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SURYA Gold

Date

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LAB-5

Bank Account

Create a class Account that stores customer name, account number and type of account. From this derive the classes ~~cur-acct~~ and ~~sav-acct~~ to make them more specific to their requirements. Achieve the following tasks:

- Accept deposit from customer and update the balance
- Display the balance
- compute and deposit interest
- Permit withdrawal and update the balance

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

```
class Input{
```

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

```
}
```

```
class Account extends Input{
```

```
    String name;
```

```
    int accNo;
```

```
    double balance;
```

```
    void getDetails(){
```

```
        System.out.println("Enter Name:");
```

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

```
        System.out.println("Enter acc No:");
```

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

```
    }
```

```
    void deposit(){
```

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

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

```
        balance += amt;
```



```

        System.out.println("Amount Deposited");
    }
    void withdraw() {
        System.out.print("Enter amount:");
        double amt = sc.nextDouble();
        if (balance >= amt) {
            balance -= amt;
            System.out.println("Amount Withdrawn");
        } else {
            System.out.println("Insufficient Balance");
        }
    }
}

```

```

void display() {
    System.out.println("Name: " + name);
    System.out.println("Account Number: "
        + accNo);
    System.out.println("Balance: " + balance);
}
}

```

Current
 Class ~~Savings~~ extends Account {
 double minbal = 500;
 double penalty = 100;

```

    void withdraw() {
        super.withdraw();
        checkMinBalance();
    }

```

```

    private void checkMinBalance() {
        if (balance < minBal) {
            balance -= penalty;
            System.out.println("Penalty applied for low balance");
        }
    }
}

```



```
class Savings extends Account {  
    double interestRate = 0.04;
```

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

```
class Bank extends Account {
```

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

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

```
        Current ob2 = new Current();
```

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

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

```
        int choice;
```

```
        String acc;
```

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

```
        System.out.println("1. Deposit In
```

```
        2. Withdraw In 3. Display Balance In
```

```
        4. Compute Interest (Savings Only) In
```

```
        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.display();

else

Ob2.display();

break;

case 4:

Ob1.computeInterest();

break;

case 5:

break;

default:

System.out.println("Invalid choice")

}

~~{ while (option != 5);~~

}

}

OUTPUT:

Enter name: Shamanth

Enter accNo: 1

Enter name: Shreyas

Enter accNo: 2

Menu

1. Deposit

2. Withdraw

3. Display

4. Compute Interest (Savings Only)

5. Exit

Enter your choice: 1

Enter acc type: saving

Enter deposit amount: 1000

Enter your choice: 1

Enter acc type: current

Enter deposit amount: 5000

Enter your choice: 2

Enter acc type: saving

Enter withdraw amount: 500

Enter your choice: 2

Enter acc type: current

Enter withdraw amount: 4600

Penalty applied.

Enter your choice: 3

Enter acc type: current

name: Shreyas

Acc number: 2

Balance: 300

Enter your choice: 4

Interest credited: 40

Enter your choice: 2

Enter acc type: saving

Enter withdraw amount: 1050 Insufficient Balance

Shamanth K Murthy

1BM22CS251

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