

5782. Maximum Alternating Subsequence Sum

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The **alternating sum** of a **0-indexed** array is defined as the **sum** of the elements at **even** indices **minus** the **sum** of the elements at **odd** indices.

- For example, the alternating sum of `[4,2,5,3]` is $(4 + 5) - (2 + 3) = 4$.

Given an array `nums`, return the **maximum alternating sum** of any subsequence of `nums` (after **reindexing** the elements of the subsequence).

A **subsequence** of an array is a new array generated from the original array by deleting some elements (possibly none) without changing the remaining elements' relative order. For example, `[2,7,4]` is a subsequence of `[4,2,3,2,1,4]` (the underlined elements), while `[2,4,2]` is not.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

Example 1:

Input: `nums = [4,2,5,3]`
Output: `7`
Explanation: It is optimal to choose the subsequence `[4,2,5]` with alternating sum $(4 + 5) - 2 = 7$.

Example 2:

Input: `nums = [5,6,7,8]`
Output: `8`
Explanation: It is optimal to choose the subsequence `[8]` with alternating sum `8`.

Example 3:

Input: `nums = [6,2,1,2,4,5]`
Output: `10`
Explanation: It is optimal to choose the subsequence `[6,1,5]` with alternating sum $(6 + 5) - 1 = 10$.

Constraints:

- $1 \leq \text{nums.length} \leq 10^5$
- $1 \leq \text{nums}[i] \leq 10^5$

JavaScript


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

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