

```
1 package Bank;
2
3 import java.util.Scanner;
4
5 // Superclass
6 class Bankac {
7     String acno;
8     double balance;
9     String name;
10
11     Bankac() {
12         acno = null;
13         balance = 0;
14         name = null;
15     }
16
17     Bankac(String accountno, double balance, String name) {
18         this.acno = accountno;
19         this.balance = balance;
20         this.name = name;
21     }
22
23     public void deposit(double amount) {
24         balance += amount;
25         System.out.println("₹" + amount + " deposited successfully.");
26     }
27
28     public void withdraw(double amount) {
29         if (amount <= balance) {
30             balance -= amount;
31             System.out.println("₹" + amount + " withdrawn successfully.");
32         } else {
33             System.out.println("Insufficient balance");
34         }
35     }
36
37     public void showBalance() {
38         System.out.println("Current Balance: ₹" + balance);
39     }
40
41     public void displayDetails() {
42         System.out.println("Account Holder: " + name);
43         System.out.println("Account Number: " + acno);
44         System.out.println("Balance: ₹" + balance);
45     }
46 }
47
48 // Subclass
49 public class SavingAccount extends Bankac {
50     double rate;
51
52     SavingAccount() {
53         super();
54         rate = 0;
55     }
56
57     SavingAccount(String accountno, double balance, String name, double rate) {
58         super(accountno, balance, name);
```

```
59     this.rate = rate;
60 }
61
62 public double calInterest() {
63     return (balance * rate * 1) / 100;
64 }
65
66 public static void main(String[] args) {
67     Scanner sc = new Scanner(System.in);
68
69     // Input details once
70     System.out.print("Enter Account Number: ");
71     String accountno = sc.nextLine();
72
73     System.out.print("Enter Name: ");
74     String name = sc.nextLine();
75
76     System.out.print("Enter Balance: ");
77     double balance = sc.nextDouble();
78
79     System.out.print("Enter Interest Rate: ");
80     double rate = sc.nextDouble();
81
82     // Create SavingAccount object
83     SavingAccount sa1 = new SavingAccount(accountno, balance, name, rate);
84
85     int choice;
86     do {
87         // Display menu
88         System.out.println("\nMenu");
89         System.out.println("1. Display Account Details");
90         System.out.println("2. Deposit");
91         System.out.println("3. Withdraw");
92         System.out.println("4. Show Balance");
93         System.out.println("5. Calculate Interest");
94         System.out.println("6. Exit");
95         System.out.print("Enter your choice: ");
96         choice = sc.nextInt();
97
98         // Handle menu options
99         switch (choice) {
100             case 1:
101                 sa1.displayDetails();
102                 break;
103
104             case 2:
105                 System.out.print("Enter amount to deposit: ");
106                 double depAmount = sc.nextDouble();
107                 sa1.deposit(depAmount);
108                 break;
109
110             case 3:
111                 System.out.print("Enter amount to withdraw: ");
112                 double withAmount = sc.nextDouble();
113                 sa1.withdraw(withAmount);
114                 break;
115
116             case 4:
```

```
117         sa1.showBalance();
118         break;
119
120     case 5:
121         double interest = sa1.calInterest();
122         System.out.println("Calculated Interest for 1 year: ₹" + interest);
123         break;
124
125     case 6:
126         System.out.println("Exiting... Thank you!");
127         break;
128
129     default:
130         System.out.println("Invalid choice. Please try again.");
131     }
132 } while (choice != 6);
133
134 sc.close();
135 }
136 }
```