

5675. Closest Subsequence Sum

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

You want to choose a subsequence of `nums` such that the sum of its elements is the closest possible to `goal`. That is, if the sum of the subsequence's elements is `sum`, then you want to **minimize the absolute difference** $\text{abs}(\text{sum} - \text{goal})$.

Return the **minimum** possible value of $\text{abs}(\text{sum} - \text{goal})$.

Note that a subsequence of an array is an array formed by removing some elements (**possibly all or none**) of the original array.

| | |
|--------------------|------|
| User Accepted: | 0 |
| User Tried: | 0 |
| Total Accepted: | 0 |
| Total Submissions: | 0 |
| Difficulty: | Hard |

Example 1:

Input: `nums = [5,-7,3,5]`, `goal = 6`
Output: `0`
Explanation: Choose the whole array as a subsequence, with a sum of 6.
This is equal to the goal, so the absolute difference is 0.

Example 2:

Input: `nums = [7,-9,15,-2]`, `goal = -5`
Output: `1`
Explanation: Choose the subsequence `[7,-9,-2]`, with a sum of -4.
The absolute difference is $\text{abs}(-4 - (-5)) = \text{abs}(1) = 1$, which is the minimum.

Example 3:

Input: `nums = [1,2,3]`, `goal = -7`
Output: `7`

Constraints:

- $1 \leq \text{nums.length} \leq 40$
- $-10^7 \leq \text{nums}[i] \leq 10^7$
- $-10^9 \leq \text{goal} \leq 10^9$

JavaScript



```
1 /**
2  * @param {number[]} nums
3  * @param {number} goal
4  * @return {number}
5  */
6 var minAbsDifference = function(nums, goal) {
7
8 };
```