

## ECHO

### Cliente

```
1 import java.net.*;
2 import java.io.*;
3
4 public class Cliente{
5     public static void main(String args[]){
6         if (args.length != 1){
7             System.err.println ("Syntax - java Cliente hostname");
8             return;
9         }
10        String hostname = args[0];
11        InetAddress addr = null;
12        try{
13            addr = InetAddress.getByName(hostname);
14        }catch (UnknownHostException uhe){
15            System.err.println ("Unable to resolve host");
16            return;
17        }
18        try {
19            String theLine;
20            InetAddress server = InetAddress.getByName(hostname);
21            BufferedReader userInput = new BufferedReader(new InputStreamReader(System.in));
22            DatagramSocket socket = new DatagramSocket();
23            while (true) {
24                theLine = userInput.readLine();
25                if (theLine.equals(".")) break;
26                byte[] dataOut = new byte[theLine.length()];
27                dataOut = theLine.getBytes();
28                DatagramPacket sendPacket = new DatagramPacket(dataOut, dataOut.length, server, 7);
29                socket.send(sendPacket);
30                byte[] dataIn = new byte[256];
31                DatagramPacket receivePacket = new DatagramPacket(dataIn, 256);
32                socket.receive (receivePacket);
33                String s = new String(receivePacket.getData(), 0, receivePacket.getLength());
34                System.out.println(s);
35            } // end while
36        } // end try
37        catch (UnknownHostException e) {System.err.println(e);}
38        catch (SocketException se) {System.err.println(se);}
39        catch (IOException e) {System.err.println(e);}
40    } // end main
41 }
```

### Servidor

```
1 import java.net.*;
2 import java.io.*;
3
4 public class Servidor {
5     static DatagramSocket socket;
6
7     public static void main(String args[]){
8         byte[] buffer = new byte[4096];
9
10
11        try{
12            socket = new DatagramSocket(7);
13        } catch (Exception e){
14            System.err.println ("Unable to bind port");
15        }
16        for (;;) {
17            try{
18                DatagramPacket packet = new DatagramPacket(buffer, 4096);
19                socket.receive(packet);
20                socket.send(packet);
21            }catch (IOException ioe){
22                System.err.println ("Error : " + ioe);
23            }
24        }
25    }
26 }
```