# CS 411 - Artificial Intelligence I Fall 2018

### Assignment 5

Department of Computer Science, University of Illinois at Chicago

# Write a program which performs iterative deepening depth first search to find the solution to any given board position for 15 puzzle

#### Input

The input should be given in form of sequence of numbered tiles for initial board configuration, '0' indicating the empty space (see example below)

#### 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 instruction to run the code

# Programming Language

You can choose from C++, Java or Python

# 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

#### AIMA code

You can use the code from the textbook found in following github repo <a href="https://github.com/aimacode">https://github.com/aimacode</a>