

```
// A Java program for a Client

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

public class Client {
    private Socket s = null;
    public Client(String address, int port)
    {
        try{

            // In this Code Input Getting from a user

            Scanner sc = new Scanner(System.in);
            s = new Socket(address, port);
            System.out.println("Connected");

            // Create two objects first is dis and dos for
            // input and output
            DataInputStream dis
            = new DataInputStream(s.getInputStream());

            DataOutputStream dos
            = new DataOutputStream(s.getOutputStream());

            // Making a Loop
            while (true) {
                System.out.println(
```



```

        "Enter the operation in the form operand operator operand");

        System.out.println("Example 3 + 5 ");

        String inp = sc.nextLine();


        // Check the user input if user enter over
        // then
        // connect is stopped by server and user
        if (inp.equals("Over"))
            break;

        dos.writeUTF(inp);


String ans = dis.readUTF();

        System.out.println("Answer = " + ans);

    }

}

catch (Exception e) {

    System.out.println("Error in Connection");

}

}

public static void main(String args[])

{

    // Connection With Server port 5000

        Client client = new Client("127.0.0.1", 5000);

    }

}

```



```
// A Java program for a Server

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

public class Server {

    // initialize socket and input stream
    private Socket socket = null;

    // constructor with port
    public Server(int port)
    {
        try{
            // Making a ServerSocket object
            // for receiving Client Request

            ServerSocket ss = new ServerSocket(port);

            Socket s = ss.accept();

            // dis and dos object for receiving
            // input from client send output to client
            DataInputStream dis
            = new DataInputStream(s.getInputStream());

            DataOutputStream dos
            = new DataOutputStream(s.getOutputStream());
```



```

while (true) {
String input = dis.readUTF();
if (input.equals("bye"))
break;
        System.out.println("Equation Received");
int result = 0;

        StringTokenizer st
        = new StringTokenizer(input);
int oprnd1
        = Integer.parseInt(st.nextToken());
String operation = st.nextToken();
int oprnd2
        = Integer.parseInt(st.nextToken());

        // Calculator Operation Perform By Server
if (operation.equals("+")) {
        result = oprnd1 + oprnd2;
}
else if (operation.equals("-")) {
result = oprnd1 - oprnd2;
}
else if (operation.equals("/")) {
result = oprnd1 / oprnd2;
}

```



```

        else if (operation.equals("*")) {
            result = oprnd1 * oprnd2;
        }

        System.out.println("Sending the Result");
        dos.writeUTF(Integer.toString(result));
    }
}

catch (Exception e) {
    System.out.println("Error");
}

}

public static void main(String args[])
{
    // Server Object and set port number 5000
    Server server = new Server(5000);
}
}

```



```
dachman@dachman: ~/Desktop/Programe/gfg
$ java Client.java
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSet
tings=on -Dswing.aatext=true
Connected
Enter the operation in the form operand operator
operand
Example 3 + 5
20 - 5
Answer = 15
Enter the operation in the form operand operator
operand
Example 3 + 5
[ ]

(dachman@dachman)-[~/Desktop/Programe/gfg]
$ java Server.java
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSet
tings=on -Dswing.aatext=true
Equation Received
Sending the Result
[ ]
```

