

**Computer Science 282**  
**Programming Assignments #4**

November 26, 2019

Due: December 9, 2019

This due date is absolute. I will not grade anything submitted after the start of class on December 9. This includes both the hard copy and the email submissions.

Write a program that outputs a topological sort of a graph using the algorithm described in class. I have uploaded the following files to help you:

A test program (TestTopologicalSort.java) and (for now) 3 input files (Graph\*.txt) the test program will use to test your program.

An implementation of graphs in the file graph.java. You should not modify this file in any way. If you feel a need to make changes to the edge, vertex, or graph classes post a compelling reason on Canvas and we can discuss it.

A file named prog4\_outline.java that pretty much outlines everything you need to add to make topological sort work. Only add code to this file. Do not remove or change anything that is already there. Again, use Canvas if you feel there is a good reason to do otherwise.

It will take you some time to get comfortable with the data structure and moving around it, but this assignment still should be fairly easy.

Email the program to me in a file attachment with the name prog4.java and with a subject header of “Naomi Osaka – prog 4 – 2:00” if your name is Naomi Osaka and you are in the 2:00 class. Do not email me the graph file or the test file. Turn in a hard copy of what you email me and a copy of the output it produces. The usual warnings apply about following all instructions, keeping up with changes, etc.