**

**2019CS10404**

Client.CPP

This file contains code for client code and in this file, I define two sockets for sending and receiving messages and after that, we need to enter the username of the client and after that, we need to give the IP address of the server than our code send a request for connecting to server if the server accepts than start registering of a client for Sending and Receiving messages. After the registration is done successfully we can start our sending or receiving messages so for that we define two threads one for and other for receiving if any input is given then the message is sent to the server and at that time the receiving threads waits until there is any message come from the server or not id any message found then he gives us the desired output. for sending the message we need to use the format is (“@reciptentname: the message you want to send”) and also the received message in print in the same order but when the messages sent to the server its format is HTTP format i.e a header is also included with it.

Server.CPP

On the server-side we define a socket and bind it and listen to it and then start accepting the connection request after that we store them in a fd\_set and if the user starts sending a request for sending messages or for registration then at the time of registration we map its username with socketed and after that check, the condition that is given in the assignment if anyone found then the server sends it to the client.