

```
import java.util.*;
```

```
class account
```

```
{
```

```
String cust-name;
```

```
long acc-no;
```

```
double balance;
```

```
int type-acc;
```

```
void input()
```

```
{
```

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

```
System.out.println("enter account details");
```

```
System.out.println("Enter customer name");
```

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

```
System.out.println("Enter customer account  
number");
```

```
acc-no = sc.nextLong();
```

```
System.out.println("enter customer's account type  
1. Savings account 2. Current account");
```

```
type-acc = sc.nextInt();
```

```
System.out.println("enter customer's balance  
amount in account");
```

```
balance = sc.nextDouble();
```

```
}
```

void deposit()

{

Scanner sc = new Scanner(System.in);

double amt;

System.out.println("Enter amount to be deposited");

amt = sc.nextDouble();

balance = balance + amt;

}

}

class Sav-act extends account

{

double interest;

void compute-interest()

{

Scanner sc = new Scanner(System.in);

int rate, time;

System.out.println("enter rate and time period");

rate = sc.nextInt();

time = sc.nextInt();

interest = balance \* Math.pow(1 + rate / 100.0, time) -  
balance;

System.out.println("Compound interest = " + interest);

balance = balance + interest;

System.out.println("Customer's balance amount  
in account | t" + balance);

}

void withdrawal()

{

Scanner sc = new Scanner(System.in);

double with;

System.out.println("Enter amount to be  
withdrawn");

with = sc.nextDouble();

if (with > balance)

System.out.println("Withdrawal not  
possible due to insufficient balance");

else

{

balance = balance - with;

System.out.println("Customer's balance  
amount | t" + balance);

}

}



void check()

{

double Penalty;  
if (balance < 2000.0)

{

Penalty = 200.0;

balance = balance - Penalty;

System.out.println("Balance amount  
less than minimum balance");

System.out.println("Penalty of Rs. 200");

System.out.println("Customer's balance amount  
in account is " + balance);

}

}

}

class Curr-acc extends account

{

void withdrawal()

{

```

Scanner sc = new Scanner(System.in);
double with;
System.out.println("enter amount to be withdrawn");
with = sc.nextDouble();
if (with > balance)
    System.out.println("withdrawal not possible  
due to insufficient balance");

```

else

```

{
    balance = balance - with;
    System.out.println("customer's balance amount in  
account is " + balance);
}

```

```

}
}

```

```

void check()
{

```

```

    double penalty;

```

```

    if (balance < 2000.0)

```

```

    {
        penalty = 200.0;
        balance = balance - penalty;
    }

```

```
System.out.println("balance amount lesser than  
minimum balance");
```

```
System.out.println("Penalty of Rs. 200");
```

```
System.out.println("customer balance amount/t" +  
balance);
```

```
}
```

```
}
```

```
}
```

```
class bank
```

```
{
```

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

```
    {
```

```
        Sav-act o1 = new Sav-act();  
        Curr-act o2 = new Curr-act();
```

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

```
        System.out.println("enter customer's account  
type 1. Savings account 2. current account");
```

```
        int ch = sc.nextInt();
```

```
        int n;
```

```
        if (ch == 1)
```

```
        {
```

```

o1.input();
o1.display();
System.out.println("enter 1.deposit + 2.withdrawal");
n = sc.nextInt();
if (n == 1)

```

```

    o1.deposit();
if (n == 2)

    o1.withdrawal();
    o1.computeInterest();
    o1.check();

```

```

}
else if (ch == 2)

```

```

{

```

```

    o2.input();
    o2.display();

    System.out.println
    System.out.println("enter 1.deposit + 2.withdrawal");
    n = sc.nextInt();
    if (n == 1)
        o2.deposit();
    if (n == 2)
        o2.withdrawal();
        o2.check();

```

```

}

```

```

}

```



```
1
enter customer's balance amount in account
30000
-----customer's account details-----
customer name    karthik
customer account number 34576897
customer's account type 1
customer's balance amount in account    30000.0
enter 1.deposit 2.withdrawal
1
enter amount to be deposited
560
enter rate and time period
2
2
compound interest = 1234.6239999999998
customer's balance amount in account    31794.624

...Program finished with exit code 0
Press ENTER to exit console.
```





```
import java.util.Scanner;
class account
{
    String cust_name;
    long acc_no;
    double balance;
    int type_acc;
    void input()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("-----enter account details-----");
        System.out.println("enter customer name ");
        cust_name=sc.nextLine();
        System.out.println("enter customer account number");
        acc_no=sc.nextLong();
        System.out.println("enter customer's account type 1.savings account 2.current account");
        type_acc=sc.nextInt();
        System.out.println("enter customer's balance amount in account");
        balance=sc.nextDouble();
    }
    void display()
    {
```

```

39 ~ {
40     double interest;
41     void compute_interest()
42     {
43         Scanner sc=new Scanner(System.in);
44         int rate,time;
45         System.out.println("enter rate and time period ");
46         rate=sc.nextInt();
47         time=sc.nextInt();
48         interest=balance*Math.pow(1+rate/100.0,time)-balance;
49         System.out.println("compound interest = "+interest);
50         balance=balance+interest;
51         System.out.println("customer's balance amount in account\t"+balance);
52     }
53     void withdrawal()
54     {
55         Scanner sc=new Scanner(System.in);
56         double with;
57         System.out.println("enter amount to be withdrawn");
58         with=sc.nextDouble();
59         if(with>balance)

```

input

customer's balance amount in account      31794.624

...Program finished with exit code 0  
Press ENTER to exit console.



```

}
void display()
{
    System.out.println("-----customer's account details-----");
    System.out.println("customer name\t"+cust_name);
    System.out.println("customer account number\t"+acc_no);
    System.out.println("customer's account type\t"+type_acc);
    System.out.println("customer's balance amount in account\t"+balance);
}
void deposit()
{
    Scanner sc=new Scanner(System.in);
    double amt;
    System.out.println("enter amount to be deposited ");
    amt=sc.nextDouble();
    balance=balance+amt;
}
}
class Sav_acct extends account
{
    double interest;

```

input

customer's balance amount in account      31794.624

Program finished with exit code 0

ENTER to exit console.



```

78     }
79 }
80 class Curr_acct extends account
81 {
82     void withdrawal()
83     {
84         Scanner sc=new Scanner(System.in);
85         double with;
86         System.out.println("enter amount to be withdrawn");
87         with=sc.nextDouble();
88         if(with>balance)
89             System.out.println("withdrawal not possible due to insufficiant balance");
90         else
91         {
92             balance=balance-with;
93             System.out.println("customer's balance amount in account\t"+balance);
94         }
95     }
96     void check()
97     {

```



```

57 System.out.println("enter amount to be withdrawn");
58 with=sc.nextDouble();
59 if(with>balance)
60     System.out.println("withdrawal not possible due to insufficiant balance");
61 else
62 {
63     balance=balance-with;
64     System.out.println("customer's balance amount in account\t"+balance);
65 }
66 }
67 void check()
68 {
69     double penalty;
70     if(balance<2000.0)
71     {
72         penalty=200.0;
73         balance=balance - penalty;
74         System.out.println("balance amount lesser than minimum balance");
75         System.out.println("penalty of Rs.200");
76         System.out.println("customer's balance amount in account\t"+balance);

```

input

customer's balance amount in account 31794.624

...Program finished with exit code 0  
Press ENTER to exit console.



```

117 int ch=sc.nextLine();
118 int n;
119 if(ch==1)
120 {
121     o1.input();
122     o1.display();
123     System.out.println("enter 1.deposit 2.withdrawal");
124     n=sc.nextInt();
125     if(n==1)
126         o1.deposit();
127     if(n==2)
128         o1.withdrawal();
129     o1.compute_interest();
130     o1.check();
131 }
132 else if(ch==2)
133 {
134     o2.input();
135     o2.display();
136     System.out.println("enter 1.deposit 2.withdrawal");
137     n=sc.nextInt();

```

input

customer's balance amount in account      31794.624

...Program finished with exit code 0  
Press ENTER to exit console.



```

double penalty;
if(balance<2000.0)
{
    penalty=200.0;
    balance=balance - penalty;
    System.out.println("balance amount lesser than minimum balance");
    System.out.println("penalty of Rs.200");
    System.out.println("customer's balance amount in account\t"+balance);
}
}

class Main
{
    public static void main(String args[])
    {
        Sav_acct o1=new Sav_acct();
        Curr_acct o2=new Curr_acct();
        Scanner sc=new Scanner(System.in);
        System.out.println("enter customer's account type 1.savings account 2.current account");
        int ch=sc.nextInt();
    }
}

```

mer's balance amount in account      31794.624

ogram finished with exit code 0  
 ENTER to exit console.

```
127  
128         o1.withdrawal();  
129         o1.compute_interest();  
130         o1.check();  
131     }  
132     else if(ch==2)  
133     {  
134         o2.input();  
135         o2.display();  
136         System.out.println("enter 1.deposit 2.withdrawal");  
137         n=sc.nextInt();  
138         if(n==1)  
139             o2.deposit();  
140         if(n==2)  
141             o2.withdrawal();  
142         o2.check();  
143     }  
144 }  
145 }  
146 }  
147 }
```