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1 import java.util.Scanner;
2 abstract class Account
3 {
4     String cust_name;
5     long acc_no;
6     String acc_type;
7     double balance;
8     double min_bal = 1000.0;
9     Account (String cust_name, long no,String acc_type,double balance)
10 {
11     this.cust_name=cust_name;
12     this.acc_no=acc_no;
13     this.acc_type=acc_type;
14     this.balance=balance;
15 }
16 abstract void deposit(double amount);
17 abstract void display();
18 abstract void withdrawal(double amount);
19 }
20
21 class Curr_acct extends Account
22 {
23     double penalty=100.0;
24     Curr_acct (String cust_name, long acc_no,String acc_type,double balance)
25     {
26         super(cust_name,acc_no,acc_type,balance);
27         System.out.println("Name of the customer: "+cust_name);
28         System.out.println("Account Number : "+acc_no);
29         System.out.println("Account type: "+acc_type);
30         System.out.println("Balance: "+balance);
31     }
32
33     void deposit(double amount)
34     {
35         this.balance = this.balance+amount;
36     }
37
38     void display()
39     {
40         System.out.println("Balance is: " + this.balance);
41     }
42     void withdrawal(double amount)
43     {
44         this.balance = this.balance-amount;
45         imposepenalty();
46     }

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44     {
45         this.balance = this.balance-amount;
46         imposepenalty();
47     }
48     void imposepenalty()
49     {
50         if(this.balance<min_bal)
51         {
52             this.balance=this.balance-penalty;
53         }
54     }
55     class Sav_acct extends Account
56     {
57         Sav_acct(String cust_name, long acc_no,String acc_type,double balance)
58         {
59             super(cust_name,acc_no,acc_type,balance);
60             System.out.println("Name of the customer: "+cust_name);
61             System.out.println("Account Number : "+acc_no);
62             System.out.println("Account type: "+acc_type);
63             System.out.println("Balance: "+balance);
64         }
65         void deposit(double amount)
66         {
67             this.balance = this.balance+amount;
68             interest();
69         }
70         void interest()
71         {
72             int rate=10,time=1;
73             float ci=(float) (this.balance*Math.pow(1+rate/100.0,time)-this.balance);
74             this.balance=this.balance+ci;
75         }
76         void display()
77         {
78             System.out.println("Balance is: " +this.balance);
79         }
80         void withdrawal(double amount)
81         {
82             this.balance=this.balance-amount;
83         }
84     }
85     class bank
86     {
87         public static void main(String[] args)

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class bank
{
    public static void main(String[] args)
    {
        Scanner ss = new Scanner(System.in);
        Double amount;
        int flag = 0;
        while( flag == 0)
        {
            System.out.println("Enter the type of Account:\n1:Current account\n2:Savings account");
            int choice=ss.nextInt();
            switch(choice)
            {
                case 1: System.out.println("\nCurrent account:\n");
                    Curr_acct c = new Curr_acct("Rahul", 15768912, "current", 30000.00);
                    int flag1 = 0;
                    while( flag1 == 0)
                    {
                        System.out.println("Enter your choice\n1:Deposit amount\n2:DisplayBalance\n3:Withdraw");
                        int choice1= ss.nextInt();
                        switch (choice1)
                        {
                            case 1:
                                System.out.println("Enter amount to be deposited:");
                                amount = ss.nextDouble();
                                c.deposit(amount);
                                break;

                            case 2:
                                c.display();
                                break;

                            case 3:
                                System.out.println("Enter amount you want to withdraw:");
                                amount = ss.nextDouble();
                                c.withdrawal(amount);
                                break;

                            default:
                                flag1 = 1;
                        }
                    }
                    break;
                case 2: System.out.println("\nSavings account:\n");
                    Sav_acct s = new Sav_acct("Vijay", 68432179, "Savings", 6000.00);
                    int flag2 = 0;
            }
        }
    }
}

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116         break;
117     case 3:
118         System.out.println("Enter amount you want to withdraw:");
119         amount = ss.nextDouble();
120         c.withdrawal(amount);
121         break;
122
123     default:
124         flag1 = 1;
125     }
126 }
127 break;
128 case 2: System.out.println("\nSavings account:\n");
129 Sav_acct s = new Sav_acct("Vijay", 68432179, "Savings", 6000.00);
130 int flag2 = 0;
131 while(flag2 == 0)
132 {
133     System.out.println("Enter your choice\n1:Deposit amount\n2:DisplayBalance\n3:Withdraw");
134     int choice2 = ss.nextInt();
135     switch (choice2)
136     {
137         case 1: System.out.println("Enter the Amount to be Deposited:");
138             amount = ss.nextDouble();
139             s.deposit(amount);
140             break;
141         case 2:
142             s.display();
143             break;
144         case 3:
145             System.out.println("Enter the Amount you want to Withdraw:");
146             amount = ss.nextDouble();
147             s.withdrawal(amount);
148             break;
149         default:
150             flag2 = 1;
151     }
152 }
153 break;
154 default: flag=1;
155 }
156 }
157 }
158 }
159

```

1:Current account

2:Savings account

1

Current account:

Name of the customer: Rahul

Account Number : 15768912

Account type: current

Balance: 30000.0

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

1

Enter amount to be deposited:

100

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

3

Enter amount you want to withdraw:

10000

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

2

Balance is: 20100.0

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

1

Enter amount to be deposited:

200

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

2

Balance is: 20300.0

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

4

Enter the type of Account:

1:Current account

2:Savings account

2:DisplayBalance

3:Withdraw

4

Enter the type of Account:

1:Current account

2:Savings account

2

Savings account:

Name of the customer: Vijay

Account Number : 68432179

Account type: Savings

Balance: 6000.0

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

1

Enter the Amount to be Deposited:

200

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

2

Balance is: 6820.0

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

3

Enter the Amount you want to Withdraw:

6000

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

2

Balance is: 820.0

Enter your choice

1:Deposit amount

2:DisplayBalance

3:Withdraw

4

Enter the type of Account:

1:Current account

2:Savings account