CS6905 (AGA) Fall 2023 – Assignment 4 (Minor) Due Wednesday October 11, 2023, by 10pm.

This assignment builds on the same DGraphWtAL class used in Assignment 3.

You need to write a Kosoraju class that extends DGraphWtAL, to add the following method:

• SCC(): takes no parameter, and returns the number of strongly connected components of the directed graph, while also setting the mark array value for each vertex to its component number. Components are to be numbered from 1.

Your class will also need a constructor to pass on the size parameter to the DGraphWtAL constructor, and should also have private methods and classes as appropriate. Your class should not have any additional variables declared globally for the class.

Ensure that your code works with the provided DrAGA4.java code, which will be used to test your submitted solution. Organize and comment your code appropriately.

Submit on D2L: your Kosoraju.java file, and the I/O from one test run of your solution.