

CS 411 - Artificial Intelligence I  
Spring 2021  
Assignment 4  
Department of Computer Science, University of Illinois at Chicago

**Write a program which performs iterative deepening depth first search (Figure 3.12, AIMA 4<sup>th</sup> edition) to find the solution to any given board position for 15 puzzle**

Input

The input should be given in the form of a sequence of numbered tiles for initial board configuration, '0' indicating the empty space.

Output

1. Moves
2. Number of Nodes expanded
3. Time Taken
4. Memory Used

Submission

Please submit a zip file with filename <netid>\_iddfs.zip including following files:

- Source Code
- Readme.txt including the instruction to run the code

Programming Language

You can choose from C++, Java, Python or Julia

Rubric

Implement Iterative deepening depth first search => 10

Print the moves to reach the solution => 3

Print number of nodes expanded => 3

Print total memory usage => 3

Print total time taken => 3

Coding style, comments, readme instruction => 3