

Assignment 2

Objectives

- Experience working with Objects and Arrays in Java
- Experience writing both static and non-static methods
- Further experience with code testing and debugging

Objectives

This assignment requires you to implement and test non-static methods in the Date class for Part 1, and then implement and test static methods in the A2Exercises class for Part 2.

Although there is a tester provided for this assignment, it does not include a comprehensive set of tests for each method. You should add your own tests for any test cases not considered.

Note: The automated grading of your assignment will include some different and additional tests to those found in the A2Tester.java file.

Quick Start

1. Download all of the .java files found in the **Resources > Assignments > a2** folder.
2. Compile and run A2Tester.java
3. Open the A2Tester.java file. Read through the tests for testDateConstructor to see what the expected behaviour is for the second Date constructor. Implement the second Date constructor, save, and then recompile and run A2Tester.java. If any tests fail, fix the errors until all of the tests pass for that method. Add any tests that you feel are necessary.
4. After finishing your implementation of the second Date constructor, uncomment the second test method in A2Tester.java (testEquals). Follow the same process that you did in step 3. until you are certain the equals method has been implemented correctly in the Date class.
5. Continuing moving down one test method at a time until all of the required methods have been implemented. Remember to write additional tests until you are sure that your implementation will work correctly under all different possible input scenarios.

CRITICAL: Any compile or runtime errors will result in a **zero grade** (as if the tester crashes it will not be able to award you any points for any previous tests that may have passed). Make sure to compile and run your program **before** submitting it!

Submission and Grading

Submit **Date.java** and **A2Exercises.java** with your name and student ID at the top of each file using ConneX.

If you chose not to complete some of the methods required, you **must provide a stub for the incomplete method(s)** in order for our tester to compile (there are stubs for each method right now, which is why it will compile without issue). If you submit files that do not compile with our tester, you will receive a **zero grade** for the assignment. It is your responsibility to ensure you follow the specification and submit the correct files. Additionally, your code must **not** be written to specifically pass the test cases in the tester, instead, it must work on all valid inputs. We may change the input values when we run the tests and we will inspect your code for hard-coded solutions.

Be sure you submit your assignment, not just save a draft. ALL late and incorrect submissions will be given a **ZERO** grade. A reminder that it is OK to talk about your assignment with your classmates, but not to share code electronically or visually (on a display screen or paper). We will be using plagiarism detection software.