

# 494. Target Sum

## Difficulty : Medium

<https://leetcode.com/problems/target-sum>

You are given an integer array `nums` and an integer `target`.

You want to build an **expression** out of `nums` by adding one of the symbols '+' and '-' before each integer in `nums` and then concatenate all the integers.

- For example, if `nums = [2, 1]`, you can add a '+' before 2 and a '-' before 1 and concatenate them to build the expression "+2-1".

Return the number of different **expressions** that you can build, which evaluates to `target`.

### Example 1:

**Input:** `nums = [1,1,1,1,1]`, `target = 3`

**Output:** 5

**Explanation:** There are 5 ways to assign symbols to make the sum of `nums` be `target` 3.

-1 + 1 + 1 + 1 + 1 = 3

+1 - 1 + 1 + 1 + 1 = 3

+1 + 1 - 1 + 1 + 1 = 3

+1 + 1 + 1 - 1 + 1 = 3

+1 + 1 + 1 + 1 - 1 = 3

### Example 2:

**Input:** `nums = [1]`, `target = 1`

**Output:** 1

### Constraints:

- $1 \leq \text{nums.length} \leq 20$
- $0 \leq \text{nums}[i] \leq 1000$
- $0 \leq \text{sum}(\text{nums}[i]) \leq 1000$
- $-1000 \leq \text{target} \leq 1000$