

# Topological Sort Lab

Started: Apr 25 at 9:25am

## Quiz Instructions

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### Question 1

0 pts

Please upload a completed copy of the [Assignment Contract \(https://sit.instructure.com/courses/23566/pages/assignment-slash-lab-submission-contract\)](https://sit.instructure.com/courses/23566/pages/assignment-slash-lab-submission-contract) as PDF.

Per course policy - Every student must individually submit a copy of the contract, even if only one group member submits the assignment for the entire team.

If you do not include a copy of the Assignment Contract, your work will not be graded. You will be required to resubmit and the new submission will be counted as submitted at the date and time you submit this agreement.

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### Question 2

100 pts

Implement the pseudocode presented in the lecture for both creating a graph and for topological sort. Put each algorithm into a separate function. Construct a data structure to store a graph, which can be based on an adjacency matrix, adjacency list, or any other underlying structure you create.

When the program starts, read in a graph from a file called infile.dat. Then, print out **two different** topological orderings for the graph to the screen. The graph we input to test is guaranteed to have at least two valid orderings, and you do not need to error check for that. You will need to modify the topological sort algorithm slightly to allow it to come up with a different valid topological ordering the second time, by tweaking one of the  $id(0)$  nodes that it selects.

**Note: You must not submit your "node\_modules" folder if you are working on**

**NodeJs/JavaScript. (Just submit your JavaScript source code and package.json file)**

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No new data to save. Last checked at 9:28am

Submit Quiz