**README**

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Assignment 4

CS 3345

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**9.3**

My algorithm for performing topological sort on a graph is contained in the method sort which uses a helper method which are both in the class Graph. Within the class of Graph there is an integer variable that holds the number of vertices in the graph and an array list of array lists which creates the adjacency list . Lastly, we have the algorithm that topologically sorts the graph using the helper method which performs recursively. Because the algorithm uses Depth first search with a stack added on the complexity is O(V + E) where V is the number of vertices and E is the number of edges. Therefore, because all other methods in the class are O(1) the complexity is O(V + E).

**Instructions**

For testing the methods open and run the specified class (Graph) to test in the main class (Assignment 4).