Homework 4

Due: Oct 1, 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.

- All source code.
- A readme file: explaining how to compile and run the program.
- A pdf file explaining initial state and set of actions returned by your program.
- * Name of folder should be your netID

Problem:

Tic-tac-toe is a classic two-player, turn-based game in which players try to get three Xs or Os in a row on a 3x3 board. In this assignment you will be implementing MiniMax algorithm as given in book for Tic-tac-toe problem.

Example initial state:

_	Χ	
-	0	-
-	-	-

Input for this example initial state should be given as a string:

"bXbbObbb" where "b" represents a blank tile.

Your program will return a set of actions that can be taken by a player from initial board configuration. Assume that player X moves first.

The output given by your program should be set of actions \mathbf{X} can take, say < 1 3 4 6 7 8 9> for the case given above.

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