

Code :

1. ReverseClient.java

```
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();
    }
}
}

```

2. 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);
    }
}

```

```
}  
  
}
```

3. ReverseModule.idl

```
module ReverseModule  
{  
  interface Reverse  
  {  
    string reverse_string(in string str);  
  };  
};
```

4. ReverseServer.java

```
import ReverseModule.*;  
  
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

        Reverselmpl rvr = new Reverselmpl();


        // 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();

    }

}

}

```

The screenshot shows a terminal window with the following commands and output:

```

student@student:~$ idlj -fall ReverseModule.idl
student@student:~$ javac ReverseClient.java
./ReverseModule/ReverseStub.java:46: warning: IORCheckImpl is internal proprietary API and may be removed in a future release
    con.sun.corba.se.impl.orbutil.IORCheckImpl.check(str, "ReverseModule_ReverseStub");
                                ^
1 warning
student@student:~$ javac ReverseImpl.java
Note: ./ReverseModule/ReversePOA.java uses unchecked or unsafe operations.
Note: Recompile with -Xlint:unchecked for details.
student@student:~$ javac ReverseServer.java
student@student:~$ orbd -ORBInitialPort 10568
[1] 10646
student@student:~$ java ReverseServer -ORBInitialPort 10568
[2] 10674
student@student:~$ Reverse Object Created
Step1
Step2
Step3
Step4
Reverse Server reading and waiting....
student@student:~$

```

```
Activities Terminal Apr 4 11:51
student@student:~$ java ReverseClient -ORBInitialPort 1056 -ORBInitialHost localhost
Enter String=
Hello
Server Send olleH
student@student:~$
```