Substitution

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

Problem Statement

Given two integers aa and bb, compute 1a+1+1b+1+ab−1(a+1)(b+1)
$\frac{1}{a+1} + \frac{1}{b+1} + \frac{ab-1}{(a+1)\ (b+1)}$, *as a fraction*.

Task Details

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

Copy

```
from fractions import Fraction

def substitute(a, b):
    return ...
```

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

The function must return a `Fraction` denoting the answer. Make sure you include the first line in the sample code block above.

To make a fraction like $12\frac{1}{2}$, use `Fraction(1, 2)`. Note that `Fraction` will reduce fractions to lowest terms for you, so you do not need to worry about whether what you're returning is in lowest terms or not.

Your source code must have at most 200200 bytes.

Examples

Example 1 Function Call

Copy

```
substitute(1, 1)
```

Example 1 Return Value

Copy

```
Fraction(1, 1)
```

Constraints

- The function `substitute` will be called at most 10410^4 times.
- $-1020 \le a,b \le 1020 - 10^{20} \le a, b \le 10^{20}$
- $a \neq -1 a \neq -1$ **and** $b \neq -1 b \neq -1$

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:
  - $-10 \le a,b \le 10 - 10 \le a, b \le 10$
- You get 5050 ❤️ points if you solve all test cases where:
  - $a,b > 0 a, b > 0$
- You get 100100 ❤️ points if you solve all test cases.

Report an issue

Clarifications

No clarifications have been made at this time.