

9/1/24

LAB - 5

classmate

Date _____

Page _____

Develop java program to develop a class bank with current account & savings account.

```
import java.util.Scanner;
```

```
class input {
```

```
    Scanner sc = new Scanner(System.in);
```

```
}
```

```
class Account extends input {
```

```
    String name;
```

```
    int accno;
```

```
    double balance;
```

```
    public void getDetails()
```

```
    {
```

```
        System.out.print("Enter name: ");
```

```
        name = sc.nextLine();
```

```
        System.out.print("Enter account number: ");
```

```
        accno = sc.nextInt();
```

```
    }
```

```
    public void deposit() {
```

```
        System.out.print("Enter amount to deposit: ");
```

```
        double amt = sc.nextDouble();
```

```
        balance += amt;
```

```
        System.out.println("Amount deposited successfully.");
```

```
    }
```

```
    public void withdraw() {
```

```
        System.out.print("Enter amt to withdraw: ");
```

```
        double amt = sc.nextDouble();
```

```
        if (balance >= amt) {
```

```
            balance -= amt;
```



```

        system.out.println("Amount withdraw successfully.");
    } else {
        system.out.println("Insufficient balance.");
    }
}
}

```

```

public void display () {
    system.out.println("Name: " + name);
    System.out.println("Account NO: " + accno);
    System.out.println("Balance: " + balance);
}
}

```

```

class Savings extends Account {
    final double interestRate = 0.04;

    public void computeInterest () {
        double interest = balance * interestRate;
        balance += interest;
        System.out.println("Interest credited: " + interest);
    }
}
}

```

```

class Current extends Account {
    final double minBalance = 500;
    final double penalty = 100;

    @Override
    public void withdraw () {
        super.withdraw();
        checkMinBalance();
    }
}
}

```



```
private void checkMinBalance() {  
    if (balance < minBalance) {  
        balance -= penalty;  
        system.out.println("penalty applied for low balance.");  
    }  
}
```

class Bank extends Account

```
{  
    public static void main (String[] args)  
    {
```

```
        Scanner sc = new Scanner (System.in);
```

```
        Savings ob1 = new saving();
```

```
        current ob2 = new current();
```

```
        ob1.getDetails();
```

```
        ob2.getDetails();
```

```
        int choice;
```

```
        String acc;
```

```
        System.out.println ("Menu:");
```

```
        System.out.println ("1. Deposit");
```

```
        System.out.println ("2. Withdraw");
```

```
        System.out.println ("3. Display Balance");
```

```
        System.out.println ("4. Compute Interest (savings only);
```

```
        System.out.println ("5. Exit");
```

```
        do {
```

```
            System.out.print ("Enter your choice:");
```

```
            choice = sc.nextInt();
```

```
            System.out.print ("Enter the acc type:");
```

```
            acc = sc.next();
```

```
            switch (choice) {
```


case 1:

```
if (acc.equals("savings")) ob1.deposit(); else  
    ob2.deposit();  
break;
```

case 2:

```
if (acc.equals("savings")) ob1.withdraw(); else  
    ob2.withdraw();  
break;
```

case 3:

```
if (acc.equals("savings")) ob1.withdraw();  
else ob2.withdraw();  
break;
```

case 4:

```
ob1.computeInterest();  
break;
```

case 5:

```
System.out.println("Existing...");  
break;
```

default:

```
System.out.println("Invalid choice");  
}
```

```
} while (choice != 5);
```

```
}
```

```
}
```


Output put :-

Enter name : Shamaranth

Enter acc no : 1

Enter name : Shreyas

Enter acc no : 2

Menu:

1) Deposit

2) Withdraw

3) Display Balance

4) Compute interest (Savings only)

5) Exit

Enter your choice : 1

Enter the acc type : saving

Enter amount to deposit : 1000

Amount deposited successfully

Enter your choice : 2

Enter the acc type : saving

Enter amount to withdraw : 500

Amount withdrawn successfully

Enter your choice : 3

Enter the acc type : saving

Name : shamaranth

Acc Number : 1

balance : 500.0

Enter your acc type : saving

Enter amount to withdraw : 400

Amount withdrawn successfully

penalty applied for low balance

Enter your choice : 3

Enter the acc type : current

Name : Shreyas

Account Number : 2

Balance : 300.0

Shreyas . K

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