Lab Experiment – 3

Aim: Create an interface called "Bank" and declare a method to get customer details: customer name, customer id , number of years, and customer balance. Three classes: Axes, ICIC, and SBI, should be derived from Bank. The customer details and interest rate should be overridden in the third class. The interest rate for Axes is 5%, ICIC is 7%, and SBI is 8%. Display the Menu:
1. AXES
2. ICIC
3. SBI
According to the selection, the total amount after a number of years should be calculated for the given balance_amount, and all the details should be displayed as follows:

CUSTOMER NAME	ID	NO OF YEARS	BALANCE	BANK	RATE OF INTEREST	TOTAL AMOUNT
AAAA	111	5	5000	AXIS	5%	5500

Code:

```java
/**
 *
 * @author 2162014
 */
import java.util.Scanner;

interface Bank {

    void get_details();
}

class Axes implements Bank {

    String Cname;
    int Cid, nay;
    double balance, tbalance, roi;
    String ROI;

    @Override
    public void get_details() {
        Scanner sc = new Scanner(System.in);
        System.out.println("ENTER CUSTOMER NAME: ");
        Cname = sc.nextLine();
        System.out.println("ENTER CID: ");
        Cid = sc.nextInt();
        System.out.println("ENTER NUMBER OF YEARS: ");
        nay = sc.nextInt();
        System.out.println("ENTER CURRENT BALANCE: ");
        balance = sc.nextDouble();
        roi = 5;
        ROI = "5%";
```

```java
      tbalance = balance + ((roi * balance * nay) / 100);
   }

   void show_details() {
      System.out.println("CUSTOMER NAME \t\t ID \t\t NO. OF YEARS \t\t
BALANCE \t\t BANK \t\t RATE OF INTEREST \t\t TOTAL AMOUNT");
      System.out.println(Cname + "\t\t\t" + Cid + "\t\t\t" + nay + "\t\t\t" + balance +
"\t\t\t" + "AXES" + "\t\t\t" + ROI + "\t\t\t" + tbalance);
   }
}

class SBI implements Bank {

   String Cname;
   int Cid, nay;
   double balance, tbalance, roi;
   String ROI;

   @Override
   public void get_details() {
      Scanner sc = new Scanner(System.in);
      System.out.println("ENTER CUSTOMER NAME: ");
      Cname = sc.nextLine();
      System.out.println("ENTER CID: ");
      Cid = sc.nextInt();
      System.out.println("ENTER NUMBER OF YEARS: ");
      nay = sc.nextInt();
      System.out.println("ENTER CURRENT BALANCE: ");
      balance = sc.nextDouble();
      roi = 8;
      ROI = "8%";
      tbalance = balance + ((roi * balance * nay) / 100);
   }

   void show_details() {
      System.out.println("CUSTOMER NAME \t\t ID \t\t NO. OF YEARS \t\t
BALANCE \t\t BANK \t\t RATE OF INTEREST \t\t TOTAL AMOUNT");
      System.out.println(Cname + "\t\t\t" + Cid + "\t\t\t" + nay + "\t\t\t" + balance +
"\t\t\t" + "SBI" + "\t\t\t" + ROI + "\t\t\t" + tbalance);
   }
}

class ICIC implements Bank {

   String Cname;
   int Cid, nay;
```

```java
    double balance, tbalance, roi;
    String ROI;

    @Override
    public void get_details() {
        Scanner sc = new Scanner(System.in);
        System.out.println("ENTER CUSTOMER NAME: ");
        Cname = sc.nextLine();
        System.out.println("ENTER CID: ");
        Cid = sc.nextInt();
        System.out.println("ENTER NUMBER OF YEARS: ");
        nay = sc.nextInt();
        System.out.println("ENTER CURRENT BALANCE: ");
        balance = sc.nextDouble();
        roi = 7;
        ROI = "7%";
        tbalance = balance + ((roi * balance * nay) / 100);
    }

    void show_details() {
        System.out.println("CUSTOMER NAME \t\t ID \t\t NO. OF YEARS \t\t
BALANCE \t\t BANK \t\t RATE OF INTEREST \t\t TOTAL AMOUNT");
        System.out.println(Cname + "\t\t\t" + Cid + "\t\t\t" + nay + "\t\t\t" + balance +
"\t\t\t" + "ICIC" + "\t\t\t" + ROI + "\t\t\t" + tbalance);
    }
}

public class interBank {

    public static void main(String[] args) {
        int ch;
        Scanner sc = new Scanner(System.in);
        System.out.println("1. AXES");
        System.out.println("2. ICIC");
        System.out.println("3. SBI");
        ch = sc.nextInt();
        switch (ch) {
            case 1 -> {
                Axes a = new Axes();
                a.get_details();
                a.show_details();
            }
            case 2 -> {
                ICIC i = new ICIC();
                i.get_details();
                i.show_details();
```

```
                }
                case 3 -> {
                    SBI s = new SBI();
                    s.get_details();
                    s.show_details();
                }
                default -> System.out.println("Invalid choice!");
            }
        }
    }
```

Output: