

# **CSE3011 NETWORK PROGRAMMING**

## **LAB EXPERIMENT 2**

NAME – B PRATYUSH

REGISTRATION NUMBER – 19BCN7114

LAB SLOT – L11+L12

FACULTY – PROF. MUNEESWARI

Experiment Description: Client Server Communication using Sockets

**Client End:**

**MyClient.java**

**Code:**

```
import java.net.*;
import java.io.*;
class MyClient{
public static void main(String args[])throws Exception{
Socket soc=new Socket("localhost",3333);
DataInputStream din=new DataInputStream(soc.getInputStream());
DataOutputStream dout=new
DataOutputStream(soc.getOutputStream());
BufferedReader br=new BufferedReader(new
InputStreamReader(System.in));

String str="",str2="";
```

```
while(!str.equals("stop")){  
    str=br.readLine();  
    dout.writeUTF(str);  
    dout.flush();  
    str2=din.readUTF();  
    System.out.println("Server says: "+str2);  
}
```

```
dout.close();  
soc.close();  
}  
}
```

**Server End:**

**MyServer.java**

**Code:**

```
import java.net.*;  
import java.io.*;  
class MyServer{  
    public static void main(String args[])throws Exception{  
        ServerSocket ss=new ServerSocket(3333);  
        Socket soc=ss.accept();  
        DataInputStream din=new DataInputStream(soc.getInputStream());  
        DataOutputStream dout=new  
        DataOutputStream(soc.getOutputStream());
```

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

```
String str="",str2="";  
while(!str.equals("stop")){  
str=din.readUTF();  
System.out.println("client says: "+str);  
str2=br.readLine();  
dout.writeUTF(str2);  
dout.flush();  
}  
din.close();  
soc.close();  
ss.close();  
}  
}
```

## Server End Output:

Administrator: Command Prompt

```
Microsoft Windows [Version 10.0.18363.418]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Windows\system32>cd C:\Users\LENOVO\Desktop

C:\Users\LENOVO\Desktop>javac MyServer.java

C:\Users\LENOVO\Desktop>java MyServer
client says: Hi Server
Hello Client
client says: How are u ?
I am fine! What about u?
client says: I am doing good? Are u attending the NP Lab today
Yes I am attending.
client says: Ok then Lets go together
Yeah sure ! Bye For now
client says: bye
stop
client says: stop
stop

C:\Users\LENOVO\Desktop>
```

## Client End Output:

Administrator: Command Prompt

```
C:\Users\LENOVO\Desktop>javac MyClient.java

C:\Users\LENOVO\Desktop>java MyClient
Exception in thread "main" java.net.ConnectException: Connection refused: connect
    at java.base/java.net.DualStackPlainSocketImpl.connect0(Native Method)
    at java.base/java.net.DualStackPlainSocketImpl.socketConnect(Unknown Source)
    at java.base/java.net.AbstractPlainSocketImpl.doConnect(Unknown Source)
    at java.base/java.net.AbstractPlainSocketImpl.connectToAddress(Unknown Source)
    at java.base/java.net.AbstractPlainSocketImpl.connect(Unknown Source)
    at java.base/java.net.PlainSocketImpl.connect(Unknown Source)
    at java.base/java.net.SocksSocketImpl.connect(Unknown Source)
    at java.base/java.net.Socket.connect(Unknown Source)
    at java.base/java.net.Socket.connect(Unknown Source)
    at java.base/java.net.Socket.<init>(Unknown Source)
    at java.base/java.net.Socket.<init>(Unknown Source)
    at MyClient.main(MyClient.java:5)

C:\Users\LENOVO\Desktop>java MyClient
Hi Server
Server says: Hello Client
How are u ?
Server says: I am fine! What about u?
I am doing good? Are u attending the NP Lab today
Server says: Yes I am attending.
Ok then Lets go together
Server says: Yeah sure ! Bye For now
bye
Server says: stop
stop
Server says: stop

C:\Users\LENOVO\Desktop>
```