IT 114L Homework 12

Due: December 7, 2020

P1

***8.13** (*Locate the largest element*) Write the following method that returns the location of the largest element in a two-dimensional array.

```
public static int[] locateLargest(double[][] a)
```

The return value is a one-dimensional array that contains two elements. These two elements indicate the row and column indices of the largest element in the two-dimensional array. Write a test program that prompts the user to enter a two-dimensional array and displays the location of the largest element in the array. Here is a sample run:

```
Enter the number of rows and columns of the array: 3 4 Enter
Enter the array:
23.5 35 2 10 Enter
4.5 3 45 3.5 Enter
35 44 5.5 9.6 Enter
The location of the largest element is at (1, 2)
```

P2

***8.24** (*Check Sudoku solution*) Listing 8.4 checks whether a solution is valid by checking whether every number is valid in the board. Rewrite the program by checking whether every row, every column, and every small box has the numbers 1 to 9.

Instructions:

- Write programs to solve the problem as required.
- Run the programs and make sure they run properly and produce the correct outputs.
- Submit them on Blackboard.

Programming Style Requirements:

- Include the comments of summary at the beginning of the program as instructed in class exercise 2.
- Comments to explain major steps.
- Make sure you follow the proper programming style we discussed in class.

Deliverables:

- Java source files (.java)
- Screenshots of output

Grading Notes:

- If the program does not compile, you will automatically get 0 point.
- If the program does not contain the comments required or not follow the proper programming style, points will be deducted.