Assignment 2 Code Review

1. Specification / Design

The functionality described in the specification is fully implemented by the code.

There is no excess functionality in the code.

2. Initialization and Declarations

All local and global variables initialized before use.

Variables and class members are of the correct type and mode.

A constructor was called and used as a single instance during program execution.

All needed import statements were included.

3. Method Calls

All parameters presented in correct order.

Methods were called with proper parameters (and types).

Correct methods were called.

Methods returned values (and threw exceptions) properly.

4. Arrays

Not Applicable. Used with only one special array type - the String class.

5. Object Comparison

No comparison. Only charAt[index] used to process single character in the string.

6. Output Format

There was an incorrect label "Lab4" which I changed to Assignment 2.

This is a java.swing GUI-base application and all spaces were provided as best as my eyes allowed.

7. Computation, Comparisons, and Assignments

Order of computation / evaluation, operator precedence and parentheses were checked with correct arrangements.

There was no division involved.

No truncation/rounding found.

Proper relational and logical operators were used.

Error conditions were legitimate in all cases.

No implicit type conversion.

8. Exceptions

All relevant exceptions were caught.

9. Flow of Control

No switch statement used.

No dangling else clauses.

Loops were formed with proper initial and final conditions, including base-case.
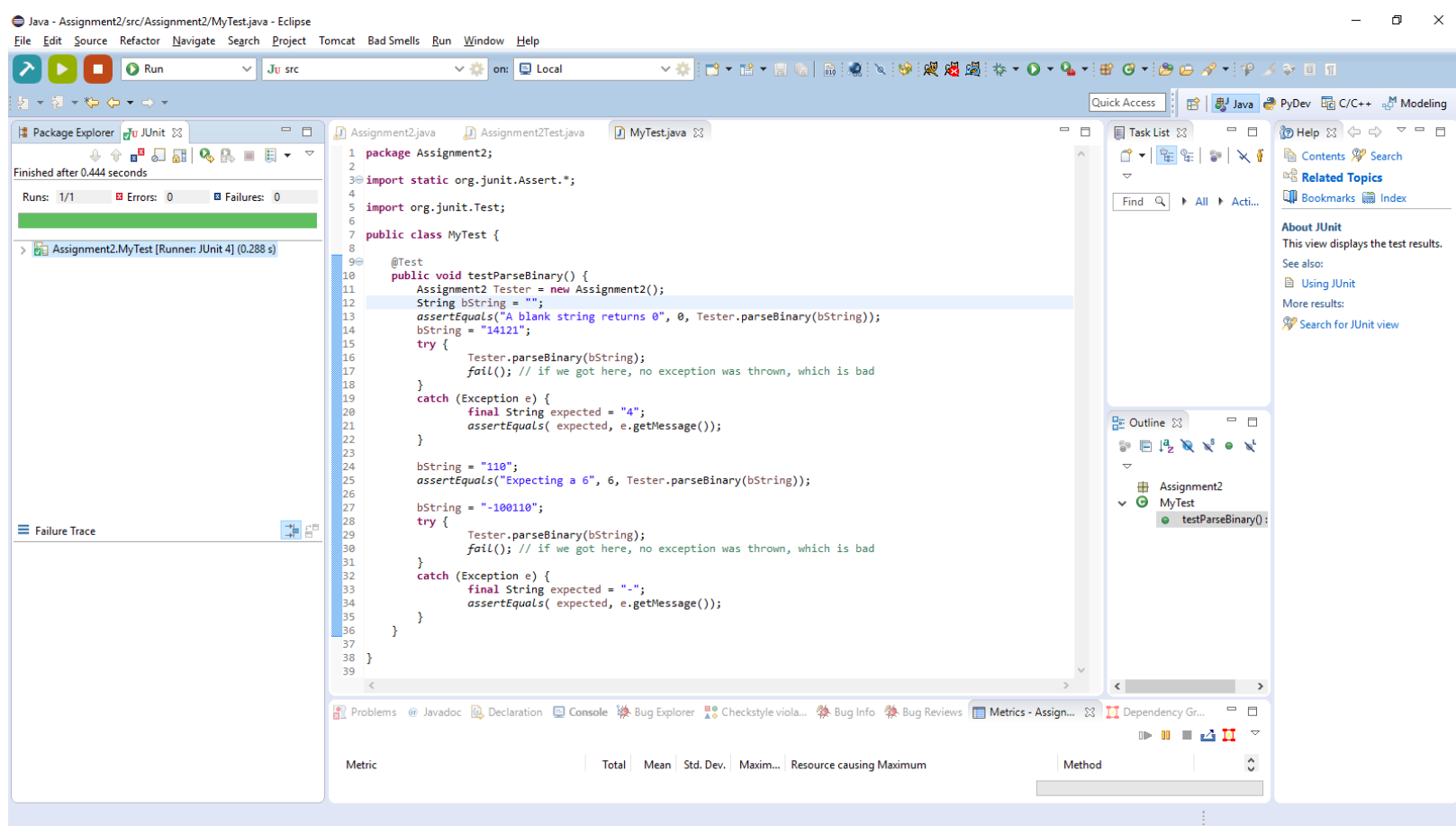
Open/Close parentheses paired up OK.

10. Files

Not Applicable.

Appendix A

Test Cases

The 4 test cases used as follows:

- Blank string, expected 0 returned.

- "14121", expected an exception thrown due to bad format.

- "110", expected a 6 returned.

- "-100110", expected an exception thrown due to bad format.