LEETCODE SOLUTIONS - YOGESH MUNEES

4. Median of Two Sorted Arrays

Hard

24.7K   2.7K

Companies

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.
```

Solution:

```python
class Solution:
    def findMedianSortedArrays(self, nums1: List[int], nums2: List[int]) -> float:
        nums3 = nums1 + nums2
        nums3.sort()
        if len(nums3)%2 == 1:
            return nums3[len(nums3)//2]
        else:
            return (nums3[len(nums3)//2]+nums3[(len(nums3)//2)-1])/2
```