

LAB211 Assignment

Type:
Code:
LOC:
Slot(s):

Short Assignment
J1.S.H205
60
1

Title

Banking Account

Background

N/A

Program Specifications

A company has written a large class `BankingAccount` with many methods including:

Method/Constructor	Description
<code>public BankingAccount(Startup s)</code>	constructs a <code>BankingAccount</code> object using information in the <code>Startup</code> object <code>s</code>
<code>public void debit(Debit d)</code>	records the given debit
<code>public void credit(Credit c)</code>	records the given credit
<code>public int getBalance()</code>	returns current balance in pennies

Design a new class `MinMaxAccount` whose instances can be used in place of a `BankingAccount` object but include new behavior of remembering the minimum and maximum balances ever recorded for the account. You should provide the same methods as the superclass, as well as the following new behavior:

Method/Constructor	Description
<code>public MinMaxAccount(Startup s)</code>	constructs a <code>MinMaxAccount</code> object using information in the <code>Startup</code> object <code>s</code>
<code>public int getMin()</code>	returns minimum balance in pennies
<code>public int getMax()</code>	returns maximum balance in pennies

The account's constructor sets the initial balance based on the `Startup` information. Assume that only the `debit` and `credit` methods change an account's balance.