

# Hunter CS Day 01 Diagonal Method

$k + s =$

diagonal(arr, 2, 3, 0, 8)

	0	1	2	3	4
0	0	8	0	0	0
1	0	0	8	0	0
2	0	0	0	8	0
3	0	0	0	0	0
4	0	0	0	0	0

diag=0 row=2 col=3 (2,3)  
1 2-1=1 3-1=2 (1,2)  
2 2-2=0 3-2=1 (0,1)

\* subtract diag  
(BOTH)

diagonal(arr, 3, 2, 1, 8)

	0	1	2	3	4
0	0	0	0	0	0
1	0	0	0	0	8
2	0	0	0	8	0
3	0	0	8	0	0
4	0	0	0	0	0

diag row col  
 0 3 2 (3,2)  
1 3-1 2+1 (2,3)  
2 3-2 2+2 (1,4)

up (row-1) left (col-1)  
 down (row+1) right (col+1)

Diag stops incrementing/decrementing  
 when row < 0 col < 0

OR

row > arr.length col > arr[row].length