DC-1

Program: **DatagramServer.java**

import java.io.\*;

import java.net.\*;

class DatagramServer {

  public static DatagramSocket serversocket;

  public static DatagramPacket dp;

  public static BufferedReader dis;

  public static InetAddress ia;

  public static byte buf[] = new byte[1024];

  public static int cport = 789, sport = 790;

  public static void main(String[] a) throws IOException {

    serversocket = new DatagramSocket(sport);

    dp = new DatagramPacket(buf, buf.length);

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

    ia = InetAddress.getLocalHost();

    System.out.println("Server is Running...");

    while (true) {

      serversocket.receive(dp);

      String str = new String(dp.getData(), 0, dp.getLength());

      if (str.equals("STOP")) {

        System.out.println("Terminated...");

        break;

      }

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

      String str1 = new String(dis.readLine());

      buf = str1.getBytes();

      serversocket.send(new DatagramPacket(buf, str1.length(), ia, cport));

    }

  }

}

Program: **DatagramClient.java**

import java.io.BufferedReader;

import java.io.IOException;

import java.io.InputStreamReader;

import java.net.DatagramPacket;

import java.net.DatagramSocket;

import java.net.InetAddress;

class DatagramClient {

  public static DatagramSocket clientsocket;

  public static DatagramPacket dp;

  public static BufferedReader dis;

  public static InetAddress ia;

  public static byte buf[] = new byte[1024];

  public static int cport = 789, sport = 790;

  public static void main(String[] a) throws IOException {

    clientsocket = new DatagramSocket(cport);

    dp = new DatagramPacket(buf, buf.length);

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

    ia = InetAddress.getLocalHost();

    System.out.println("Client is Running... Type  stop to Quit");

    while (true) {

      String str = new String(dis.readLine());

      buf = str.getBytes();

      if (str.equals("STOP")) {

        System.out.println("Terminated...");

        clientsocket.send(new DatagramPacket(buf, str.length(), ia, sport));

        break;

      }

      clientsocket.send(new DatagramPacket(buf, str.length(), ia, sport));

      clientsocket.receive(dp);

      String str2 = new String(dp.getData(), 0, dp.getLength()); // convert to string

      System.out.println("Server: " + str2);

    }

  }

}



