Chun-Wei Chen

CSC143.05.W12

Assignment #1 Written Report

01/07/12

First, I tested my code by drawing down the 5 x 5 and 7 x 7 magic squares, and then I compare those to the string representation of the 5 x 5 and 7 x 7 magic squares produced by my code. The result is the same. After that, I made use of the isMagic method to see if it worked fine; however, I faced some problem. I initially passed in the OddMagicSquare as an argument, but the method requires an int[][]; therefore, that statement showed error message. After a while, I realized I should make use of the instance variable, matrix. After I passed in the matrix as an argument instead of an OddMagicSquare, My program worked fine. Afterwards, I decided to do the extra challenge. I did flipHorizontal() and flipVertical(). When I first ran these methods, I encountered an ArrayIdexOutOfBoundException, I suddenly understood that I made off-by-one errors. After fixing that, my program compiled fine. Then I drew down the horizontally and vertically magic squares and compare them with the result my code produced; the result matched.

After about three-week holiday, I forget some important concepts of Java, such as Object Oriented Program, array, and Scanner. When I encountered some errors during coding, I gradually got those memories back. To me, this assignment is really helpful because it helps me review and get back those concepts from last quarter.

I feel that the code of my constructor and isMagic method is a little bit tedious. I don’t know how I can reduce it. Is this normal? I also have another question about extra challenge. I originally wanted to write rotateClockwise() and rotateCounterclockwise(); nevertheless, I gave up after I thought about how to set up the loop to change the value in the matrix. It seems easy when the matrix is 3 x 3, but when the size of the matrix grows up, it becomes very complicated. Is there any quick way to do that?