FACTORIAL OF A NUMBER USING RMI IN JAVA

                 **FACTORIAL OF A NUMBER USING RMI IN JAVA**

**AIM:**

To write the Remote Invocation Method (RMI) program to find a factorial of a number .

**PROCEDURE:**

1. Start the process.

            2. To perform the RMI operation create Interface file, Implementation file, Server file and

 Client file .

3. Perform the JAVA compilation for all files.

4. Perform the RMI compilation for the implementation file to create stub and skeleton by

using rmic command.

5. Start the RMI registry.

6. Run the server and client file separately.

7. Display the result.

8. Terminate the process.

**PROGRAM:**

**CLIENT PROGRAM:**

import java.io.\*;

import java.rmi.\*;

public class client

{

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

{

try

{

String s="rmi://"+args[0]+"/abc";

serverint f=(serverint)Naming.lookup(s);

DataInputStream m=new DataInputStream(System.in);

int n1=Integer.parseInt(m.readLine());

System.out.println("the factorial is"+f.fact(n1));

}

catch(Exception e)

{

System.out.println(e);

}

}

}

**INTERFACE PROGRAM:**

import java.rmi.\*;

public interface serverint extends Remote

{

int fact(int n)throws Exception**;**

**}**

**IMPLEMENTATION PROGRAM:**

import java.rmi.\*;

import java.rmi.server.\*;

public class serverimpl extends UnicastRemoteObject implements serverint

{

public serverimpl()throws Exception

{

}

public int fact(int n)

{

int i,c=1;

for(i=1;i<=n;i++)

{

c=i\*c;

}

return c;

}

}

**SERVER PROGRAM:**

import java.net.\*;

import java.rmi.\*;

public class server

{

public static void main(String args[])

{

try

{

serverimpl m=new serverimpl();

Naming.rebind("abc",m);

}

catch(Exception e)

{

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

}

}

}

**OUTPUT:**

**SERVER WINDOW:**

 C:\vino20>javac serverint.java

 C:\vino20>javac serverimpl.java

 C:\vino20>javac server.java

 C:\vino20>rmic serverimpl

 C:\vino20>start rmiregistry

 C:\vino20>java server

**CLIENT WINDOW:**

C:\vino20>javac client.java

Note: client.java uses or overrides a deprecated API.

Note: Recompile with -Xlint:deprecation for details.

 C:\vino20>java client localhost

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the factorial is 6