import java.io.BufferedReader;

import java.io.IOException;

import java.io.InputStreamReader;

import java.io.PrintWriter;

import java.net.Socket;

public class ServerDriver extends Thread{

Server server;

class Connecter {

private int number;

private PrintWriter out;

private Receiver receiver;

Socket socket;

Connecter(int n){

number = n;

connectServer("localhost",10000);

}

public void connectServer(String ipAddress, int port) {

try {

socket = new Socket(ipAddress, port);

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

receiver = new Receiver(socket);

receiver.start();

} catch (Exception e) {

e.printStackTrace();

}

}

public void sendMessage(String msg) {

out.println(msg);

out.flush();

System.out.println(number + "人目の接続者が " + msg + " を送信しました");

}

public void disconnect() {

try {

socket.shutdownInput();

socket.shutdownOutput();

socket.close();

} catch (IOException e) {

e.printStackTrace();

}

}

class Receiver extends Thread {

private InputStreamReader sisr;

private BufferedReader br;

Receiver (Socket socket){

try{

sisr = new InputStreamReader(socket.getInputStream());

br = new BufferedReader(sisr);

} catch (IOException e) {

}

}

public void run(){

try{

while(true) {

String inputLine = br.readLine();

if (inputLine != null) {

System.out.println(number + "人目の接続者が " + inputLine + " を受信しました");

}

}

} catch (IOException e){

}

}

}

}

public void run() {

server = new Server(10000);

server.acceptClient();

}

public void check() throws InterruptedException{

System.out.println("サーバ―に1人目の接続を行います");

Connecter c1 = new Connecter(1);

Thread.sleep(1000);

System.out.println("サーバ―に2人目の接続を行います");

Connecter c2 = new Connecter(2);

Thread.sleep(1000);

System.out.println("サーバ―に3人目の接続を行います");

Connecter c3 = new Connecter(3);

Thread.sleep(1000);

System.out.println("対戦中の1,2人目間でデータのやり取りを行えることを確認します");

c1.sendMessage("from 1 to 2");

c2.sendMessage("from 2 to 1");

Thread.sleep(1000);

System.out.println();

System.out.println("対戦中の1,2人目間の試合を終了させます");

c1.sendMessage("+");

c2.sendMessage("-");

Thread.sleep(100);

server.printStatus();

Thread.sleep(1000);

System.out.println("1人目の接続を切ります");

c1.sendMessage("e");

Thread.sleep(100);

server.printStatus();

Thread.sleep(1000);

System.out.println("2人目を再度マッチングさせます");

c2.sendMessage("r");

Thread.sleep(100);

server.printStatus();

Thread.sleep(1000);

System.out.println("対戦中の2,3人目間の試合を終了させます");

c2.sendMessage("+");

c3.sendMessage("-");

Thread.sleep(100);

server.printStatus();

Thread.sleep(1000);

System.out.println("3人目の接続を切ります");

c3.sendMessage("e");

Thread.sleep(100);

server.printStatus();

Thread.sleep(1000);

System.out.println("2人目の接続を切ります");

c2.sendMessage("e");

Thread.sleep(100);

server.printStatus();

System.exit(0);

}

public static void main(String[] args) {

ServerDriver sd = new ServerDriver();

sd.start();

try {

sd.check();

} catch (InterruptedException e) {

e.printStackTrace();

}

}

}

試験結果：

