# 1785. Minimum Elements to Add to Form a Given Sum

## Description

You are given an integer array nums and two integers limit and goal. The array nums has an interesting property that abs(nums[i]) <= limit.

Return the minimum number of elements you need to add to make the sum of the array equal to <code>goal</code>. The array must maintain its property that <code>abs(nums[i]) <= limit</code>.

Note that abs(x) equals x if  $x \ge 0$ , and -x otherwise.

#### **Example 1:**

```
Input: nums = [1,-1,1], limit = 3, goal = -4

Output: 2

Explanation: You can add -2 and -3, then the sum of the array will be 1-1+1-2-3=-4.
```

#### Example 2:

```
Input: nums = [1,-10,9,1], limit = 100, goal = 0
Output: 1
```

### **Constraints:**

- 1 <= nums.length <= 10 <sup>5</sup>
- 1 <= limit <= 10 <sup>6</sup>
- -limit <= nums[i] <= limit</pre>
- -10 <sup>9</sup> <= goal <= 10 <sup>9</sup>