Homework 2
Due: Sep 15, 2014 - 2pm

Instructions for submitting programs
The beginning of the program should contain comments with your name. You should submit .zip folder* on blackboard with following items.

1. All source code.
2. A readme file: explaining how to compile and run the program.
3. A pdf file explaining initial state you used and list of steps taken till you find the goal state.

* - Name of folder should be your netID

Problem: Solving the 15-puzzle with uninformed search algorithms(Breadth First Search and Iterative deepening depth-first)

Initial state: (an easy case)

1		2	4
5	7	3	8
9	6	11	12
13	10	14	15

Goal state:

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	

Input should be given as follows where '0' represents the blank tile.
1 0 2 4 5 7 3 8 9 6 11 12 13 10 14 15

Output:
Your program should list the board configurations and steps taken by both search strategies.

Case1: If there is a solution/ BFS doesn't run out of memory

Example:
1 0 2 4 5 7 3 8 9 6 11 12 13 10 14 15
1 2 0 4 5 7 3 8 9 6 11 12 13 10 14 15
1 2 3 4 5 7 0 8 9 6 11 12 13 10 14 15
...
..

.. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 0

Case 2:

If BFS runs out of memory, just print " Can't find solution- BFS ran out of memory"

Programming Languages:

You can use C, C++ or Java.

Online Code Repository

You can use AIMA Code if you want.
http://aima.cs.berkeley.edu/code.html
https://code.google.com/p/aima-java/downloads/list