lab5

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import java.util.*;
class Account{
    String acc_name;
    int acc_num;
    String cust_name;
    double balance;
    Scanner s=new Scanner(System.in);
    void accept(){
        System.out.println("Customer name:");
        cust_name=s.nextLine();
        System.out.println("Account number:");
        acc_num=s.nextInt();
        System.out.println("Balance amount:");
        balance=s.nextDouble();
    }
    void display(){
        System.out.println("Customer name:"+
        cust_name);
        System.out.println("Account number:"+
        acc_num);
        System.out.println("Balance amount:"+
        balance);
    }
    void deposit(){
        int amt;
        System.out.println("Enter the amount
        to be deposited:");
        amt=s.nextInt();
        balance=balance+amt;
    }
}
class Savings_ac extends Account{
    double inter;
    double comp_inter(){
        int time;
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        int rate = 10;
        System.out.println("Enter the time : ");
        time = s.nextInt();
        inter = balance * Math.pow(1+(double) rate/100,time);
        return inter;
    }
    void update_balance(){
        balance = balance + comp_inter();
    }
    void withdrawal(){
        int amount;
        System.out.println("Enter the amount to be
        withdrawn:");
        amount = s.nextInt();
        if (balance >= amount)
        {
            balance = balance - amount;
        }
        else{
            System.out.println("The amount cannot be
            withdrawn as there is no sufficient
            balance");
        }
    }
}
class Current_acc extends Account{
    boolean check_book;
    int penalty = 50;
    double m_bal = 500;
    void min_bal()
    {
        if (balance <= m_bal ){
            balance = balance - penalty;
            System.out.println("Penalty is
            imposed as penalty is less than
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            500");
        }
        else {
            System.out.println("No penalty is imposed");
        }
    }

    void withdrawal(){
        int amt;
        System.out.println("Enter the amount to be
        withdrawn:");
        amt = s.nextInt();
        if (balance - amt > m-bal){
            if (balance >= amount)
            {   balance = balance - amt;
            }
            else{
                System.out.println("The amount cannot
                be withdrawn as there is no enough
                amount");
            }
        }
        else {
            System.out.println("The penalty will be "+
            penalty +" if the balance after
            withdrawal is less than the minimum
            balance");
            balanie = balanie - amt;
            min - bal();
        }
    }
}

public class Bank {
    public static void main(String[] args)
    {   Scanner s=new Scanner(System.in);
        SavingS-acc s = new SavingS-acc();
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Current acc = new Current_acc();
System.out.println("Press 1 for savings and 2
for current account :");
int ch = sc.nextInt();
if (ch==1){
    s.acc_type = "Savings";
    s.accept();
    s.display();
    System.out.println("Type of account:"+
    s.acc_type);
    s.deposit();
    s.display();
    System.out.println("Type of account:"+
    s.acc_type);
    s.update_balance();
    s.display();
    System.out.println("Type of account:"+
    s.acc_type);
    s.withdrawal();
    s.display();
    System.out.println("Type of account:"+
    s.acc_type);
}
else if (ch==2){
    c.acc_type = "current";
    c.accept();
    c.display();
    System.out.println("Type of account:"+
    c.acc_type);
    c.deposit();
    c.display();
    System.out.println("Type of account:"+
    c.acc_type);
    c.withdrawal();
    c.display();
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        System.out.println("Type of account:"
        c.acc-type);}
    else{
        System.out.println("please input a valid
        number");
    }
}}
```