**Experiment No. 2**

**Code:**

**Server.java**

import java.util.\*;

import java.io.\*;

import java.net.\*;

public class Server {

public static void main(String args[]) throws Exception{

//Server server = new Server();

ServerSocket MyServer = new ServerSocket(25);

Socket ss = null;

while(true) {

ss = null;

try {

ss = MyServer.accept();

DataInputStream din =new DataInputStream(ss.getInputStream());

DataOutputStream dout=new DataOutputStream(ss.getOutputStream());

Thread t = new ClientHandler(ss, din, dout);

t.start();

}

catch(Exception E){

continue;

}

}

}

}

class ClientHandler extends Thread{

DataInputStream in;

DataOutputStream out;

Socket socket;

int sum;

float res;

boolean conn;

public ClientHandler(Socket s, DataInputStream din, DataOutputStream dout) {

this.socket = s;

this.in = din;

this.out = dout;

this.conn = true;

try{

this.out.writeUTF("Service:\nAdd: + num num\nSubtract: - num num\nMultiply: \* num num\nDivision: / num num");

this.out.flush();

}

catch(Exception e){

System.out.println(e);

}

}

public void run(){

while(conn == true){

try{

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

String input[] = this.in.readUTF().split(" ");

switch(input[0]) {

case "+":

sum = Integer.parseInt(input[1]) + Integer.parseInt(input[2]);

this.out.writeUTF(Integer.toString(sum));

break;

case "-":

sum = Integer.parseInt(input[1]) - Integer.parseInt(input[2]);

this.out.writeUTF(Integer.toString(sum));

break;

case "\*":

sum = Integer.parseInt(input[1]) \* Integer.parseInt(input[2]);

this.out.writeUTF(Integer.toString(sum));

break;

case "/":

res = Integer.parseInt(input[1]) / Float.parseFloat(input[2]);

this.out.writeUTF(Integer.toString(sum));

break;

default:

this.out.writeUTF("Terminating");

conn = false;

}

//String ip=(((InetSocketAddress) this.socket.getRemoteSocketAddress()).getAddress()).toString().replace("/","");

this.out.flush();

System.out.println("Response to " + this.socket + ": " + sum);

}

catch(Exception E){

System.out.println(E);

}

}

closeConn();

}

public void closeConn(){

try{

this.out.close();

this.in.close();

this.socket.close();

}

catch(Exception E){

System.out.println(E);

}

}

}

**Client.java**

import java.io.\*;

import java.util.\*;

import java.net.\*;

public class Client

{

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

{

String send="",r="";

Socket MyClient = new Socket("192.168.0.106",25);

DataInputStream din=new DataInputStream(MyClient.getInputStream());

DataOutputStream dout = new DataOutputStream(MyClient.getOutputStream());

Scanner sc = new Scanner(System.in);

r=din.readUTF();

System.out.println(r);

while(!send.equals("stop"))

{

System.out.print("Task: ");

send = sc.nextLine();

dout.writeUTF(send);

dout.flush();

r=din.readUTF();

System.out.println("Answer: "+ r);

}

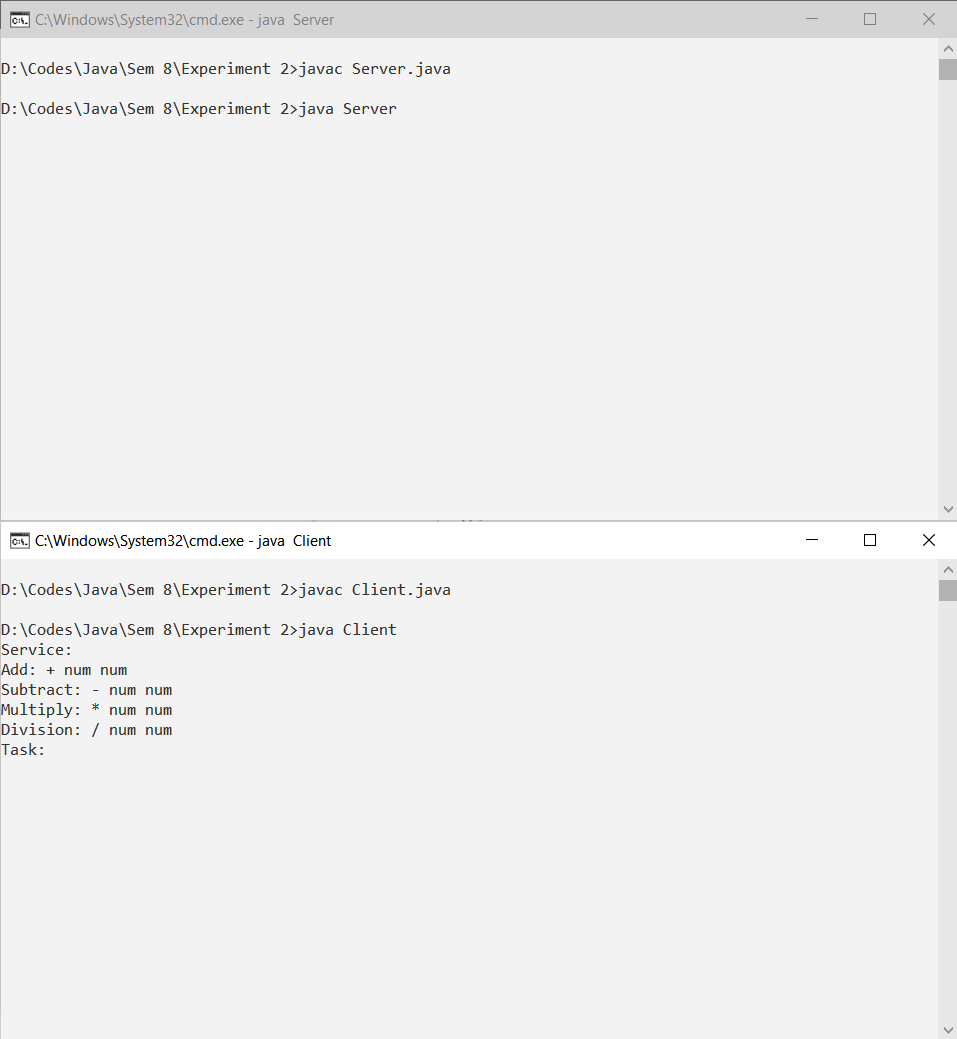
dout.close();

din.close();

MyClient.close();

}

}

**Outputs:** ****

