Given a 6×6 2D Array, arr:

111000 010000 111000 000000 000000 000000

An hourglass in A is a subset of values with indices falling in this pattern in arr's graphical representation:

abc d efg

There are 16 hourglasses in arr. 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. The array will always be 6×6 .

Example

```
arr =
```

-9-9-9111 0-90432 -9-9-9123 008660 000-200 001240

The 16 hourglass sums are:

```
-63, -34, -9, 12,
-10, 0, 28, 23,
-27, -11, -2, 10,
9, 17, 25, 18
```

The highest hourglass sum is 28 from the hourglass beginning at row 1, column 2:

043 1 866

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.

hourglassSum has the following parameter(s):

• int arr[6][6]: an array of integers

Returns

• int: the maximum hourglass sum

Input Format

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

Constraints

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

Output Format

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

Sample Input

111000

010000

111000

002440

000200

001240

Sample Output

19

Explanation

arr contains the following hourglasses:

```
111 110 100 000
      0
          0
111 110 100 000
010100000000
0 0 2 0 2 4 2 4 4 4 4 0
111 110 100 000
000 002 020 200
0 0 2 0 2 4 2 4 4 4 4 0
0 0 1 0 1 2 1 2 4 2 4 0
```

The hourglass with the maximum sum (19) is:

244

2

124