DC-1

Program: **DatagramServer.java**

```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**

```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")) {
```

```java
            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);
    }
  }
}
```

```
PS C:\Users\Moin MN\Downloads> java DatagramClient.java
Client is Running... Type  stop to Quit
Hii!
Server: Hello
I am Moin MN from BE Comps
Server: Hii, Moin MN! Where are you from?
I am from chiplun, ratnagiri.
Server: Wow great city.
STOP
Terminated...
PS C:\Users\Moin MN\Downloads>
```

```
PS C:\Users\Moin MN\Downloads> javac *.java
PS C:\Users\Moin MN\Downloads> java DatagramServer.java
Server is Running...
Client: Hii!
Hello
Client: I am Moin MN from BE Comps
Hii, Moin MN! Where are you from?
Client: I am from chiplun, ratnagiri.
Wow great city.
Terminated...
PS C:\Users\Moin MN\Downloads>
```