2.0 Bank accounts

Look at the Account class `Account.java` and write a main method in a different class to briefly experiment with some instances of the `Account` class.

- Using the `Account` class as a base class, write two derived classes called `SavingsAccount` and `CurrentAccount`. A `SavingsAccount` object, in addition to the attributes of an `Account` object, should have an interest variable and a method which adds interest to the account. A `CurrentAccount` object, in addition to the attributes of an `Account` object, should have an overdraft limit variable. Ensure that you have overridden methods of the Account class as necessary in both derived classes.
- Now create a `Bank` class, an object of which contains an array of `Account` objects. Accounts in the array could be instances of the `Account` class, the `SavingsAccount` class, or the `CurrentAccount` class. Create some test accounts (some of each type).
- Write an update method in the `Bank` class. It iterates through each account, updating it in the following ways: Savings accounts get interest added (via the method you already wrote); `CurrentAccounts` get a letter sent if they are in overdraft.
- The `Bank` class requires methods for opening and closing accounts, and for paying a dividend into each account.

Hints:

- Note that the balance of an account may only be modified through the `deposit(double)` and `withdraw(double)` methods.
- The `Account` class should not need to be modified at all.
- Be sure to test what you have done after each step.

Consider writing some unit tests as well!