Max Dot Product of Two Subsequences

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