

Given two sorted arrays `nums1` and `nums2` of size `m` and `n` respectively, return **the median** of the two sorted arrays.

The overall run time complexity should be $O(\log(m+n))$.

Example 1:

Input: `nums1 = [1,3], nums2 = [2]`

Output: `2.00000`

Explanation: merged array = `[1,2,3]` and median is 2.

Example 2:

Input: `nums1 = [1,2], nums2 = [3,4]`

Output: `2.50000`

Explanation: merged array = `[1,2,3,4]` and median is $(2 + 3) / 2 = 2.5$.

Example 3:

Input: `nums1 = [0,0], nums2 = [0,0]`

Output: `0.00000`

Example 4:

Input: `nums1 = [], nums2 = [1]`

Output: `1.00000`

Example 5:

Input: `nums1 = [2], nums2 = []`

Output: `2.00000`