Assignment # 1
State Space Search Uninformed
Submission Dead Line: 20/2/2023

LATE SUBMISSION WILL NOT BE ACCEPTED

Implement the following uninformed state space search strategies for the 8-Tile Puzzle in any programming language. Compare these strategies on the basis of maximum number of states generated and solutions found.

You must display solution path from initial state to goal state with all moves performed along with board updates.

1. **Breadth First Search**
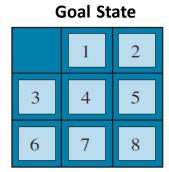2. **Depth First Search**
3. **Iterative Deepening Search**

Problem: The 8-Tile Puzzle

1. **States:** Integer locations of tiles
2. **Successor function (Actions):** Move blank Tile: Left, Right, up, down
3. **Goal test:** = Goal state reached
4. **Path cost:** 1 per move

Start State

7	2	4
5		6
8	3	1

Goal State

	1	2
3	4	5
6	7	8

HAPPY PROGRAMMING