LAB 5 : 09/01/2024

Develop a java program to create a class Bank that maintains two kinds of account for its customers, one called savings account and the other called current account. The savings account provides compound interest and withdrawal facilities but no cheque book facility. The current account provides cheque book facility but no interest. Current account holders should also maintains a minimum balance & if the balance falls below this level, service charge is imposed.

```
import java.util.Scanner;

class Account{
    String name;
    int accNo;
    String type;
    double balance;

    Account (String name, int accNo, String type,
            double balance) {
        this.name = name;
        this.accNo = accNo;
        this.type = type;
        this.balance = balance;
    }

    void deposit (double amt){
        balance = balance + amt;
    }
```

```
    void withdraw(double amt) {
        if (balance<amt) {
            System.out.println("Insufficient Balance");
        }
        else {
            balance = balance - amt;
        }
    }

    void display(){
        System.out.println("Name:" +name+" \t Account No
        "+accNo+" \t Account Type : "+type+" \t Balance
        +balance);
    }
}

class savings_acc extends Account {
    private static double rate = 3.5;

    Savings_acc (String name, int accNo, double balance){
        super (name, accNo, "savings", balance);
    }

    void callInt (){
        double interest = (balance * 1 * rate)/100;
        System.out.println("Interest is " + Interest);
    }
}
```

```
class Current_acc extends Account{
    private double minBal = 500;
    private double s_charges = 50;

    Current_acc(String name, int accNo, double balance){
        super(name, accNo, "current", balance);
    }

    void check_bal()
    {
        if (balance < minBal)
        {
            System.out.println("Insufficient Balance");
            balance = balance - s_charges;
            System.out.println("Balance = "+ balance);
        }
    }
}

public class Bank{
    public static void main(String args[]){
        String name;
        int AccNO;
        String Type;
        double init_bal;

        Scanner s = new Scanner(System.in);
        System.out.println("Enter Customer Name :");
        name = s.nextLine();
        System.out.println("Enter Account NO :");
        AccNO = s.nextInt();
        System.out.println("Enter Account Type :");
```

```
Type = s.next();
System.out.println("Enter Initial Balance:");
init.bal = s.nextDouble();
double amt;
Account a = new Account(name, AccNo, Type, init.bal);
Savings_acc sv = Savings_acc(name, AccNo, init.bal);
Current_acc ca = Current_acc(name, AccNo, init.bal);

while(true){
  if( Type.equalsIgnoreCase("savings")){
    System.out.println("----MENU----");
    System.out.println("Enter 1:Deposit 2:Withdraw
    3: Interest 4: Display Details 5: Exit");

    int ch = s.nextInt();
    switch(ch){
      case 1:
        System.out.println("Enter The Amount:");
        amt = s.nextDouble();
        a.deposit(amt);
        break;
      case 2:
        System.out.println("Enter the withdrawing
        amount");
        amt = s.nextDouble();
        a.withdraw(amt);
        break;
      case 3:
        sv.calInt();
        break;
      case 4:
        a.display();
        break;
```

```
ccase 5:
    System.exit(0);
default:
    System.out.println("Invalid choice");
}
}
else {
System.out.println("---- MENU ----");
System.out.println("Enter 1: Deposit 2: Withdraw
3: Display");
ch = s.nextInt();
switch(ch){
    case 1:
        System.out.println("Enter the amount :");
        amt = s.nextDouble();
        ca.deposit(amt);
        break;
    case 2:
        System.out.println("Enter the amount :");
        amt = s.nextDouble();
        ca.withdraw(amt);
        ca.checkbal();
        break;
    case 3:
        ca.display();
        break;
    case 4:
        system.exit(0);
}
}
System.out.println("Sanketh M Hanasi 1BM22CS262");
}
```

Output:

Enter the name:
Sankeeth
Enter the Account Number:
123
Enter the Account type:
savings
Enter the Balance
1000

--MENU---
Enter 1: Deposit 2: Withdraw 3: Interest
4: Display 5: Exit
1
Enter amount
1000

--MENU----
Enter 1: Deposit 2: Withdraw 3: Interest
4: Display 5: Exit
2
Enter amount
1000
Insufficient Balance

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