Possibly Triangular

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

Submit solution
Points: 200 (partial)

Time limit: 4.0s

Memory limit: 1G

Author:
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Problem type

Allowed languages

~~NONE~~, py3

Problem Statement

Mika, Nagisa, and Seia want to hold a tea party, but they have no idea exactly where each other is.

Upon contacting them, you find out that Mika and Nagisa are aa meters apart, while Nagisa and Seia are bb meters apart.

Is it possible that Mika and Seia are cc meters apart?

Note. The *triangle inequality* states that for any triangle with nonzero area, it must be the case that the sum of the lengths of any two sides is **greater** than the length of the third side.

Task Details

Your task is to implement a function named `possibly_triangular`, whose signature is as follows:

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```
def possibly_triangular(a, b, c):
    return ...
```

Here, you only need to replace the `...` part with a **Python expression**.

The function must return a `bool` denoting the answer.

Your source code must have at most 200200 bytes.

Examples

Example 1 Function Call

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```
possibly_triangular(3, 4, 5)
```

Example 1 Return Value

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```
True
```

Example 2 Function Call

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```
possibly_triangular(2, 2, 5)
```

Example 2 Return Value

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```
False
```

Constraints

- The function `possibly_triangular` will be called at most 10410^4 times.

- $1 \leq a,b,c \leq 10^{50}$

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 50 ❤️ points if you solve all test cases where:
  - $1 \leq a,b,c \leq 2$
- You get 50 ❤️ points if you solve all test cases where:
  - $a = b$
- You get 100 ❤️ points if you solve all test cases.

Report an issue

Clarifications

No clarifications have been made at this time.