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.