

Program: MutualServer.java

```

import java.io.*;
import java.net.*;
public class MutualServer implements Runnable {
    Socket socket = null;
    static ServerSocket ss;
    MutualServer(Socket newSocket) {
        this.socket = newSocket;
    }
    public static void main(String args[]) throws IOException {
        ss = new ServerSocket(7000);
        System.out.println("||=====|| MOIN MN (211P030) ||=====||");
        System.out.println("||=====|| Server has Started ||=====||");
        while (true) {
            Socket s = ss.accept();
            MutualServer es = new MutualServer(s);
            Thread t = new Thread(es);
            t.start();
        }
    }
    public void run() {
        try {
            BufferedReader in = new BufferedReader(new
InputStreamReader(socket.getInputStream()));
            while (true) {
                System.out.println(in.readLine());
            }
        } catch (Exception e) {
        }
    }
}

```

Program: ClientOne.java

```

import java.io.*;
import java.net.*;
public class ClientOne {
    public static void main(String args[]) throws IOException {
        Socket s = new Socket("localhost", 7000);
        PrintStream out = new PrintStream(s.getOutputStream());
        ServerSocket ss = new ServerSocket(7001);
        Socket s1 = ss.accept();
        BufferedReader in1 = new BufferedReader(new
InputStreamReader(s1.getInputStream()));
        PrintStream out1 = new PrintStream(s1.getOutputStream());
        BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
        String str = "Token";
        while (true) {
            if (str.equalsIgnoreCase("Token")) {
                System.out.println("Do you want to send some data?\n Yes / No: ");
                str = br.readLine();
                if (str.equalsIgnoreCase("Yes")) {
                    System.out.print("Enter the Data: ");
                    str = br.readLine();
                    out.println(str);
                }
                out1.println("Token");
            }
            System.out.println("Waiting for Token");
            str = in1.readLine();
        }
    }
}

```

```

Program: ClientTwo.java
import java.io.*;
import java.net.*;
public class ClientTwo {
    public static void main(String args[]) throws IOException {
        Socket s = new Socket("localhost", 7000);
        PrintStream out = new PrintStream(s.getOutputStream());
        Socket s2 = new Socket("localhost", 7001);
        BufferedReader in2 = new BufferedReader(new
InputStreamReader(s2.getInputStream()));
        PrintStream out2 = new PrintStream(s2.getOutputStream());
        BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
        String str;
        while (true) {
            System.out.println("Waiting for Token");
            str = in2.readLine();
            if (str.equalsIgnoreCase("Token")) {
                System.out.println("Do you want to send some data?");
                System.out.print("Yes / No: ");
                str = br.readLine();
                if (str.equalsIgnoreCase("Yes")) {
                    System.out.print("Enter the Data: ");
                    str = br.readLine();
                    out.println(str);
                }
                out2.println("Token");
            }
        }
    }
}

```

```

PS C:\Users\Moin MN\Downloads\DC-Expt-7> javac .\MutualServer.java
PS C:\Users\Moin MN\Downloads\DC-Expt-7> javac .\ClientOne.java
PS C:\Users\Moin MN\Downloads\DC-Expt-7> javac .\ClientTwo.java
PS C:\Users\Moin MN\Downloads\DC-Expt-7>

PS C:\Users\Moin MN\Downloads\DC-Expt-7> java MutualServer
||=====|| MOIN MN (211P030) ||=====||
||=====|| Server has Started ||=====||
Hii, ClientOne Here!
Hii, ClientTwo Here!
Go Green!
Go Blue!

```

```

Enter PS C:\Users\Moin MN\Downloads\DC-Expt-7> java ClientTwo
Waiting for Token
Do you want to send some data?
Yes / No: yes
the Data: Hii, ClientTwo Here!
Waiting for Token
Do you want to send some data?
Yes / No: yES
Enter the Data: Go Blue!
Waiting for Token

```

```

PS C:\Users\Moin MN\Downloads\DC-Expt-7> java ClientOne
Do you want to send some data?
Yes / No: YES
Enter the Data: Hii, ClientOne Here!
Waiting for Token
Do you want to send some data?
Yes / No: YES
Enter the Data: Go Green!
Waiting for Token
Do you want to send some data?
Yes / No:

```