Classwork Lab: ArrayFun.java

Purpose: Create a file or pair of files that practice array operations of both primitive data types and objects. Work alone or with one person to practice accessing an element's attribute in a list of objects. If you choose to work with a partner, it may NOT be with someone you have previously worked with in this course.

Object array:

- Download the `Rectangle.java` class from the Movies and Lecture Notes page, Lecture Topic #9.
- Create a 5 element array of `Rectangles` named `rectList`, giving your choice of various widths and lengths to each `Rectangle`
- Access and print out the length of the `Rectangle` in the third index
- Change the width of the last `Rectangle` to 5 and print it out
- Try to access past the end of the array and notice what happens
- Write code to demonstrate a `nullPointerException`

Integer array:

- Create a ten element integer array named `intList`.
- Assign randomly generated values from [-10, 15] to <u>the first eight</u> elements – are there any values in the last two indexes?
- Iterate over the array with a for-each loop to find the sum of the values in the array
- Iterate over the array to find the index of the lowest value

General:

- Use well designed code – lots of methods!
- It is okay to have a driver and a class for your design, or you may work this as an "all-in-one" style file.
- Make sure you have lots of output statements so any other person could follow what you code is doing.
- Show me in class when you finish – no Canvas submission for this assignment.