Exercise 02: Set and duplicates

In this exercise, we will be implementing the set data structure (see StringSet interface) and then using it to find words in texts that occur at least twice.

Task 1: StringSet

Complete the `StringSetImpl` class by implementing the `add`, `contains`, `remove` and `size` methods.

- Implement the set as a tree structure, as discussed in the lecture.
- Implement the required helper class as an *inner class*.
- The String class provides the `equals` and `compareTo` methods for comparing strings, see https://docs.oracle.com/javase/9/docs/api/java/lang/String.html
- Verify that the testSetTest test runs without errors.

Task 2: Duplicates

Implement the static method `Duplicates.findDuplicates()` in which you now use the set to find the words in a string that occur at least twice.

- The `String.split` method splits a single string into an array of multiple strings.
- The `String.replaceAll` method can be used to remove certain characters from a string; existing strings are unchangeable (*immutable*) in Java - see the documentation https://docs.oracle.com/javase/9/docs/api/java/lang/String.html#replaceAll-java.lang.String-java.lang.String-
- Verify that the `testFindDuplicates` test runs without errors.