Exercise 02.04 – JUnit test for ArrayStack

The four uploaded jar-files (`Stack1.jar`, `Stack2.jar`, `Stack3.jar` and `Stack4.jar`) each contain the interface `StackADT<T>` and one version of the implementation `ArrayStack<T>`.

Make a JUnit test and test all four versions of `ArrayStack` and for each, specify which test they have failed (if any), an idea when they fail the test and in which method(s) in `ArrayStack` to look for errors.

Specification for interface `StackADT<T>`

- http://ict-engineering.dk/javadoc/Collections/utility/collection/StackADT.html

Further specifications for all four implementations of `ArrayStack<T>`.

- The stack may contain `null` elements
- Duplicate elements are allowed
- A stack is never full
- Default capacity is 100 (initial capacity when calling the zero-args constructor)
- After trying to add more elements when the size is equal to the capacity, a new array with twice the capacity is created
- `toString` method return a string with the elements separated with comas and encapsulated in a set of curly braces. Top element first, example: `"{C, B, A}"`

Remember to test the following in your JUnit class

- Boundaries (using Boundary value analysis)
- Using equivalence partitioning
- `null` elements and duplicates
- All legal types of exceptions

Exercise 02.05 – JUnit test for BoundedArrayQueue

Part 1: Make a JUnit test and test your solution to `BoundedArrayQueue`

Part 2: Find another pair programming group and get their implementation to `BoundedArrayQueue` (and give them your version). Run the same JUnit test and test their solution to `BoundedArrayQueue`