CSE3011 NETWORK PROGRAMMING

LAB EXPERIMENT 10

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Experiment Description: UDP Client Server Communication program using Datagram

CODE:

udpClient.java

```java
import java.util.*;

import java.io.IOException;

import java.net.DatagramPacket;

import java.net.DatagramSocket;

import java.net.InetAddress;

public class udpClient {

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

                Scanner sc = new Scanner(System.in);

                DatagramSocket ds = new DatagramSocket();

                InetAddress ip = InetAddress.getLocalHost();

                byte buf[] = null;

                while (true)

                {
```

```java
            String inp = sc.nextLine();

            buf = inp.getBytes();

            DatagramPacket DpSend = new DatagramPacket(buf, buf.length,
ip, 1234);

            ds.send(DpSend);
        // break the loop if user enters "bye" if (inp.equals("bye"))
        break;
        }
        sc.close();
        ds.close();
    }

}
```

udpServer.java

```java
import java.io.IOException;

import java.net.DatagramPacket;

import java.net.DatagramSocket;

import java.util.*;

public class udpServer {


    public static void main(String[] args) throws IOException {
        // TODO Auto-generated method stub
        DatagramSocket ds = new DatagramSocket(1234);


        byte[] receive = new byte[65535];


        DatagramPacket DpReceive = null;
```

```java
        while (true)
        {


            DpReceive = new DatagramPacket(receive,receive.length);
            ds.receive(DpReceive);
        System.out.println("Client Says:-" + data(receive));
        Arrays.fill(receive,(byte)0);
            if (data(receive).toString().equals("bye"))
            {
                System.out.println("Client sent Bye!!EXITING");
                break;
            }



        }
        ds.close();

    }


        public static StringBuilder data(byte[] a)
        {
            if (a == null)
            return null;
            StringBuilder r = new StringBuilder();
            int i = 0;
```
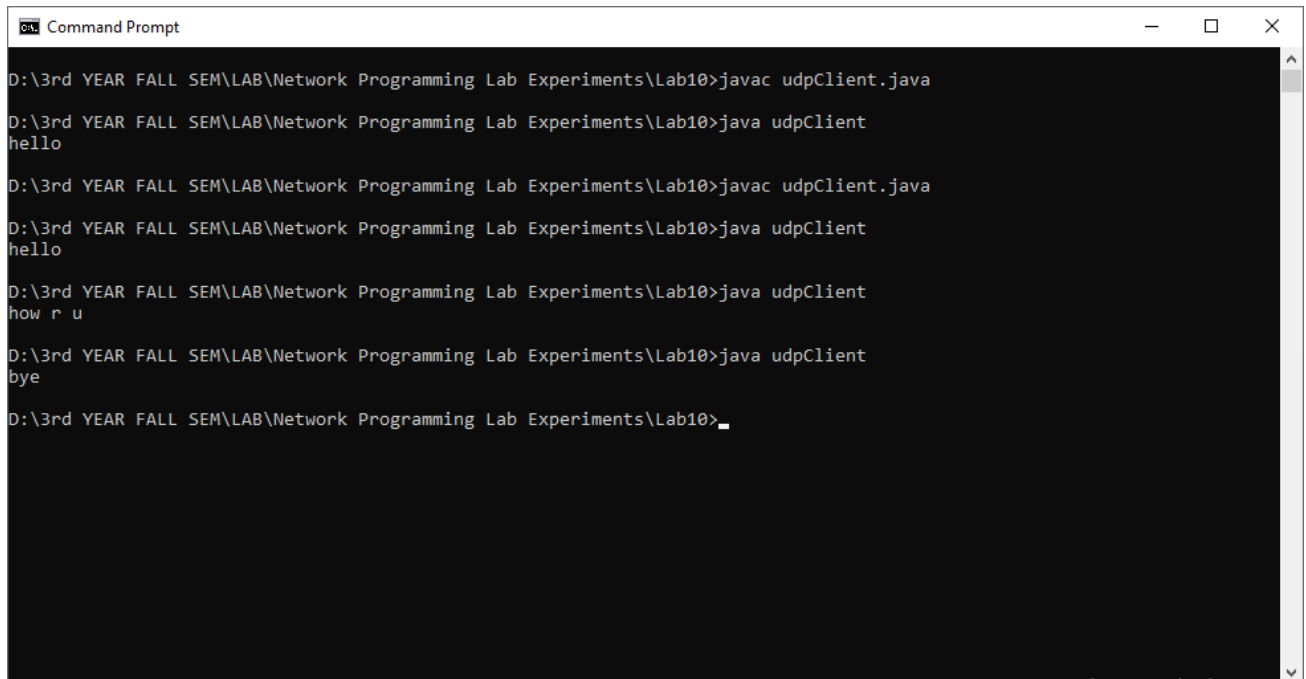
```
        while (a[i]!= 0)

        {

          r.append((char)a[i]);

          i++;

        }

        return r;



    }



}
```
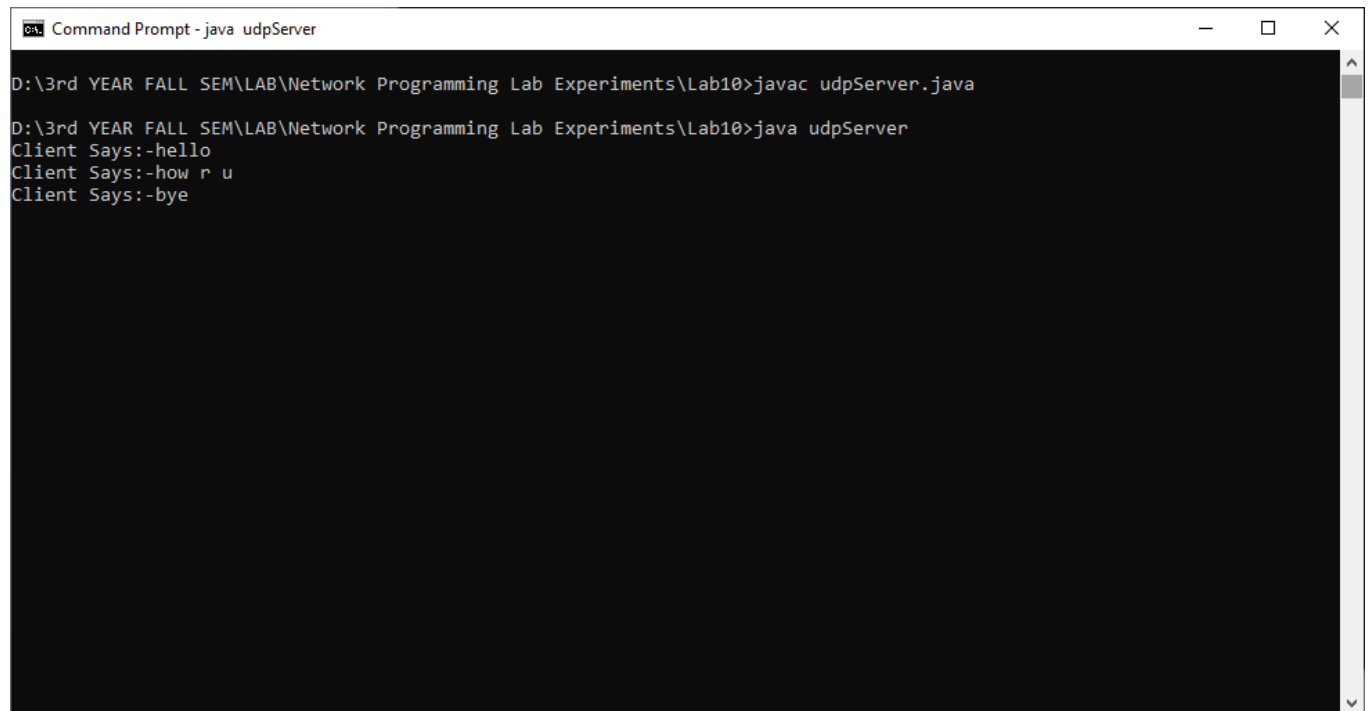
Client side

Server Side

```
Command Prompt - java udpServer

D:\3rd YEAR FALL SEM\LAB\Network Programming Lab Experiments\Lab10>javac udpServer.java

D:\3rd YEAR FALL SEM\LAB\Network Programming Lab Experiments\Lab10>java udpServer
Client Says:-hello
Client Says:-how r u
Client Says:-bye
```