

Code

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");
                System.out.println("Enter Yes or No");
                str = br.readLine();
                if (str.equalsIgnoreCase("Yes")) {
                    System.out.println("Enter the data");
                    str = br.readLine();
                    out.println(str);
                }
                out1.println("Token");
            }
            System.out.println("Waiting for Token");
            str = in1.readLine();
        }
    }
}
```

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.println("Enter Yes or No");
        str = br.readLine();
        if (str.equalsIgnoreCase("Yes")) {
            System.out.println("Enter the data");
            str = br.readLine();
            out.println(str);
        }
        out2.println("Token");
    }
}
}
}
}

```

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("Server 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) {
        }
    }
}

```

Output

```
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6 × slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ javac MutualServer.java
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ java MutualServer
Server Started

```

```
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6 × slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ javac ClientOne.java
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ java ClientOne
Do you want to send some data
Enter Yes or No

```

```
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6 × slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ javac ClientTwo.java
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ java ClientTwo
Waiting for Token

```

```
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6 × slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ javac ClientOne.java
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ java ClientOne
Do you want to send some data
Enter Yes or No
No
Waiting for Token

```

```
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6 × slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ javac ClientTwo.java
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ java ClientTwo
Waiting for Token
Do you want to send some data
Enter Yes or No
yes
Enter the data
Hello World!!!

```

```
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6 × slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ javac MutualServer.java
slowgamer@adnan-System-Product-Name: ~/Desktop/College/sem8/DC/exp_6$ java MutualServer
Server Started
Hello World!!!

```