TCP

```java
//package tcp1;

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

public class client {

    public static void main(String[] args) throws Exception {
        Socket sock = new Socket("127.0.01", 4000);
        System.out.println("Enter the filename");
        BufferedReader keyRead = new BufferedReader(new InputStreamReader(System.in));
        String fname = keyRead.readLine();
        OutputStream ostream = sock.getOutputStream();
        PrintWriter pwrite = new PrintWriter(ostream, true);
        pwrite.println(fname);
        InputStream istream = sock.getInputStream();
        BufferedReader socketRead = new BufferedReader(new InputStreamReader(istream));
        String str;
        while ((str = socketRead.readLine()) != null) {
            System.out.println(str);
        }
        pwrite.close();
        socketRead.close();
        keyRead.close();
    }
}

//package pgm7;

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

public class server {

    public static void main(String[] args) throws Exception {
        ServerSocket sersock = new ServerSocket(4000);
        System.out.println("Server ready for connection");
        Socket sock = sersock.accept();
        System.out.println("Connection Is successful and waiting for chatting");
        InputStream istream = sock.getInputStream();
        BufferedReader fileRead = new BufferedReader(new InputStreamReader(istream));
        String fname = fileRead.readLine();
        BufferedReader ContentRead = new BufferedReader(new FileReader(fname));
```

```java
        OutputStream ostream = sock.getOutputStream();
        PrintWriter pwrite = new PrintWriter(ostream, true);
        String str;
        while ((str = ContentRead.readLine()) != null) {
            pwrite.println(str);
        }
        sock.close();
        sersock.close();
        pwrite.close();
        fileRead.close();
        ContentRead.close();
    }
}
```

UDP

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

class client {

    public static void main(String[] args) throws Exception {
        BufferedReader inFromUser = new BufferedReader(new InputStreamReader(System.in));
        DatagramSocket clientSocket = new DatagramSocket();
        InetAddress IPAddress = InetAddress.getByName("localhost");
        byte[] sendData = new byte[1024];
        byte[] receiveData = new byte[1024];
        System.out.println("Enter the sting to be converted into Upper case");
        String sentence = inFromUser.readLine();
        sendData = sentence.getBytes();
        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();
    }
}
```

```java
import java.net.*;

class server {

    public static void main(String args[]) throws Exception {
        DatagramSocket serverSocket
            = new DatagramSocket(9876);
        byte[] receiveData = new byte[1024];
        byte[] sendData = new byte[1024];
        while (true) {
            System.out.println("Server is Up");
            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();
            sendData = capitalizedSentence.getBytes();
            DatagramPacket sendPacket = new DatagramPacket(sendData, sendData.length,
IPAddress, port);
            serverSocket.send(sendPacket);
        }
    }
}
```

```
PS C:\Users\BMSCECSE\Desktop\tcp>

                        cd UDP
PS C:\Users\BMSCECSE\Desktop\tcp\UDP> java server
Server is Up
RECEIVED:just my luck
Server is Up

```

```
PS C:\Users\BMSCECSE\Desktop\tcp>

                        cd UDP
PS C:\Users\BMSCECSE\Desktop\tcp\UDP> java client
Enter the sting to be converted into Upper case
just my luck
FROM SERVER:JUST MY LUCK
PS C:\Users\BMSCECSE\Desktop\tcp\UDP>
```