**Practical No. 17: Write a program to demonstrate use of DatagramSocket and DataGramPacket.**

**Exercise:**

**Program:**

**Server code:**

import java.io.\*;

import java.net.\*;

class udpserver

{public static InetAddress ia;

    public static byte [] b = new byte[1204];

    public static int cport =789 , sport = 790;

    public static void main(String[] args) throws IOException

    {DatagramSocket ss = new DatagramSocket(sport);

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

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

       ia = InetAddress.getLocalHost();

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

        while(true){

            ss.receive(dp);

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

            if (str.equals("STOP"))

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

                break;}

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

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

            b = str1.getBytes();

ss.send(new DatagramPacket(b , b.length , ia , cport));}}}

**Client code:**

import java.io.\*;

import java.net.\*;

class udpclient

{   public static InetAddress ia;

    public static byte [] b = new byte[1204];

    public static int cport =789 , sport = 790;

    public static void main(String[] args) throws IOException

    {   DatagramSocket cs = new DatagramSocket(cport);

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

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

        ia = InetAddress.getLocalHost();

        System.out.println("Client Running");

        while(true)

        {

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

            b = str.getBytes();

            if(str.equals("STOP"))

            {

                System.out.println("Terminated");

                cs.send(new DatagramPacket(b, str.length() , ia , sport));

                break;}

            cs.send(new DatagramPacket(b, str.length() , ia , sport));

            cs.receive(dp);

            String str2 = new String(dp.getData() , 0 , dp.getLength());

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

        }}}

**Output:**



