

```
1 import java.util.Scanner;
2 import java.lang.Math;
3 class Account{
4     String name;
5     int account_no;
6
7     Scanner inp = new Scanner(System.in);
8
9     void getData() {
10         System.out.print("Enter name of the user : ");
11         name = inp.nextLine();
12         System.out.print("Enter your account number : ");
13         account_no = inp.nextInt();
14     }
15 }
16 class saving_acc extends Account {
17     double amount;
18     Scanner inp = new Scanner(System.in);
19     saving_acc() {
20         getData();
21         System.out.print("Enter the amount you want to deposit(Minimum Rs. 500) : ");
22         amount = inp.nextInt();
23     }
24
25
26     void cal_compoundIntrest() {
27         double compound_intrest;
28         int n;
29         int t;
30         int r;
31         System.out.print("Enter rate of interest : ");
32         r = inp.nextInt();
33         System.out.print("Enter the time period(in years) : ");
34         n = inp.nextInt();
35         compound_intrest = (double)amount*Math.pow((1+(r/100)),n);
36         System.out.println("The final amount user will have is "+(amount + compound_intrest));
37         amount = amount + compound_intrest;
38     }
39 }
```

```
40 void cheque_book_facility() {
41     System.out.println("Check book facility is not available.");
42 }
43
44 double display() {
45     return amount;
46 }
47
48 double withdrawl(int w_amount) {
49     if (w_amount>amount) {
50         System.out.println("Not enough balance\n Cannot process further");
51         return amount;
52     }
53     amount = amount - w_amount;
54     if(amount < 500) {
55         System.out.println("Your balance has fallen below the limit.\nRs.50 is being deducted");
56         amount = amount - 50;
57     }
58     return amount;
59 }
60 }
61
62 class current_acc extends Account {
63     Scanner inp = new Scanner(System.in);
64     int amount;
65
66     current_acc() {
67         getData();
68         System.out.print("Enter the amount you want to deposit(Minimum Rs.500) : ");
69         amount = inp.nextInt();
70     }
71
72     void cheque_book_facility() {
73         System.out.println("Check book facility is available.");
74     }
75
76     double display() {
77         return amount;
78     }
79 }
```

```
80     double withdrawl(int w_amount) {
81         if (w_amount>amount) {
82             System.out.println("Not enough balance\n Cannot process further");
83             return amount;
84         }
85         amount = amount - w_amount;
86         if(amount < 500) {
87             System.out.println("Your balance has fallen below the limit.\nRs.50 is being deducted");
88             amount = amount - 50;
89         }
90         return amount;
91     }
92 }
93
94 class week8Bank {
95     public static void main(String args[]) {
96         Scanner inp = new Scanner(System.in);
97         System.out.println("-----WELCOME TO ONLINE BANK-----");
98         System.out.println("What type of account you want to open : ");
99         System.out.println("1.Savings Account\n2.Current Account\n3.Exit");
100        System.out.print("Enter your choice : ");
101        int opt = inp.nextInt();
102
103        if(opt == 1) {
104            saving_acc s = new saving_acc();
105            System.out.println("You can choose from the given queries : ");
106            System.out.println("1.Calculate Compound Interest\n2.Check for Cheque Book facility\n3.Display Balance\n4.Withdraw");
107            System.out.print("Query number : ");
108            int choice = inp.nextInt();
109
110            while(choice != 5) {
111                switch(choice) {
112                    case 1 : s.cal_compoundIntrest();
113                        break;
114                    case 2 : s.cheque_book_facility();
115                        break;
116                    case 3 : System.out.println("Balance : "+s.display());
117                        break;
```

```
110 while(choice != 5) {
111     switch(choice) {
112         case 1 : s.cal_compoundIntrest();
113                 break;
114         case 2 : s.chque_book_facility();
115                 break;
116         case 3 : System.out.println("Balance : "+s.display());
117                 break;
118         case 4 : System.out.print("Enter the amount you want to withdraw : ");
119                 int amt = inp.nextInt();
120                 System.out.println("Balance after withdrawl : Rs."+s.withdrawl(amt));
121                 break;
122     }
123     System.out.print("Next Query number : ");
124     choice = inp.nextInt();
125 }
126
127 System.out.print("-----Visit Again-----");
128 }
129
130
131 if(opt == 2) {
132     current_acc c = new current_acc();
133     System.out.println("You can choose from the given queries : ");
134     System.out.println("1.Check for Cheque Book facility\n2.Display Balance\n3.Withdraw Money\n4.Exit");
135     System.out.print("Query number : ");
136     int choice = inp.nextInt();
137
138     while(choice != 4) {
139         switch(choice) {
140             case 1 : c.chque_book_facility();
141                     break;
142             case 2 : System.out.println("Balance : "+c.display());
143                     break;
144             case 3 : System.out.print("Enter the amount you want to withdraw : ");
145                     int amt = inp.nextInt();
146                     System.out.println("Balance after withdrawl : Rs. "+c.withdrawl(amt));
147                     break;
148         }
```



```
125         choice = inp.nextInt();
126     }
127
128     System.out.print("-----Visit Again-----");
129 }
130
131 if(opt == 2) {
132     current_acc c = new current_acc();
133     System.out.println("You can choose from the given queries : ");
134     System.out.println("1.Check for Cheque Book facility\n2.Display Balance\n3.Withdraw Money\n4.Exit");
135     System.out.print("Query number : ");
136     int choice = inp.nextInt();
137
138     while(choice != 4) {
139         switch(choice) {
140             case 1 : c.cheque_book_facility();
141                     break;
142             case 2 : System.out.println("Balance : "+c.display());
143                     break;
144             case 3 : System.out.print("Enter the amount you want to withdraw : ");
145                     int amt = inp.nextInt();
146                     System.out.println("Balance after withdrawl : Rs. "+c.withdrawl(amt));
147                     break;
148         }
149         System.out.print("Next Query number : ");
150         choice = inp.nextInt();
151     }
152
153     System.out.print("-----Visit Again-----");
154 }
155 }
156 }
157 }
```

dhruvdubey@Dhruvs-MacBook-Air JavaLab % java week8Bank

-----WELCOME TO ONLINE BANK-----

What type of account you want to open :

1.Savings Account

2.Current Account

3.Exit

Enter your choice : 1

Enter name of the user : Dhruv Dubey

Enter your account number : 12137134

Enter the amount you want to deposit(Minimum Rs. 500) : 2000

You can choose from the given queries :

1.Calculate Compound Interest

2.Check for Cheque Book facility

3.Display Balance

4.Withdraw Money

5.Exit

Query number : 1

Enter rate of interest : 13

Enter the time period(in years) : 2

The final amount user will have is 4000.0

Next Query number : 2

Check book facility is not available.

Next Query number : 3

Balance : 4000.0

Next Query number : 4

Enter the amount you want to withdraw : 3600

Your balance has fallen below the limit.

Rs.50 is being deducted

Balance after withdrawl : Rs.350.0

Next Query number : 3

Balance : 350.0

Next Query number : 5

-----Visit Again-----%

dhruvdubey@Dhruvs-MacBook-Air JavaLab %

dhruvdubey@Dhruvs-MacBook-Air JavaLab % java week8Bank

-----WELCOME TO ONLINE BANK-----

What type of account you want to open :

1.Savings Account

2.Current Account

3.Exit

Enter your choice : 2

Enter name of the user : Dhruv Dubey

Enter your account number : 12346541

Enter the amount you want to deposit(Minimum Rs.500) : 2800

You can choose from the given queries :

1.Check for Cheque Book facility

2.Display Balance

3.Withdraw Money

4.Exit

Query number : 1

Check book facility is available.

Next Query number : 2

Balance : 2800.0

Next Query number : 3

Enter the amount you want to withdraw : 1300

Balance after withdrawl : Rs. 1500.0

Next Query number : 3

Enter the amount you want to withdraw : 1700

Not enough balance

Cannot process further

Balance after withdrawl : Rs. 1500.0

Next Query number : 3

Enter the amount you want to withdraw : 1300

Your balance has fallen below the limit.

Rs.50 is being deducted

Balance after withdrawl : Rs. 150.0

Next Query number : 4

-----Visit Again-----%

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