

# 224. Basic Calculator

## Description

Given a string `s` representing a valid expression, implement a basic calculator to evaluate it, and return *the result of the evaluation*.

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

### Example 1:

Input: `s = "1 + 1"`  
Output: 2

### Example 2:

Input: `s = " 2-1 + 2 "`  
Output: 3

### Example 3:

Input: `s = "(1+(4+5+2)-3)+(6+8)"`  
Output: 23

### Constraints:

- `1 <= s.length <= 3 * 105`
- `s` consists of digits, `'+'`, `'-'`, `'('`, `')'`, and `' '`.
- `s` represents a valid expression.
- `'+'` is **not** used as a unary operation (i.e., `"+1"` and `"+(2 + 3)"` is invalid).
- `'-'` could be used as a unary operation (i.e., `"-1"` and `"-(2 + 3)"` is valid).
- There will be no two consecutive operators in the input.
- Every number and running calculation will fit in a signed 32-bit integer.

