

Practical-04: Client-Server Two Way Communication using Socket Programming in Java [Two different Machines]

CLIENT.java FILE

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

public class client {
    public static void main(String[] args) {
        try {
            Socket s = new Socket("192.168.0.103", 8080);
            BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

            DataOutputStream dout = new DataOutputStream(s.getOutputStream());
            DataInputStream dis = new DataInputStream(s.getInputStream());
            String str = "", str1 = "";
            while (!str.equalsIgnoreCase("bye")) {
                str = br.readLine();
                dout.writeUTF(str);
                dout.flush();
                str1 = dis.readUTF();
                System.out.println("Server = " + str1);
            }
            dout.close();
            s.close();
        } catch (Exception e) {
            System.out.println(e);
        }
    }
}
```

SERVER.java FILE

```
import java.io.*;
import java.net.*;
public class server
{
    public static void main(String[] args)
    {
        try
        {
            ServerSocket ss = new ServerSocket(8080);
            Socket s = ss.accept();

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

            DataInputStream dis = new DataInputStream(s.getInputStream());
            DataOutputStream dout = new DataOutputStream(s.getOutputStream());
            String str="",str1="";
            while(!str.equalsIgnoreCase("bye"))
            {
                str = dis.readUTF();
                System.out.println("Client = "+str);
                str1 = br.readLine();
                dout.writeUTF(str1);
                dout.flush();
            }
            dout.close();
            ss.close();
        }
        catch(Exception e)
        {
            System.out.println(e);
        }
    }
}
```

OUTPUT:

```
PS C:\Users\himan\Desktop\B.Tech(CSE)\6th sem\Advance java lab\lab 4> javac client.java
PS C:\Users\himan\Desktop\B.Tech(CSE)\6th sem\Advance java lab\lab 4> java client
hi
Server = hello
bye
Server = bye
PS C:\Users\himan\Desktop\B.Tech(CSE)\6th sem\Advance java lab\lab 4> █
```

```
PS C:\Users\himan\Desktop\B.Tech(CSE)\6th sem\Advance java lab\lab 4> javac server.java
PS C:\Users\himan\Desktop\B.Tech(CSE)\6th sem\Advance java lab\lab 4> java server
Client = hi
hello
Client = bye
bye
PS C:\Users\himan\Desktop\B.Tech(CSE)\6th sem\Advance java lab\lab 4> █
```