

Write a program using TCP socket for wired network for following

a. Say Hello to Each other

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

public class Server {
    public static void main(String[] args) {
        int port = 5000;

        try (ServerSocket serverSocket = new ServerSocket(port)) {
            System.out.println("Server is listening on port " + port + "...");

            Socket socket = serverSocket.accept();
            System.out.println("Client connected: " + socket.getInetAddress());

            // Input and output streams
            BufferedReader in = new BufferedReader(new
InputStreamReader(socket.getInputStream()));
            PrintWriter out = new PrintWriter(socket.getOutputStream(), true);

            // Read message from client
            String message = in.readLine();
            System.out.println("Client says: " + message);

            // Send Hello back
            out.println("Hello from Server!");

            socket.close();
        } catch (IOException ex) {
            ex.printStackTrace();
        }
    }
}
```

```
    }  
    }  
}
```

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

```
public class Client {  
    public static void main(String[] args) {  
        String host = "localhost";  
        int port = 5000;  
  
        try (Socket socket = new Socket(host, port)) {  
            System.out.println("Connected to server.");  
  
            // Input and output streams  
            BufferedReader in = new BufferedReader(new  
InputStreamReader(socket.getInputStream()));  
            PrintWriter out = new PrintWriter(socket.getOutputStream(), true);  
  
            // Send Hello to server  
            out.println("Hello from Client!");  
  
            // Read response  
            String response = in.readLine();  
            System.out.println("Server says: " + response);  
  
        } catch (IOException ex) {  
            ex.printStackTrace();  
        }  
    }  
}
```

```
}
```

How to Run

1.Compile both files:

```
javac Server.java
```

```
javac Client.java
```

2.Run the server first (in one terminal):

```
java Server
```

3.Then run the client (in another terminal or same machine):

```
java Client
```