Lab 7: 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 abstract class. Develop a parent class BANK with data members amount and rate_of_interest with protected visibility and define an abstract method getInterest(int amount,double rate_of_interest). Print results of interests from different banks using different subclasses namely SBI, ICICI and AZIX. The data members amount and rate_of_intererst have to be passed from main to class and hide the data member in the sub classes. Print the results by invoking getInterest() with respective objects in Main class named Abstract_Class

```
package Abstract_Class;
//Java Program to demonstrate the real scenario of Java abstract class
//where three classes are making use of a method which is declared as an abstract in the parent class.

//Creating a parent class with keyword abstract and  define an abstract method without any
implementation in it.
        abstract class Bank{
                        protected int amount;
                        protected double rate_of_interest;
                                // defining an abstract method without any implementation.
                        abstract public  double getInterest(int amount,double rate_of_interest);
                        }
//Creating child classes.
        class SBI extends Bank{
        public double getInterest(int amount,double rate_of_interest){
                                this.amount=amount;
                                this.rate_of_interest=rate_of_interest;
                                return (amount*rate_of_interest/100.0);}
                }

class ICICI extends Bank{
        public double getInterest(int amount,double rate_of_interest){
                this.amount=amount;
                this.rate_of_interest=rate_of_interest;
                return (amount*rate_of_interest/100.0);}
}


class AXIS extends Bank{
        public double getInterest(int amount,double rate_of_interest){
                this.amount=amount;
                this.rate_of_interest=rate_of_interest;
                return (amount*rate_of_interest/100.0);}
}


//Test class to create objects and call the methods
class Abstract_Class{
                public static void main(String args[]){
                        SBI s=new SBI();
```

```
                    ICICI i=new ICICI();
                    AXIS a=new AXIS();

        System.out.println("SBI Interest is: "+s.getInterest(10000,8));
        System.out.println("ICICI Interest is: "+i.getInterest(10000,9));
        System.out.println("AXIS Interest is: "+a.getInterest(10000,10));
            }
}
```

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```
SBI Interest is: 800.0
ICICI Interest is: 900.0
AXIS Interest is: 1000.0
```

LAB 7 Exericise

Develop an abstract class called Mobile with an abstract method dispdata() and data members Manufacturer, OS, Model, Cost to display all the parameters in the class as follows. Develop the subclasses namely Apple,Android and Blackberry inherited from Mobile to implement abstract method dispdata() in the respective class.

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