COSC 2436 lab 6: DFS Traversal with Stack

1. Introduction

DFS is a graph traversing algorithm where you start traversing from a selected node (source or starting node) and traverse the graph by going forward in a selected path until there are no more nodes in the current path, after which the next path will be selected.

You can use any STL implementation for this lab.

2. Input and Output

   a. Input file
      - The first line will contain an integer indicate the number of vertices.
      - The second line will contain an integer indicate the source node.
      - Each of the following lines will contains two integer a and b, with b being the adjacent vertex to a.

   b. Output file
      - Output the vertices in the order that they were visited starting from the source node.

3. Example Output

input1.txt

5
3
0 1
0 2
1 0
1 2
1 3
2 0
2 1
2 3
3 1
3 2
3 4
4 3

output1.txt

3 4 2 1 0

4. **Turn in your lab assignment**

    Lab 6 needs to be turned in to our Linux server, follow the link here
    https://rizk.netlify.app/courses/cosc2430/2_resources/
    Make sure to create a folder under your root directory, name it lab6 (name need to be lower case), copy your code and ArgumentManager.h to this folder, no testcase or other files needed.
    PS: This document may have typos, if you think something illogical, please email TAs for confirmation.