

# 1874. Minimize Product Sum of Two Arrays

## Description

The **product sum** of two equal-length arrays `a` and `b` is equal to the sum of `a[i] * b[i]` for all `0 <= i < a.length` (**0-indexed**).

- For example, if `a = [1,2,3,4]` and `b = [5,2,3,1]`, the **product sum** would be `1*5 + 2*2 + 3*3 + 4*1 = 22`.

Given two arrays `nums1` and `nums2` of length `n`, return *the minimum product sum if you are allowed to rearrange the order of the elements in `nums1`*.

### Example 1:

**Input:** `nums1 = [5,3,4,2]`, `nums2 = [4,2,2,5]`

**Output:** 40

**Explanation:** We can rearrange `nums1` to become `[3,5,4,2]`. The product sum of `[3,5,4,2]` and `[4,2,2,5]` is `3*4 + 5*2 + 4*2 + 2*5 = 40`.

### Example 2:

**Input:** `nums1 = [2,1,4,5,7]`, `nums2 = [3,2,4,8,6]`

**Output:** 65

**Explanation:** We can rearrange `nums1` to become `[5,7,4,1,2]`. The product sum of `[5,7,4,1,2]` and `[3,2,4,8,6]` is `5*3 + 7*2 + 4*4 + 1*8 + 2*6 = 65`.

### Constraints:

- `n == nums1.length == nums2.length`
- `1 <= n <= 105`
- `1 <= nums1[i], nums2[i] <= 100`

