

# Exercise 1

In this exercise your task is to write a java class, who's instances represent a bank account.

## Step 1: Design a BankAccount Java class

Your task is to create a new class in IntelliJ with the name 'BankAccount'. Our BankAccount has following attributes:

- account number
- owner
- amount

Think of suitable datatypes and define the attributes in your class. (**IMPORTANT: all attributes should be private!**)

After the attributes are defined, you can start implementing two constructors for the BankAccount class (one without parameters and one, that allows us to set all attributes). When you finished this task, the getter and setter methods should be added to the class.

As the account only allows a positive amount of money, make sure that only positive values can be set! Think of ways how to deal with the situation, when somebody tries to set a negative amount of money.

Implement a `toString()` method for your account. This method should return a String, that contain the account number, the owners name and the amount of money on this account.

## Step 2: Instantiate BankAccount objects

Now we are going to test our implementation of our BankAccount class.

At first declare a variable of type 'BankAccount' and instantiate a new object for it, with the empty constructor. Set all attributes with the setter methods and print the result of the `toString` method to the console.

Now try to set a negative amount of money and print the result to the console again. Observer how your program behaves.

Next we declare a new variable of type 'BankAccount' and instantiate a new object for it with the constructor, that allows us to set all attributes.

Again, print the result of the new object's `toString` method to the console.