//ReverseServer.java

import java.io.\*;

import java.net.\*;

public class ReverseServer {

public static void main(String[] args) {

int port = 1234; // Define the port number for the server

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

System.out.println("Server is running and waiting for client connection...");

while (true) {

// Accept client connection

Socket clientSocket = serverSocket.accept();

System.out.println("Client connected!");

// Create input and output streams

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

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

// Read input from client

String input = in.readLine();

System.out.println("Received from client: " + input);

// Reverse the input string

String reversed = new StringBuilder(input).reverse().toString();

// Send reversed string back to the client

out.println(reversed);

System.out.println("Sent to client: " + reversed);

// Close the client connection

clientSocket.close();

System.out.println("Client connection closed.\n");

}

} catch (IOException e) {

System.out.println("Server exception: " + e.getMessage());

e.printStackTrace();

}

}

}

//ReverseClient.java

import java.io.\*;

import java.net.\*;

public class ReverseClient {

public static void main(String[] args) {

String hostname = "localhost"; // Server hostname

int port = 1234; // Server port number

try (Socket socket = new Socket(hostname, port)) {

// Create input and output streams

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

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

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

// Get user input

System.out.print("Enter a sentence to reverse: ");

String sentence = userInput.readLine();

// Send input to server

out.println(sentence);

// Receive reversed string from server

String reversed = in.readLine();

System.out.println("Reversed sentence from server: " + reversed);

} catch (IOException e) {

System.out.println("Client exception: " + e.getMessage());

e.printStackTrace();

}

}

}



