

592. Fraction Addition and Subtraction

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 Description  Hints  Submissions  Solutions

Given a string representing an expression of fraction addition and subtraction, you need to return the calculation result in string format. The final result should be **irreducible fraction**. If your final result is an integer, say **2**, you need to change it to the format of fraction that has denominator **1**. So in this case, **2** should be converted to **2/1**.

- Total Accepted: 589
- Total Submissions: 1317
- Difficulty: Medium
- Contributors: fallcreek

Example 1:

Input: "-1/2+1/2"
Output: "0/1"

Example 2:

Input: "-1/2+1/2+1/3"
Output: "1/3"

Example 3:

Input: "1/3-1/2"
Output: "-1/6"

Example 4:

Input: "5/3+1/3"
Output: "2/1"

Note:

1. The input string only contains **'0'** to **'9'**, **'/'**, **'+'** and **'-'**. So does the output.
2. Each fraction (input and output) has format **±numerator/denominator**. If the first input fraction or the output is positive, then **'+'** will be omitted.
3. The input only contains valid **irreducible fractions**, where the **numerator** and **denominator** of each fraction will always be in the range [1,10]. If the denominator is 1, it means this fraction is actually an integer in a fraction format defined above.
4. The number of given fractions will be in the range [1,10].
5. The numerator and denominator of the **final result** are guaranteed to be valid and in the range of 32-bit int.

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