additionServer.java

**import** java.io.\*;

**import** java.net.\*;// java networking

**import** java.util.Scanner;

**public** **class** additionServer {

**public** **static** **void** main(String[] args) {

**try** {

ServerSocket ss = **new** ServerSocket(1111); //Server creates socket to communicate with client , comm occurs on port no. 1111

Socket s = ss.accept();

//server invokes accept() , server waits until a client connects to the server on given port.

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

// Reads the data from input

DataOutputStream dout=**new** DataOutputStream(s.getOutputStream());

// Writes the data to the output stream which can later be read by inputstream

**int** i = dis.readInt();

**int** j = dis.readInt();

// input taken in integer format

**int** num = i + j;

dout.writeInt(num);

//calculated result written in output stream

// System.out.println("Sum " + num);

ss.close();

} **catch** (Exception e) {

System.*out*.println(e);

}

}

}

client.java

**import** java.io.\*;

**import** java.net.\*;

**import** java.util.Scanner;

**public** **class** client

{

**public** **static** **void** main(String[] args)

{

**try**

{

Socket s=**new** Socket("localhost",1236);

DataOutputStream dout=**new** DataOutputStream(s.getOutputStream());

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

Scanner in = **new** Scanner(System.*in*);

System.*out*.printf("Enter i Value: ");

**int** i = in.nextInt();

System.*out*.printf("Enter j Value: ");

**int** j = in.nextInt();

dout.writeInt(i);

dout.writeInt(j);

**int** ch;

System.*out*.println("Enter 1 for addition\n");

System.*out*.println("Enter 2 for subtraction\n");

// System.out.println("Enter 3 for multiplication\n");

// System.out.println("Enter 4 for division\n");

ch = in.nextInt();

dout.writeInt(ch);

**int** sum = dis.readInt();

System.*out*.println("Sum: " + sum);

/\* dout.writeUTF(""+ sum);

dout.flush();

dout.close();

\*/ s.close();

}

**catch**(Exception e)

{

System.*out*.println(e);

}

}

}

server.java

**import** java.io.\*;

**import** java.net.\*;

**import** java.util.Scanner;

**public** **class** server {

**public** **static** **void** main(String[] args) {

**int** sum=0;

**int** sub=0;

**int** client = 1236;

**int** additionServer = 1111;

**int** subtractionServer = 2222;

**try** {

ServerSocket ss = **new** ServerSocket(client);

Socket s = ss.accept();

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

DataOutputStream dout2=**new** DataOutputStream(s.getOutputStream());

**int** i = dis.readInt();

**int** j = dis.readInt();

**int** ch = dis.readInt();

// int num = i + j;

// System.out.println("Sum " + num);

**switch**(ch){

**case** 1:

Socket s1=**new** Socket("localhost",additionServer);

DataOutputStream dout=**new** DataOutputStream(s1.getOutputStream());

DataInputStream din = **new** DataInputStream(s1.getInputStream());

dout.writeInt(i);

dout.writeInt(j);

sum = din.readInt();

s1.close();

dout2.writeInt(sum);

**break**;

**case** 2:

Socket s11=**new** Socket("localhost",subtractionServer);

DataOutputStream dout1=**new** DataOutputStream(s11.getOutputStream());

DataInputStream din1 = **new** DataInputStream(s11.getInputStream());

dout1.writeInt(i);

dout1.writeInt(j);

sub = din1.readInt();

s11.close();

dout2.writeInt(sub);

**break**;

}

ss.close();

} **catch** (Exception e) {

System.*out*.println(e);

}

}

}

subtractionServer.java

**import** java.io.\*;

**import** java.net.\*;

**import** java.util.Scanner;

**public** **class** subtractionServer {

**public** **static** **void** main(String[] args) {

**try** {

ServerSocket ss = **new** ServerSocket(2222);

Socket s = ss.accept();

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

DataOutputStream dout=**new** DataOutputStream(s.getOutputStream());

**int** i = dis.readInt();

**int** j = dis.readInt();

**int** num = i - j;

dout.writeInt(num);

// System.out.println("Sum " + num);

ss.close();

} **catch** (Exception e) {

System.*out*.println(e);

}

}

}

OUTPUT:-

