2-by-2 Rotation

oj.dcs.upd.edu.ph/problem/rotate2by2

Submit solution
Points: 200 (partial)

Time limit: 4.0s

Memory limit: 1G

Author:
dlko ()
Problem type

Allowed languages

~~NONE~~, py3

Problem Statement

Given a 2×2 matrix m of integers, can you rotate it 90 degrees clockwise?

Task Details

Your task is to implement a function named `rotate_clockwise`, which should look like this:

Copy

```
def rotate_clockwise(m):
    return ...
```

Here, `m` is represented as a tuple of two rows, where each row is a tuple of two integers.

You only need to replace the `...` part with a **Python expression**.

The function must return a tuple of two length-2 tuples denoting the rotated matrix.

Your source code must have at most 150150 bytes.

Examples

Example 1 Function Call

Copy

```
rotate_clockwise(((1, 2), (3, 4)))
```

Example 1 Return Value

Copy

```
((3, 1), (4, 2))
```

Constraints

- The function `rotate_clockwise` will be called at most 10410^4 times.
- mm is a 2×22 × 2 matrix.
- Each element of mm is an integer between $-1020 - 10^{20}$ and 102010^{20} inclusive.

Scoring

Note: New tests may be added and all submissions may be rejudged at a later time. (All future tests will satisfy the constraints.)

- You get 5050 ❤️ points if you solve all test cases where:
  - All elements in mm are the same.
- You get 5050 ❤️ points if you solve all test cases where:
  - mm has exactly two unique elements.
- You get 100100 ❤️ points if you solve all test cases.

Report an issue

Clarifications

No clarifications have been made at this time.