Project and Final

Choosing you project: Now that a project has been chosen, improve (or create) a testing framework that sufficiently increases code quality confidence. To measure increased confidence, we must see increased coverage of the criterion we have studied.

1. For your project (which should be a section of code in your project's code), create tests to cover the following for each method:

   - Code Coverage
   - Branch Coverage

2. If a section of code was not covered by tests, please explain why. Instrument your code to provide an automated report of code and branch coverage. Report the results. A good example is here; `https://www.mkyong.com/qa/maven-cobertura-code-coverage-example/`

3. Identify any tests that overlap. (This should be apparent from the instrumentation.) Why is the overlap necessary? Is there a way to minimize the number of tests?

4. **Mutant Testing:** Include a mutant test suite to test the correctness of your original test suite. If you find any errors that were missed by your original test suite, include in your final report. Please explain why your believe your mutant test is sufficient for the correctness of your program.

5. Your final report should provide a Table of Contents, with all the sections listed previously. Please provide a narrative of what the test suites are doing and how/why. Make sure to cite your test cases so I can link what your saying to your code.

How to turn in:
Turn in via github under the final directory.

Due Date: December 6, 2019 2359

Teamwork: No teamwork, your work must be your own.