<u>Lab Experiment – 3</u>

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:

```
/**
 * @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\%";
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```

```
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" + Cid + "\t\t" + nay + "\t\t" + balance +
"\t\t\" + "AXES" + "\t\t\" + ROI + "\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' + Cid + "t\t' + nay + "t\t' + balance +
"\t\t\t" + "SBI" + "\t\t\t" + ROI + "\t\t\t" + tbalance);
  }
}
class ICIC 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 = 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 + "tt' + Cid + "tt' + nay + "tt' + 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:

```
1
ENTER CUSTOMER NAME:
ASHVATH
ENTER CID:
454
ENTER NUMBER OF YEARS:
NTER CURRENT BALANCE:
                                                                                                                                                   RATE OF INTEREST 5%
ENTER CUSTOMER NAME:
BARATH
ENTER CID:
655
ENTER NUMBER OF YEARS:
                                                                                          BALANCE
5000.0
000
USTOMER NAME
ARATH
                                                        NO. OF YEARS
                                                                                                                                                                                                 TOTAL AMOUNT
6400.0
  \Users\2162014\00P\exp3\src\main\java>java interBank
AXES
ICIC
SBI
NTER CUSTOMER NAME:
SHVATH
NTER CID:
65
NTER NUMBER OF YEARS:
NTER CURRENT BALANCE:
 L00
JSTOMER NAME
                                                                                                                                                                                               TOTAL AMOUNT
3612.0
                                                        NO. OF YEARS
                                                                                                                                                  RATE OF INTEREST
```