Object Oriented Programming - Lab 4

Date: 08-09-2021

1. Create the following classes:

a. Account

Attributes: AccountNumber, Password, Name, Balance

- 1. deposit (double)
- 2. withdraw (double)
- addInterest() A constant interest of 10% will be added to balance
- 4. other get, set methods for fields

b. SavingsAccount extends Account

Attributes: interest percent (double)

Methods: addInterest() - should increase the balance by the interest percent %

c. CurrentAccount extends Account

Attributes: limit (double)

Methods: withdraw (double) - should allow the withdrawal only if the requested amount does not exceed the limit field.

Add appropriate get, set methods in each class

[Note: ensure that you have print statements in all methods, so that you can easily check whether the method was successfully invoked]

d. BankApplication

The main method will be in this class. In the main method, create one general account, one saving account, and one current account object. The initial properties are mentioned in the table below. After creation, perform the operations as mentioned in the table:

S.No	Account Type	Initial values	Operations to Perform
1	General Account	Balance: 10000	Deposit 100 Withdraw 2000 addInterest printBalance
2	Savings account	Balance: 50000 Interest: 12%	Deposit 100 Withdraw 2000 addInterest printBalance
3	Current Account	Balance: 5000 Limit: 1000	Deposit 100 Withdraw 2000 (should fail

printBalance

Note: Do not take any input from the user. Hardcode the input values

To be uploaded:

- One java file named BankApplication.java which contains the following classes
 - BankApplication (only public class)
 - Account
 - SavingsAccount
 - CurrentAccount
- Screenshot(s) of the output (jpg/png)
 - o Try to show all output in a single screenshot if possible, otherwise use two
- Do not zip