Server:

import java.io.\*;

import java.net.\*;

public class Server {

public static void main(String[] args) {

final int PORT = 12345;

try (ServerSocket serverSocket = new ServerSocket(PORT)) {

System.out.println("Server listening on port " + PORT);

// Accept client connections

Socket clientSocket = serverSocket.accept();

System.out.println("Client connected: " + clientSocket.getInetAddress().getHostAddress());

// Create input and output streams

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

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

// Start a thread for receiving messages from client

Thread receiveThread = new Thread(() -> {

try {

String receivedMessage;

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

System.out.println("Client: " + receivedMessage);

}

} catch (IOException e) {

e.printStackTrace();

}

});

receiveThread.start();

// Read messages from console and send to client

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

String sendMessage;

while ((sendMessage = consoleIn.readLine()) != null) {

out.println("Server: " + sendMessage);

}

} catch (IOException e) {

e.printStackTrace();

}

}

}

Client:

import java.io.\*;

import java.net.\*;

public class Client {

public static void main(String[] args) {

final String SERVER\_IP = "127.0.0.1"; // Change to server's IP address

final int SERVER\_PORT = 12345;

try (Socket clientSocket = new Socket(SERVER\_IP, SERVER\_PORT)) {

System.out.println("Connected to server");

// Create input and output streams

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

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

// Start a thread for receiving messages from server

Thread receiveThread = new Thread(() -> {

try {

String receivedMessage;

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

System.out.println(receivedMessage);

}

} catch (IOException e) {

e.printStackTrace();

}

});

receiveThread.start();

// Read messages from console and send to server

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

String sendMessage;

while ((sendMessage = consoleIn.readLine()) != null) {

out.println("Client: " + sendMessage);

}

} catch (IOException e) {

e.printStackTrace();

}

}

}