1458. Max Dot Product of Two Subsequences

Description

Given two arrays `nums1` and `nums2` .

Return the maximum dot product between **non-empty** subsequences of nums1 and nums2 with the same length.

A subsequence of a array is a new array which is formed from the original array by deleting some (can be none) of the characters without disturbing the relative positions of the remaining characters. (ie, `[2,3,5]` is a subsequence of `[1,2,3,4,5]` while `[1,5,3]` is not).

Example 1:

```
Input: nums1 = [2,1,-2,5], nums2 = [3,0,-6]
Output: 18
Explanation: Take subsequence [2,-2] from nums1 and subsequence [3,-6] from nums2.
Their dot product is (2*3 + (-2)*(-6)) = 18.
```

Example 2:

```
Input: nums1 = [3,-2], nums2 = [2,-6,7]
Output: 21
Explanation: Take subsequence [3] from nums1 and subsequence [7] from nums2.
Their dot product is (3*7) = 21.
```

Example 3:

```
Input: nums1 = [-1,-1], nums2 = [1,1]
Output: -1
Explanation: Take subsequence [-1] from nums1 and subsequence [1] from nums2.
Their dot product is -1.
```

Constraints:

- `1 <= nums1.length, nums2.length <= 500`
- `-1000 <= nums1[i], nums2[i] <= 1000`