

210. 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

PROGRAM:-

```
from collections import defaultdict
```

```
def findTargetSumWays(nums, target):
```

```
    dp = defaultdict(int)
```

```
    dp[0] = 1
```

```
    for num in nums:
```

```
        next_dp = defaultdict(int)
```

```
        for sum_val, count in dp.items():
```

```
            next_dp[sum_val + num] += count
```

```
            next_dp[sum_val - num] += count
```

```
        dp = next_dp
```

```
    return dp[target]
```

```
# Example
```

```
nums = [1, 1, 1, 1, 1]
```

```
target = 3
```

```
print(findTargetSumWays(nums, target))
```

OUTPUT:-

5

```
=== Code Execution Successful ===
```

TIME COMPLEXITY:-O(N)