227. Basic Calculator II

Given a string s which represents an expression, *evaluate this expression and return its value*.

The integer division should truncate toward zero.

You may assume that the given expression is always valid. All intermediate results will be in the range of $[-2^{31}, 2^{31} - 1]$.

Note: You are not allowed to use any built-in function which evaluates strings as mathematical expressions, such as eval().

Example 1:

Input: s = "3+2*2"

Output: 7

Example 2:

Input: s = " 3/2 "

Output: 1

Example 3:

Input: s = " 3+5 / 2 "

Output: 5

Constraints:

- $1 <= s.length <= 3 * 10^5$
- s consists of integers and operators ('+', '-', '*', '/') separated by some number of spaces.
- s represents **a valid expression**.
- All the integers in the expression are non-negative integers in the range $[0, 2^{31} - 1]$.
- The answer is **guaranteed** to fit in a **32-bit integer**