**MyServer.java :-**

import java.io.\*;

import java.net.\*;

public class MyServer

{

ServerSocket ss;

Socket s;

DataInputStream dis;

DataOutputStream dos;

float num1,num2,ans;

String symb;

public MyServer() throws Exception

{

ss=new ServerSocket(3123);

s=ss.accept();

dis=new DataInputStream(s.getInputStream());

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

while(true)

{

num1=dis.readFloat();

symb=dis.readUTF();

num2=dis.readFloat();

System.out.println("Equation Received "+num1+" "+symb+" "+num2);

System.out.println("Sending the result");

if(symb.equals("+"))

{

ans=num1+num2;

dos.writeFloat(ans);

}

if(symb.equals("-"))

{

ans=num1-num2;

dos.writeFloat(ans);

}

if(symb.equals("\*"))

{

ans=num1\*num2;

dos.writeFloat(ans);

}

if(symb.equals("/"))

{

ans=num1/num2;

dos.writeFloat(ans);

}

}

}

public static void main(String[] args)

{

try

{

new MyServer();

}

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

}

}

**MyClient.java :-**

import java.io.\*;

import java.net.\*;

import java.util.Scanner;

public class MyClient

{

Socket s;

DataInputStream dis;

DataOutputStream dos;

float num1,num2,ans;

String symb,ch;

Scanner sc=new Scanner(System.in);

public MyClient() throws Exception

{

s=new Socket("localhost",3123);

dis=new DataInputStream(s.getInputStream());

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

do

{

System.out.println("Enter Equation :");

num1=Float.parseFloat(sc.nextLine());

symb=sc.nextLine();

num2=Float.parseFloat(sc.nextLine());

dos.writeFloat(num1);

dos.writeUTF(symb);

dos.writeFloat(num2);

ans=dis.readFloat();

System.out.println("Answer Is : "+ans);

System.out.println("Do you want to continue? (Y/N)");

ch=sc.nextLine();

}

while(ch.equalsIgnoreCase("y"));

dos.flush();

dos.close();

dis.close();

s.close();

}

public static void main(String[] args)

{

try

{

new MyClient();

}

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

}

}

Server Output :-

C:\Users\Administrator\eclipse-workspace\TCPCal\src>javac MyServer.java

C:\Users\Administrator\eclipse-workspace\TCPCal\src>java MyServer

Equation Received 3.0 - 6.0

Sending the result

Equation Received 8.0 / 2.0

Sending the result

Equation Received 2.45 + 1.7

Sending the result

Equation Received 4.5 \* 2.0

Sending the result

**Client Output :-**

C:\Users\Administrator\eclipse-workspace\TCPCal\src>javac MyClient.java

C:\Users\Administrator\eclipse-workspace\TCPCal\src>java MyClient

Enter Equation :

3

-

6

Answer Is : -3.0

Do you want to continue? (Y/N)

y

Enter Equation :

8

/

2

Answer Is : 4.0

Do you want to continue? (Y/N)

y

Enter Equation :

2.45

+

1.7

Answer Is : 4.15

Do you want to continue? (Y/N)

y

Enter Equation :

4.5

\*

2

Answer Is : 9.0

Do you want to continue? (Y/N)

n