

2. UDP Client, UDP Server

UDP Client

```
import java.io.*;
import java.net.*;
class UDPClient
{
    public static void main(String args[]) throws Exception
    {
        BufferedReader inFromUser =
            new BufferedReader(new InputStreamReader(System.in));
        DatagramSocket clientSocket = new DatagramSocket();
        //Client Socket is created
        InetAddress IPAddress = InetAddress.getByName("localhost");
        //Gets the IP Address
        byte[] sendData = new byte[1024];
        byte[] receiveData = new byte[1024];
        System.out.print("Enter Message for server:");
        String sentence = inFromUser.readLine();
        sendData = sentence.getBytes();
        //sends data
        DatagramPacket sendPacket = new DatagramPacket(sendData, sendData.length,
            IPAddress, 9876);
        clientSocket.send(sendPacket);
        DatagramPacket receivePacket = new DatagramPacket(receiveData, receiveData.length);
        clientSocket.receive(receivePacket);
        String modifiedSentence = new String(receivePacket.getData());
        System.out.println("FROM SERVER:" + modifiedSentence);
        clientSocket.close();
    }
}
```

UDP Server

```
import java.io.*;
import java.net.*;
class UDPServer
{
    public static void main(String args[]) throws Exception
    {
        DatagramSocket serverSocket = new DatagramSocket(9876);
        //Server Socekt Created
        byte[] receiveData = new byte[1024];
        byte[] sendData = new byte[1024];
        while(true)
        {
            DatagramPacket receivePacket = new DatagramPacket(receiveData,
```

```
receiveData.length);
serverSocket.receive(receivePacket);
String sentence = new String( receivePacket.getData());
System.out.println("RECEIVED: " + sentence);
InetAddress IPAddress = receivePacket.getAddress();
int port = receivePacket.getPort();
String capitalizedSentence = sentence.toUpperCase();
//Change sentence to Capital letter
sendData = capitalizedSentence.getBytes();
DatagramPacket sendPacket =
new DatagramPacket(sendData, sendData.length, IPAddress, port);
serverSocket.send(sendPacket);
//Send Capitalized data back to client
}
}
}
```