

Readme

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. This is solved using the MiniMax algorithm for Tic-tac-toe problem.

Example initial state:

-	X	-
-	O	-
-	-	-

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

" b X b b O b b b b " where "b" represents a blank tile.

The 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 the program should be set of actions X can take, say < 1 3 4 6 7 8 9> for the case given above.

***Import the project in eclipse and execute**

Performance Comparison of MinMax and MinMax with Alpha-Beta Pruning

3 test cases are given below:

Initial Board	Possible good moves		No. Of Nodes expanded	
	Min Max	Alpha Beta	Min Max Algo	Min Max with Alpha Beta Pruning
xbbbobbxx	2 3 4 6 7 8	2	1005	634
obbbxxbbb	2 3 4 7 8 9	2	616	380
bxbbbobb	1 3 4 6 7 9	1	8104	2376