**Assignment no. 3 :**

**ReverseModule.idl :**

module ReverseModule

{

interface Reverse

{

string reverse\_string(in string str);

};

};

**ReverseSever.java :**

import ReverseModule.Reverse;

import org.omg.CosNaming.\*;

import org.omg.CosNaming.NamingContextPackage.\*;

import org.omg.CORBA.\*;

import org.omg.PortableServer.\*;

class ReverseServer

{

public static void main(String[] args)

{

try

{

// initialize the ORB

org.omg.CORBA.ORB orb = org.omg.CORBA.ORB.init(args,null);

// initialize the BOA/POA

POA rootPOA = POAHelper.narrow(orb.resolve\_initial\_references("RootPOA"));

rootPOA.the\_POAManager().activate();

// creating the calculator object

ReverseImpl rvr = new ReverseImpl();

// get the object reference from the servant class

org.omg.CORBA.Object ref = rootPOA.servant\_to\_reference(rvr);

System.out.println("Step1");

Reverse h\_ref = ReverseModule.ReverseHelper.narrow(ref);

System.out.println("Step2");

org.omg.CORBA.Object objRef = orb.resolve\_initial\_references("NameService");

System.out.println("Step3");

NamingContextExt ncRef = NamingContextExtHelper.narrow(objRef);

System.out.println("Step4");

String name = "Reverse";

NameComponent path[] = ncRef.to\_name(name);

ncRef.rebind(path,h\_ref);

System.out.println("Reverse Server reading and waiting....");

orb.run();

}

catch(Exception e)

{

e.printStackTrace();

}

}

}

**ReverseClient.java :**

// Client

import ReverseModule.\*;

import org.omg.CosNaming.\*;

import org.omg.CosNaming.NamingContextPackage.\*;

import org.omg.CORBA.\*;

import java.io.\*;

class ReverseClient

{

public static void main(String args[])

{

Reverse ReverseImpl=null;

try

{

// initialize the ORB

org.omg.CORBA.ORB orb = org.omg.CORBA.ORB.init(args,null);

org.omg.CORBA.Object objRef = orb.resolve\_initial\_references("NameService");

NamingContextExt ncRef = NamingContextExtHelper.narrow(objRef);

String name = "Reverse";

ReverseImpl = ReverseHelper.narrow(ncRef.resolve\_str(name));

System.out.println("Enter String=");

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

String str= br.readLine();

String tempStr= ReverseImpl.reverse\_string(str);

System.out.println(tempStr);

}

catch(Exception e)

{

e.printStackTrace();

}

}

}

**ReverseImpl.java :**

import ReverseModule.ReversePOA;

import java.lang.String;

class ReverseImpl extends ReversePOA

{

ReverseImpl()

{

super();

System.out.println("Reverse Object Created");

}

public String reverse\_string(String name)

{

StringBuffer str=new StringBuffer(name);

str.reverse();

return (("Server Send "+str));

}

}

**Output :**

**Terminal 1 :**

ccoewlab1-pc84@ccoewlab1pc84-desktop:~$ cd Desktop/corba/

ccoewlab1-pc84@ccoewlab1pc84-desktop:~/Desktop/corba$ idlj -fall ReverseModule.idl

ccoewlab1-pc84@ccoewlab1pc84-desktop:~/Desktop/corba$ javac \*.java ReverseModule/\*.java

Note: ReverseModule/ReversePOA.java uses unchecked or unsafe operations.

Note: Recompile with -Xlint:unchecked for details.

ccoewlab1-pc84@ccoewlab1pc84-desktop:~/Desktop/corba$ orbd -ORBInitialPort 1050&[1] 4715

**Terminal 2 :**

coewlab1-pc84@ccoewlab1pc84-desktop:~$ cd Desktop/corba/

[ccoewlab1-pc84@ccoewlab1pc84-desktop](mailto:ccoewlab1-pc84@ccoewlab1pc84-desktop):~/Desktop/corba$ java ReverseServer -ORBInitialPort 1050& -ORBInitialHost localhost&

**Terminal 3 :**

ccoewlab1-pc84@ccoewlab1pc84-desktop:~$ cd Desktop/corba/

ccoewlab1-pc84@ccoewlab1pc84-desktop:~/Desktop/corba$ java ReverseClient -ORBInitialPort 1050 -ORBInitialHost localhost

Enter String=

distributedcomputing

Server Send gnitupmocdetubirtsid