**SimpleInterest.idl**

module InterestModule

{

    interface SimpleInterest

    {

        float calculate\_si(in float principal,in float rate, in float time);

    };

};

**SimpleInterestServer.java**

import InterestModule.SimpleInterestPOA;

import org.omg.CORBA.ORB;

class SimpleInterestImpl extends SimpleInterestPOA {

    private ORB orb;

    public void setORB(ORB orb\_val) {

        orb = orb\_val;

    }

    public float calculate\_si(float principal, float rate, float time) {

        return (principal \* rate \* time) / 100;

    }

}

public class SimpleInterestServer {

    public static void main(String args[]) {

        try {

            ORB orb = ORB.init(args, null);

            SimpleInterestImpl simpleInterestImpl = new SimpleInterestImpl();

            simpleInterestImpl.setORB(orb);

            // Get reference to root POA and activate POAManager

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

            org.omg.PortableServer.POA rootpoa = org.omg.PortableServer.POAHelper.narrow(objRef);

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

            // Get object reference from servant

            org.omg.CORBA.Object ref = rootpoa.servant\_to\_reference(simpleInterestImpl);

            InterestModule.SimpleInterest href = InterestModule.SimpleInterestHelper.narrow(ref);

            // Register object with naming service

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

            org.omg.CosNaming.NamingContextExt ncRef = org.omg.CosNaming.NamingContextExtHelper.narrow(nsObjRef);

            org.omg.CosNaming.NameComponent path[] = ncRef.to\_name("SimpleInterest");

            ncRef.rebind(path, href);

            System.out.println("Simple Interest Server Ready...");

            orb.run();

        } catch (Exception e) {

            System.err.println("Server Exception: " + e);

        }

    }

}

**SimpleInterestClient.java**

import InterestModule.SimpleInterest;

import InterestModule.SimpleInterestHelper;

import org.omg.CORBA.ORB;

import java.util.Scanner;

public class SimpleInterestClient {

    public static void main(String args[]) {

        try {

            ORB orb = ORB.init(args, null);

            // Get reference to naming service

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

            org.omg.CosNaming.NamingContextExt ncRef = org.omg.CosNaming.NamingContextExtHelper.narrow(nsObjRef);

            // Resolve object reference from naming service

            SimpleInterest simpleInterestObj = SimpleInterestHelper.narrow(ncRef.resolve\_str("SimpleInterest"));

            // Take user input

            Scanner scanner = new Scanner(System.in);

            System.out.print("Enter Principal Amount: ");

            float principal = scanner.nextFloat();

            System.out.print("Enter Rate of Interest: ");

            float rate = scanner.nextFloat();

            System.out.print("Enter Time (years): ");

            float time = scanner.nextFloat();

            scanner.close();

            // Call remote method

            float interest = simpleInterestObj.calculate\_si(principal, rate, time);

            System.out.println("Calculated Simple Interest: " + interest);

        } catch (Exception e) {

            System.err.println("Client Exception: " + e);

        }

    }

}

**Output:**

**Terminal1**

PS D:\Corba> idlj -fall SimpleInterest.idl

PS D:\Corba> javac \*.java InterestModule/\*.java

Note: InterestModule\SimpleInterestPOA.java uses unchecked or unsafe operations.

Note: Recompile with -Xlint:unchecked for details.

PS D:\Corba> orbd -ORBInitialPort 1050

**Terminal2**

PS D:\Corba> java SimpleInterestServer -ORBInitialPort 1050 -ORBInitialHost localhost

Simple Interest Server Ready...

**Terminal3**

PS D:\Corba> java SimpleInterestClient -ORBInitialPort 1050 -ORBInitialHost localhost

Enter Principal Amount: 5000

Enter Rate of Interest: 7.5

Enter Time (years): 2

Calculated Simple Interest: 750.0