

Aim: To develop any distributed application through implementing client-server communication programs based on java RMI.

```
//AddClient.java

import java.rmi.*;

public class AddClient{

    public static void main(String args[]) {

        try{

            String addServerURL = "rmi://" + args[0] + "/AddServerImpl";

            AddServerIntf addServerIntf =

            (AddServerIntf)Naming.lookup(addServerURL);

            System.out.println("The first number is: " + args[1]);

            double d1 = Double.valueOf(args[1]).doubleValue();

            System.out.println("The second number is: " + args[2]);

            double d2 = Double.valueOf(args[2]).doubleValue();

            System.out.println("The sum is: " + addServerIntf.add(d1,d2));

        }

        catch(Exception e) {

            System.out.println("Exception: " + e);

        }

    }

}
```

```
//AddServer.java

import java.net.*;

import java.rmi.*;

public class AddServer {

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

```
try {  
    AddServerImpl addServerImpl = new AddServerImpl();  
    Naming.rebind("AddServerImpl", addServerImpl);  
}  
catch(Exception e) {  
    System.out.println("Exception: " + e);  
}  
}  
}
```

```
//AddServerImpl.java  
import java.rmi.*;  
import java.rmi.server.*;  
public class AddServerImpl extends UnicastRemoteObject  
implements AddServerIntf {  
    public AddServerImpl() throws RemoteException {  
    }  
    public double add(double d1,double d2) throws RemoteException {  
        return d1 + d2;  
    }  
}
```

```
//AddServerIntf.java  
import java.rmi.*;  
public interface AddServerIntf extends Remote {  
    double add(double d1, double d2) throws RemoteException;  
}
```

Output

PROBLEMS15OUTPUTDEBUG CONSOLETERMINALPORTSSEARCH ERROR

PS E:\NEHA_ENGG\BE\Distributed systems\DSPrac1> javac *.java

PS E:\NEHA_ENGG\BE\Distributed systems\DSPrac1> ls

Directory: E:\NEHA_ENGG\BE\Distributed systems\DSPrac1

Mode	LastWriteTime	Length	Name
d----	02-02-2024 11:45		client
d----	02-02-2024 11:46		server
-a----	02-02-2024 11:47	1275	AddClient.class
-a----	02-02-2024 11:47	721	AddClient.java
-a----	02-02-2024 11:47	850	AddServer.class
-a----	02-02-2024 11:47	361	AddServer.java
-a----	02-02-2024 11:47	363	AddServerImpl.class
-a----	02-02-2024 11:46	306	AddServerImpl.java
-a----	02-02-2024 11:47	205	AddServerIntf.class
-a----	02-02-2024 11:47	177	AddServerIntf.java
-a----	02-02-2024 11:41	66930	terminal1 prac1 ss.png

PS E:\NEHA_ENGG\BE\Distributed systems\DSPrac1> rmic AddServerImpl

Warning: generation and use of skeletons and static stubs for JRMPIs deprecated. Skeletons are unnecessary, and static stubs have been superseded by dynamically generated stubs. Users are encouraged to migrate away from using rmic to generate skeletons and static stubs. See the documentation for java.rmi.server.UnicastRemoteObject.

PS E:\NEHA_ENGG\BE\Distributed systems\DSPrac1> rmiregistry

rmiregis... java server powershell client

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PROBLEMS15OUTPUTDEBUG CONSOLETERMINALPORTSSEARCH ERROR

PS E:\NEHA_ENGG\BE\Distributed systems\DSPrac1> cd server

PS E:\NEHA_ENGG\BE\Distributed systems\DSPrac1\server> java AddServer

rmiregistry java server powershell client

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PROBLEMS 15

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

SEARCH ERROR

PS E:\NEHA _ENGG\BE\Distributed systems\DSPrac1> cd server

PS E:\NEHA _ENGG\BE\Distributed systems\DSPrac1\server> java AddServer

rmiregistry

java server

powershell client

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Comment Code

Code Chat

Java: Ready

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Spaces: 3

Java

Blackbox

PROBLEMS15OUTPUTDEBUG CONSOLETERMINALPORTSSEARCH ERROR

PS E:\NEHA _ENG\BE\Distributed systems\DSPrac1> cd client

PS E:\NEHA _ENG\BE\Distributed systems\DSPrac1\client> java AddClient 127.0.0.1 8 9

The first number is: 8

The second number is: 9

The sum is: 17.0

PS E:\NEHA _ENG\BE\Distributed systems\DSPrac1\client>

+ ... ^ x

rmiregistry

java server

powersh...

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