

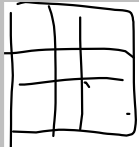
Dynamic Programming

o	o	
o	o	o
o	o	o

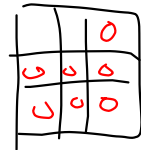
Can we peg-jump this board to leave just a single peg?

Find all boards that do have solutions

Also - show how to solve those boards which are solvable.



How would you use this tree to decide if the original board is solvable?

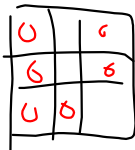
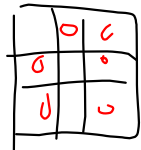
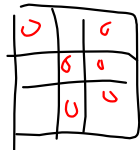


Do a DFS (or a BFS)

to see if you find a

board with 1 peg.

(Brute Force).



BFS vs DFS

The queue grows

SOITA expo -

mentally - lot of memory!

nevermore than 8 boards in memory at a time.

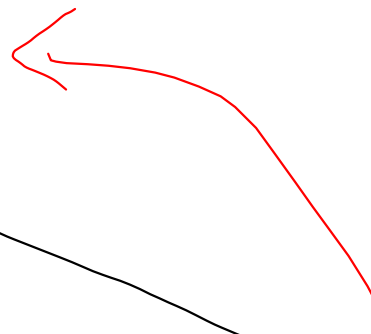
In this board's tree, the branching factor ("Avg" # of children) may is larger.

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

New method is "Brute Force with memoization"

there may be 6^{24} nodes in the tree
↑
(wild guess)

0	0	
0	0	0
0	0	0



1	2	3
4	5	6
7	8	9

		0
0	0	0
0	0	0

0	0	0
0	0	0
0	0	

0	0	0
0	0	
0	0	

0		0
0	0	0
0		0

0	0	0
0	0	0
0		0

NO

0		0
0	0	0
0	0	0

NO

0		
0		
0	0	0

NO

0	0	0
0	0	0
0	0	0

NO

		0
		0
0	0	0

XC + 10
 Answer is
 This
 is available

Dep Man.