Joshua Harbison
CSSE376
Lab 4

1. In the process of TDD a developer writes test code before any functional code. Specifically the developer writes test code until it fails for any reason. Then the developer writes functional code until the test code passes. They switch back to writing test code until it fails again and repeat this process until the product is complete.
2. I feel TDD does both of these claims. A developer can feel more confident about their code because they have been testing as they go. This means that at any point in the development a programmer should be only a few minor changes from a working set of code. This style also increases the quality of the code because developers are more prone to keeping certain parts of their program separate (e.g engine versus GUI) for testing purposes which generally results in cleaner, more flexible code.
3. The advantages to TDD are that you have a large test suite for regression tests and should have a relatively high test coverage by the end of the development. It is also advantageous because it keeps the programmer being more productive with little time wasted. This is because the little steps leave you always knowing what you need to do next. There are certain disadvantages however. The main disadvantage is the amount of time that is budgeted towards testing. For some projects, it may be too expensive to create so many tests. Another disadvantage is that for simple methods or projects, TDD can over complicate a simple task, once again wasting time. Sanity checks are nice but not always necessary.