JavaLife

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CS 1632 - DELIVERABLE 5: Performance Testing Conway's Game of Life

While profiling the game, the method that stood out the most in terms of expenses seemed to be the MainPanel.convertToInt(int x) method. After looking at this method, it appears that the method is completely useless. After looping unnecessarily, it simply returns the int that was originally passed into the method. I wrote pinning tests for positive maxint, negative maxint, and 0. I decided that my first refactor should be an attempt to simply pass the int back to the caller. My first attempt to refactor ended up with the tests for the positive passing, as well as the zero passing. The negative however, failed. Upon looking over the method again, I discovered that the reason appeared to be because of the way the concatenation occurs in the method. It was causing a number formatting error due to the concatenation of a negative number at the end of a string. For example, it could be 00…0000000-1. This means that my initial thought was wrong. The original version of this method will crash if given a negative number. This means that if given a negative number, I had to ensure that the method exits in error.