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HackerRank Java Problem: Java2D Array problem

You are given a 2D array. An hourglass in an array is a portion shaped like this:

```
a b c
d
e f g
```

For example, if we create an hourglass using the number 1 within an array full of zeros, it may look like this:

```
1 1 1 0 0 0
0 1 0 0 0 0
1 1 1 0 0 0
0 0 0 0 0 0
0 0 0 0 0 0
0 0 0 0 0 0
```

Actually, there are many hourglasses in the array above. The three leftmost hourglasses are the following:

```
1 1 1 1 1 0 1 0 0
1 0 0
1 1 1 1 1 0 1 0 0
```

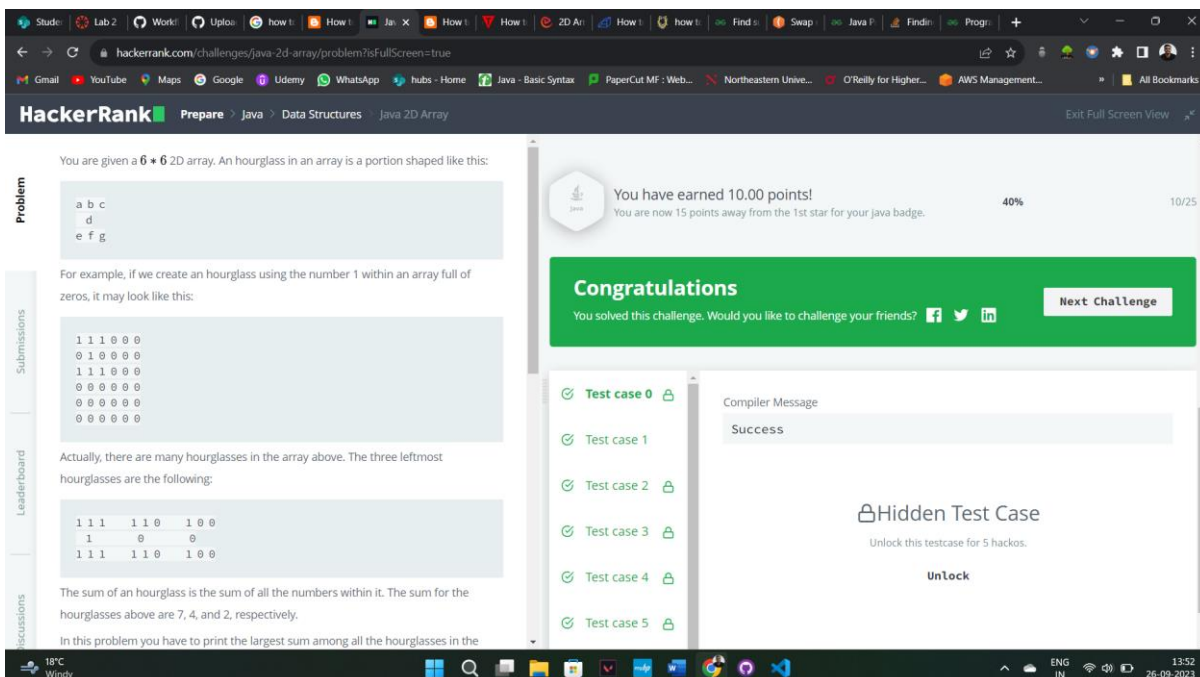
The sum of an hourglass is the sum of all the numbers within it. The sum for the hourglasses above are 7, 4, and 2, respectively.

In this problem you have to *print the largest sum among all the hourglasses* in the array.

Input Format

There will be exactly 6 lines, each containing integers separated by spaces. Each integer will be between -9 and 9 inclusive.

➤ Successful Test case Solution



The screenshot shows the HackerRank interface for the 'Java 2D Array' problem. The problem description is on the left, and the solution code is on the right. The solution code is in Java and uses a 2D array to store the input. It then iterates through the array to find the maximum sum of an hourglass. The test cases are all passed, and the solution is successful. The page also shows a 'Congratulations' message and a 'Next Challenge' button.

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hackerrank.com/challenges/java-2d-array/problem?isFullScreen=true

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HackerRankPrepare > Java > Data Structures > Java 2D ArrayExit Full Screen View

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In this problem you have to print the largest sum among all the hourglasses in the array.

Input Format

There will be exactly 6 lines, each containing 6 integers seperated by spaces. Each integer will be between -9 and 9 inclusive.

Output Format

Print the answer to this problem on a single line.

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

The hourglass which has the largest sum is:

You have earned 10.00 points!
You are now 15 points away from the 1st star for your java badge.

40%10/25

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 1

Test case 2

Test case 3

Test case 4

Test case 5

Test case 6

Test case 7

Compiler Message

Success

Hidden Test Case

Unlock this testcase for 5 hacks.

Unlock

18°C Windy

Windows Taskbar

ENG IN13:52 26-09-2023