**Practical 2.1**

**Aim:**

Write RMI application where client supplies two numbers and server response by summing it. (Use: Scanner class).

**Program code:**

**RemoteInterface.java**

**import** java**.**rmi**.\*;**

public interface RemoteInterface **extends** Remote

**{**

public int add**(**int x**,**int y**)throws** Exception**;**

**}**

**ServerImplements.java**

**import** java**.**rmi**.\*;**

**import** java**.**rmi**.**server**.\*;**

**import** java**.**lang**.**String**;**

public class ServerImplements **extends**

UnicastRemoteObject **implements** RemoteInterface

**{**

public ServerImplements**()throws** Exception

**{**

**super();**

**}**

public int add**(**int x**,**int y**)**

**{**

**return** **(**x**+**y**);**

**}**

**}**

**Server.java**

**import** java**.**rmi**.\*;**

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

public class Server **{**

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

**try** **{**

ServerImplements s**=new** ServerImplements**();**

Naming**.**rebind**(**"SERVICE"**,**s**);**

System**.**out**.**println**(**"Server Started "**);**

**}**

**catch(**Exception e**)**

**{**

System**.**out**.**println**(**e**.**getMessage**());**

**}**

**}**

**}**

**Client.java**

**import** java**.**rmi**.\*;**

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

**import** java**.**util**.**Scanner**;**

public class Client **{**

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

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

int num1**,** num2**;**

**try** **{**

System**.**out**.**println**(**"Enroll no: 130050131071"**);**

String ip**=**"rmi://localhost/SERVICE"**;**

RemoteInterface s **=** **(**RemoteInterface**)**Naming**.**lookup**(**ip**);**

System**.**out**.**println**(**"Enter num 1: "**);**

num1 **=** in**.**nextInt**();**

System**.**out**.**println**(**"Enter num 2: "**);**

num2 **=** in**.**nextInt**();**

System**.**out**.**println**(**"sum: "**+** s**.**add**(**num1**,** num2**));**

**}** **catch(**Exception e**)** **{**

System**.**out**.**println**(**e**.**getMessage**());**

e**.**printStackTrace**();**

**}**

**}**

**}**

**Input Output:**

