

# 3221. Maximum Array Hopping Score II Premium

Medium

Topics

Companies

Hint

Given an array `nums`, you have to get the **maximum** score starting from index 0 and **hopping** until you reach the last element of the array.

In each **hop**, you can jump from index `i` to an index `j > i`, and you get a **score** of `(j - i) * nums[j]`.

Return the *maximum score* you can get.

### Example 1:

Input: `nums = [1,5,8]`

Output: 16

Explanation:

There are two possible ways to reach the last element:

- `0 -> 1 -> 2` with a score of `(1 - 0) * 5 + (2 - 1) * 8 = 13`.
- `0 -> 2` with a score of `(2 - 0) * 8 = 16`.

### Example 2:

Input: `nums = [4,5,2,8,9,1,3]`

Output: 42

Explanation:

We can do the hopping `0 -> 4 -> 6` with a score of `(4 - 0) * 9 + (6 - 4) * 3 = 42`.

### Constraints:

- `2 <= nums.length <= 105`
- `1 <= nums[i] <= 105`

Seen this question in a real interview before? 1/5

Yes

No

Accepted 543 | Submissions 813 | Acceptance Rate 66.8%

Topics

ArrayStackGreedyMonotonic Stack

Companies

0 - 6 months

Zluri2

Hint 1

It's always optimal to jump to index `j` with the maximum value.

Hint 2

Keep an array `suffixMax` and store the maximum of each suffix of the array along with its index.

Discussion (1)