MULTI CLIENT CHAT PROGRAM :

CLIENT CODE:

```
import java.io.*;
import java.net.*;

public class MultiClient {

    public static void main(String[] args) {

        try {

            Socket socket =
                    new Socket("localhost", 5000);

            BufferedReader keyboard =
                    new BufferedReader(
                            new InputStreamReader(System.in));

            BufferedReader in =
                    new BufferedReader(
                            new InputStreamReader(
                                    socket.getInputStream()));

            PrintWriter out =
                    new PrintWriter(
                            socket.getOutputStream(), true);

            while (true) {

                System.out.print("Enter Message : ");

                String msg = keyboard.readLine();

                out.println(msg);

                String reply = in.readLine();

                System.out.println(reply);

            }

        } catch (Exception e) {
            System.out.println(e);
        }
    }
}
```

SERVER CODE:

```
import java.io.*;
import java.net.*;

public class MultiServer {

    public static void main(String[] args) {

        try {

            ServerSocket serverSocket = new ServerSocket(5000);

            System.out.println("Server Started...");

            while (true) {

                Socket socket = serverSocket.accept();

                System.out.println("New Client Connected : "
                        + socket.getInetAddress());

                ClientHandler client =
                        new ClientHandler(socket);

                client.start();
            }

        } catch (Exception e) {
            System.out.println(e);
        }
    }
}

class ClientHandler extends Thread {

    Socket socket;
    BufferedReader in;
    PrintWriter out;

    ClientHandler(Socket socket) {

        this.socket = socket;

        try {

            in = new BufferedReader(
                    new
InputStreamReader(socket.getInputStream()));
```

```
            out = new PrintWriter(
                    socket.getOutputStream(), true);

        } catch (Exception e) {
        }
    }

    public void run() {

        try {

            String msg;

            while ((msg = in.readLine()) != null) {

                System.out.println(
                        "Received from "
                        + socket.getInetAddress()
                        + " : " + msg);

                out.println("Server Reply : " +
msg.toUpperCase());

            }

        } catch (Exception e) {

            System.out.println("Client Disconnected");

        } finally {

            try {
                socket.close();
            } catch (Exception e) {
            }

        }

    }
}
```