

Practical No. 2A

Write a program for implementing Client Server communication model using UDP.

Program which finds entered number is even or odd

1. udpClientEO.java

```
import java.io.*;
import java.net.*;

public class udpClientEO
{
    public static void main(String args[])
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(1000);

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

            System.out.println("Enter a number : ");

            String num = br.readLine();

            byte b[] = new byte[1024];

            b = num.getBytes();

            DatagramPacket dp = new DatagramPacket(b, b.length, InetAddress.getLocalHost(), 2000);

            ds.send(dp);

            byte b1[] = new byte[1024];

            DatagramPacket dp1 = new DatagramPacket(b1, b1.length);

            ds.receive(dp1);

            String str = new String(dp1.getData(), 0, dp1.getLength());

            System.out.println(str);
        }
    }
}
```

```
catch(Exception e)
{
    e.printStackTrace();
}
}
```

2. udpServerEO.java

```
import java.io.*;
import java.net.*;

public class udpServerEO
{
    public static void main(String args[])
    {
        try
        {
            DatagramSocket ds = new DatagramSocket(2000);
            byte b[] = new byte[1024]; // 1 mb of variable storage
            DatagramPacket dp = new DatagramPacket(b, b.length);
            ds.receive(dp);
            String str = new String(dp.getData(), 0, dp.getLength());
            System.out.println(str);
            int a = Integer.parseInt(str);
            String s = new String();
            if (a % 2 == 0)
                s = "Number is even";
            else
                s = "Number is odd";
            byte b1[] = new byte[1024];
            b1 = s.getBytes();
            DatagramPacket dp1 = new DatagramPacket(b1, b1.length, InetAddress.getLocalHost(), 1000);
            ds.send(dp1);
        }
        catch(Exception e)
        {
            e.printStackTrace(); }}}}
```