

PRACTICE

COMPETE

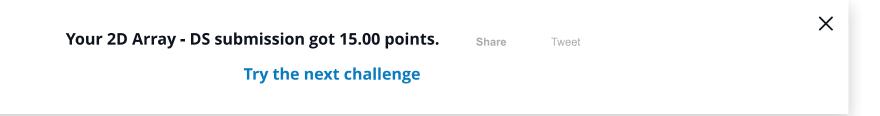
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Practice > Interview Preparation Kit > Arrays > 2D Array - DS

2D Array - DS ☆



Problem	Submissions	Leaderboard	Discussions	Editorial 🖰			
Given a 6×6 2D Ar	rav. arr :				Author	Shafaet	
	,				Difficulty	Easy	
1 1 1 0 0 0					Max Score	15	
0 1 0 0 0 0					Submitted By	398338	
1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0					NEED HELP?		
0 0 0 0 0					View discussions		
We define an hourglass in $m{A}$ to be a subset of values with indices falling in this pattern in $m{arr}$'s graphical					☐ View editorial		
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abc d efg

There are 16 hourglasses in arr, and an hourglass sum is the sum of an hourglass' values. Calculate the hourglass sum for every hourglass in arr, then print the maximum hourglass sum.

For example, given the 2D array:

We calculate the following **16** hourglass values:

Our highest hourglass value is **28** from the hourglass:



MORE DETAILS

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Note: If you have already solved the Java domain's Java 2D Array challenge, you may wish to skip this challenge.

Function Description

Complete the function hourglassSum in the editor below. It should return an integer, the maximum hourglass sum in the array.

hourglassSum has the following parameter(s):

• arr: an array of integers

Input Format

Each of the $m{6}$ lines of inputs $m{arr}[m{i}]$ contains $m{6}$ space-separated integers $m{arr}[m{i}][m{j}]$.

Constraints

- $-9 \leq arr[i][j] \leq 9$
- $0 \le i, j \le 5$

Output Format

Print the largest (maximum) hourglass sum found in arr.

Sample Input

- 1 1 1 0 0 0
- 0 1 0 0 0 0
- 1 1 1 0 0 0
- 0 0 2 4 4 0
- 0 0 0 2 0 0
- 0 0 1 2 4 0

Sample Output

19

Explanation

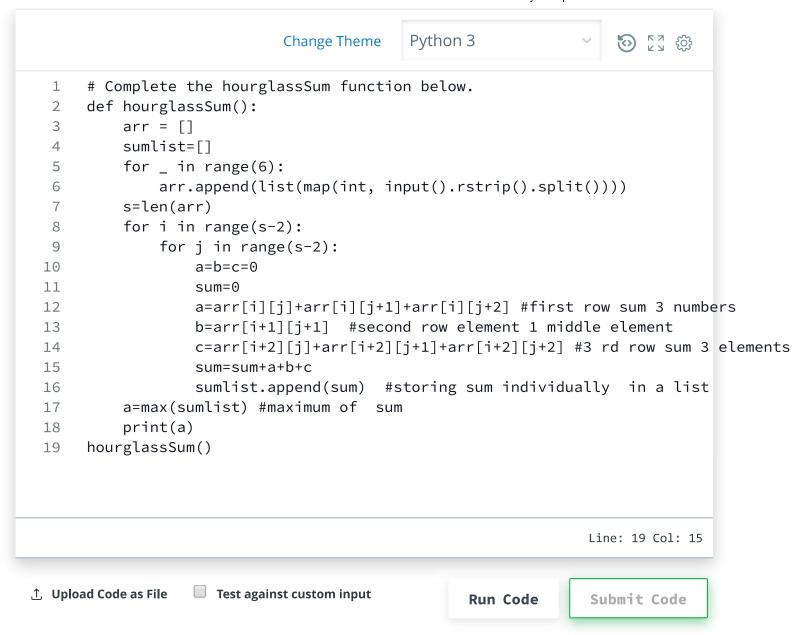
arr contains the following hourglasses:

The hourglass with the maximum sum (19) is:

2 4 4

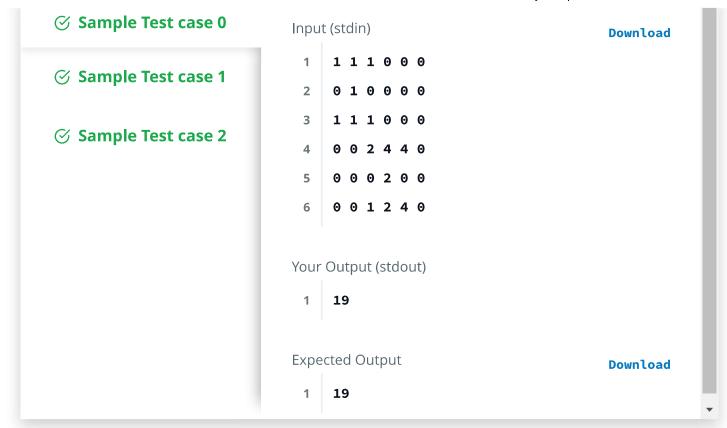
2

1 2 4



Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.



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