

150. Evaluate Reverse Polish Notation

Description

You are given an array of strings `tokens` that represents an arithmetic expression in a [Reverse Polish Notation](#).

Evaluate the expression. Return *an integer that represents the value of the expression*.

Note that:

- The valid operators are `'+'`, `'-'`, `'*'`, and `'/'`.
- Each operand may be an integer or another expression.
- The division between two integers always **truncates toward zero**.
- There will not be any division by zero.
- The input represents a valid arithmetic expression in a reverse polish notation.
- The answer and all the intermediate calculations can be represented in a **32-bit** integer.

Example 1:

Input: `tokens = ["2","1","+","3","*"]`
Output: `9`
Explanation: `((2 + 1) * 3) = 9`

Example 2:

Input: `tokens = ["4","13","5","/","+"]`
Output: `6`
Explanation: `(4 + (13 / 5)) = 6`

Example 3:

Input: `tokens = ["10","6","9","3","+","-11","*","/","*","17","+","5","+"]`
Output: `22`
Explanation: `((10 * (6 / ((9 + 3) * -11))) + 17) + 5`
`= ((10 * (6 / (12 * -11))) + 17) + 5`
`= ((10 * (6 / -132)) + 17) + 5`
`= ((10 * 0) + 17) + 5`
`= (0 + 17) + 5`
`= 17 + 5`
`= 22`

Constraints:

- `1 <= tokens.length <= 104`
- `tokens[i]` is either an operator: `"+"`, `"-"`, `"*"`, or `"/"`, or an integer in the range `[-200, 200]`.

