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### Bugs

My tests could not find any bugs in the refactored dominion code, however using my tests on the code from assignment 2 with bugs introduced successfully introduced the re-introduced bugs. I could further improve my test suite by altering my tests to definitively break various components of the dominion system. Since it took me so long to even the code to compile I was not able to hone my tests to test more than surface functionality.

#### Bug 1

For the adventurer card function, I used unit tests to verify the deck count was correct after the adventurer card was played. After building the game state and calling this function, there was an additional card drawn.

#### Bug 2

The smithyCard function has a bug that would not draw any cards, and I was able to surface this bug by asserting the expected card count after the function was called.

#### Bug 3

In the mine function, the unit tests surfaced an issue when passing in a gold card enumeration value. The expected outcome was skipped because the condition that determined a failure was changed for the accepted range in one portion of the function.

#### Bug 4

The unit tests helped figure out the bug in the remodel card function because it would assert the expected value for the number of cards in the player's hand after the function was called. Since the discardCard function was removed from the code, it would not adjust to the correct value.

## **Unit Testing**

If you look at the raw code for my makefile, I attempted to use gcov to find coverage for the tests. However, I could not figure out how to append multiple files to a single outputting unit test results file. Thus, I was not able to make generalizations for the coverage of my testing in comparison to the entire dominion system.

# **Unit Testing Efforts**

If you look at the raw code for my makefile, I attempted to use gcov to find coverage for the tests. However, I could not figure out how to append multiple files to a single outputting unit test results file. However, the code under the Assignment 3 branch on GitHub should be proof enough that the tests I wrote function as intended. The makefile was really what gave me a lot of trouble in the end.