Lab 5: Build a Java program for finding interest for the investment from different banks which offer different rate interests such as SBI (8%), ICICI(9%) and AXIS (10%) using the concept of method overriding. Develop a parent class BANK with data members Investment_amount and rate_of_interest initialized to zero. Print results of interests from different banks using different subclasses namely SBI, ICICI and AZIX.The data members (Investment_amount has to be passed from main to class and hide the data member in the class. Print the results by invoking getInterest() with respective objects in Main class named Override

```
package Polymorphism;
//Java Program to demonstrate the real scenario of Java Method Overriding
//where three classes are overriding the method of a parent class.
//Creating a parent class.
class Bank{
        int amount;
        double rate_of_interest;
        Bank(int amount, double rate_of_interest)
        {
            this.rate_of_interest= rate_of_interest;
                this.amount=amount;
        }
            public double getInterest(){
                    return this.rate_of_interest*this.amount/100.0;
                    }
    }

//Creating child classes.
class SBI extends Bank{

    SBI(int amount, double rate_of_interest)
    {
    super(amount,rate_of_interest);
    }
    public double getInterest(){
    return super.getInterest();
    }
}

class ICICI extends Bank{

    ICICI(int amount, double rate_of_interest)
    {
            super(amount,rate_of_interest);
    }
    public double getInterest(){
            return super.getInterest();
            }
    }
```

```
class AXIS extends Bank{
        AXIS(int amount, double rate_of_interest)
        {
                 super(amount,rate_of_interest);
        }
        public double getInterest(int amount){
                return super.getInterest();
                }
        }
//Test class to create objects and call the methods
class Override{
                public static void main(String args[]){
                        Bank   b= new Bank(0,0);
                        SBI    s=new SBI(10000,8.0);
                        ICICI  i=new ICICI(10000,9.0);
                        AXIS   a=new AXIS(10000,10.0);
        System.out.println("Bank Interest amount is  :"+b.getInterest());
        System.out.println("SBI Interest amount is    :"+s.getInterest());
        System.out.println("ICICI Interest amount is :"+i.getInterest());
        System.out.println("AXIS Interest amount is  :"+a.getInterest());
                }
}
```

o/p

Bank Interest amount is :0.0
SBI Interest amount is :800.0
ICICI Interest amount is :900.0
AXIS Interest amount is :1000.0

LAB 5 Exericise

Develop a class Mobile with parameterized constructor with parameters Manufacturer, OS, Model, Cost to set the data from main class called Overriding_Demo and define a member function dispdata() to display all the parameters in the class Mobile. Develop the subclasses namely Apple,Android and Blackberry inherited from Mobile. Develop parameterized constructors in the derived Classes Apple,Anroid and Blackberry using super(Manufacturer, OS, Model, Cost) and print the following details using the member functions in the derived Classes Apple,Anroid and Blackberry with super.dispdata() .

o/p

```
manunfacturer    :Apple
operating_system :Appleios
model            :Delux
cost             :75000
*****************************************************************************
operating_system :Android
model            :Grand
cost             :30000
*****************************************************************************
manunfacturer    :BlackBerry
operating_system :RIM
model            :Curve
cost             :20000
**************************************************************************
```