

```
1  /*****
2  Develop a Java program to create a class Bank that maintains two kinds of account
3  *****/
4  import java.util.Scanner;
5  import java.lang.Math;
6  class bank{
7      String name;
8      int acc_no;
9      float bal, si;
10     Scanner scan = new Scanner(System.in);
11
12     void accept(){
13         System.out.println();
14         System.out.println("Enter the name of the account holder: ");
15         name = scan.nextLine();
16         System.out.println("Enter account number: ");
17         acc_no = scan.nextInt();
18         System.out.println("Enter account balance: ");
19         bal = scan.nextFloat();
20     }
21
22     void display(){
23         System.out.println();
24         System.out.println("Details-");
25         System.out.println("Name: "+name+"\nAccount number: "+acc_no+"\nBalance: "+bal);
26     }
27
28     void deposit(){
29         System.out.println();
30         System.out.println("Enter the amount to be deposited: ");
31         int amt = scan.nextInt();
32         bal = bal + amt;
33         System.out.println("Available balance= "+bal);
34     }
35 }
36
```

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36
37 class savings extends bank{
38
39     void cheque(){
40         System.out.println("\nNo cheque service");
41     }
42
43     void simple_interest(){
44         System.out.println();
45         Scanner scan = new Scanner(System.in);
46         System.out.println("\nEnter Rate of interest: ");
47         int r = scan.nextInt();
48         System.out.println("Enter the number of times interest applied per time period");
49         int n = scan.nextInt();
50         System.out.println("Enter the time elapse: ");
51         int t = scan.nextInt();
52         si = bal*(1+r/n);
53         System.out.println("Simple interest = Rs "+(Math.pow(si, n*t)));
54     }
55
56     void withdrawal(){
57         float amount;
58         System.out.println("No minimun balance required");
59         System.out.println("Enter the amount to be withdrawn");
60         amount = scan.nextFloat();
61         if(amount>bal)
62             System.out.println("Balance is insufficient");
63         else{
64             bal = bal - amount;
65             System.out.println(amount + " withdrawn");
66             System.out.println("Available balance= " + bal);
67         }
68     }
69 }
70
71 class current extends bank{
```

```

71 - class current extends bank{
72     float service_charge = 100;
73
74 - void cheque(){
75     System.out.println("\nCheque service available");
76 }
77
78 - void withdrawal(){
79     float amount;
80     System.out.println("Minimun balance = Rs 1000.00");
81     System.out.print("Enter the amount to be withdrawn: ");
82     amount = scan.nextFloat();
83     if(amount > bal)
84         System.out.println("Balance is insufficient");
85 - else{
86     bal= bal-amount;
87 - if(bal<1000){
88         bal = bal - service_charge;
89         System.out.println("Service charge of Rs "+ service_charge + " is added.");
90         System.out.println("Available balance= " + bal);
91     }
92 - else{
93         System.out.println(amount + " withdrawn");
94         System.out.println("Available balance= " + bal);
95     }
96 }
97 }
98 }
99
100 public class Main
101 - {
102 -     public static void main(String[] args) {
103
104         savings obj1 = new savings();
105         current obj2 = new current();

```



```
106
107     System.out.println("1. Savings");
108     System.out.println("2. Current");
109     System.out.print("Enter your choice: ");
110     Scanner scan = new Scanner(System.in);
111     int ch = scan.nextInt();
112     switch(ch){
113         case 1: obj1 = new savings();
114                 obj1.accept();
115                 obj1.display();
116                 obj1.cheque();
117                 obj1.deposit();
118                 obj1.simple_interest();
119                 obj1.withdrawal();
120                 break;
121
122         case 2: obj2 = new current();
123                 obj2.accept();
124                 obj2.display();
125                 obj2.cheque();
126                 obj2.deposit();
127                 obj2.withdrawal();
128                 break;
129
130         default: System.out.println("Invalid Input");
131     }
132 }
133 }
```

1. Savings

2. Current

Enter your choice: 1

Enter the name of the account holder:

abc

Enter account number:

123

Enter account balance:

2000

Details-

Name: abc

Account number: 123

Balance: 2000.0

No cheque service

Enter the amount to be deposited:

500

Available balance= 2500.0

Enter Rate of interest:

8

Enter the number of times interest applied per time period

3

Enter the time elapse:

4

Simple interest = Rs 3.167635202407837E46

No minimum balance required

Enter the amount to be withdrawn

1000

1000.0 withdrawn

Available balance= 1500.0

1. Savings

2. Current

Enter your choice: 2

Enter the name of the account holder:

abc

Enter account number:

123

Enter account balance:

2000

Details-

Name: abc

Account number: 123

Balance: 2000.0

Cheque service available

Enter the amount to be deposited:

500

Available balance= 2500.0

Minimum balance = Rs 1000.00

Enter the amount to be withdrawn: 1600

Service charge of Rs 100.0 is added.

Available balance= 800.0

...Program finished with exit code 0

Press ENTER to exit console.