

Prompt	Scratchpad	Our Solution(s)	Video Explanation	Run Code
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Solution 1	Solution 2	Solution 3	Solution 4
<pre>1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved. 2 3 # O(n^4) time O(1) space - where n is the height and width of the matrix 4 ▾ def squareOfZeroes(matrix): 5 n = len(matrix) 6 ▾ for topRow in range(n): 7 ▾ for leftCol in range(n): 8 squareLength = 2 9 ▾ while squareLength <= n - leftCol and squareLength <= n - topRow: 10 bottomRow = topRow + squareLength - 1 11 rightCol = leftCol + squareLength - 1 12 ▾ if isSquareOfZeroes(matrix, topRow, leftCol, bottomRow, rightCol): 13 return True 14 squareLength += 1 15 return False 16 17 18 # r1 is the top row, c1 is the left column 19 # r2 is the bottom row, c2 is the right column 20 ▾ def isSquareOfZeroes(matrix, r1, c1, r2, c2): 21 ▾ for row in range(r1, r2 + 1): 22 ▾ if matrix[row][c1] != 0 or matrix[row][c2] != 0: 23 return False 24 ▾ for col in range(c1, c2 + 1): 25 ▾ if matrix[r1][col] != 0 or matrix[r2][col] != 0: 26 return False 27 return True 28</pre>			

