

CS6905 (AGA) Winter 2023 – Assignment 3 (Minor)

Due Wednesday February 8, 2023, by 5pm.

This assignment builds on the same `DGraphWtAL` class as used in Assignment 2.

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 `DriverAGA3.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.