Strings exercise

Goal: To learn more about how `Strings` work in Processing.

1. Get the *Alice* program working on your own computer (downloadable from the syllabus page). You will have to make sure `alice.txt` is in your Processing project directory.

2. Instead of printing out the whole text of "Alice in Wonderland", change the program to print out the number of lines in the file.

3. After printing out the number of lines in the file, print out the number of *characters* in the first line of the file. This will require looking at the Processing reference. Click on the entry for *String*, and you will see several functions there. One of them is what you want.

4. Now, print out the number of characters in the *whole file*.

5. What is the average length of the lines in the file?

6. Write a loop to print out the lines of the file.

7. Modify that loop to print out only those lines that have at least three characters.

8. Modify that loop to print out only the first three characters of each line that has at least three characters.

9. Modify that loop to print out whole lines, but only those lines beginning with the characters `the`.

    > **IMPORTANT NOTE**: Comparing two `Strings` for equality using `==` in Processing ***does not work***. Instead, use the `.equals()` method, as described in the reference page for `String`. There is a good reason for this, but we won't get there for another few weeks.