**SERVER PROGRAM :**

import java.io.\*;

import java.text.\*;

import java.util.\*;

import java.net.\*;

public class Server

{

public static void main(String[] args) throws IOException

{

ServerSocket ss = new ServerSocket(1234);

while (true)

{

Socket s = null;

try

{

s = ss.accept();

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

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

Thread t = new ClientHandler(s, dis, dos);

t.start();

}

catch (Exception e){

s.close();

e.printStackTrace();

}

}

}

}

class ClientHandler extends Thread

{

DateFormat fordate = new SimpleDateFormat("yyyy/MM/dd");

DateFormat fortime = new SimpleDateFormat("hh:mm:ss");

final DataInputStream dis;

final DataOutputStream dos;

final Socket s;

public ClientHandler(Socket s, DataInputStream dis, DataOutputStream dos)

{

this.s = s;

this.dis = dis;

this.dos = dos;

}

@Override

public void run()

{

String received;

String toreturn;

while (true)

{

try {

dos.writeUTF("Enter Opearation (+,-,\*,/,%,^,exit) :");

received = dis.readUTF();

Random random = new Random(1000);

int num1=random.nextInt();

int num2=random.nextInt();

if(received.equals("exit"))

{

this.s.close();

break;

}

dos.writeUTF("Random numbers are : "+num1+" & "+num2);

switch (received) {

case "+" :

toreturn = new Integer(num1 + num2).toString();

dos.writeUTF("Result : "+ toreturn);

break;

case "-" :

toreturn = new Integer(num1 - num2).toString();

dos.writeUTF("Result : "+ toreturn);

break;

case "\*" :

toreturn = new Integer(num1 \* num2).toString();

dos.writeUTF("Result : "+ toreturn);

break;

case "/" :

toreturn = new Integer(num1 / num2).toString();

dos.writeUTF("Result : "+ toreturn);

break;

case "%" :

toreturn = new Integer(num1 % num2).toString();

dos.writeUTF("Result : "+ toreturn);

break;

case "^" :

toreturn = new Integer(num1 ^ num2).toString();

dos.writeUTF("Result : "+ toreturn);

break;

}

} catch (IOException e) {

System.out.print(e);

}

}

try

{

this.dis.close();

this.dos.close();

}catch(IOException e){

System.out.print(e);

}

}

}

**CLIENT PROGRAM :**

import java.io.\*;

import java.net.\*;

import java.util.Scanner;

public class Client

{

public static void main(String[] args) throws IOException

{

try

{

Scanner scn = new Scanner(System.in);

Socket s = new Socket(ip, 1234);

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

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

while (true)

{

System.out.println(dis.readUTF());

String tosend = scn.nextLine();

dos.writeUTF(tosend);

if(tosend.equals("Exit"))

{

s.close();

break;

}

String received = dis.readUTF();

System.out.println(received);

}

scn.close();

dis.close();

dos.close();

}catch(Exception e){

e.printStackTrace();

}

}

}

