

4. Median of Two Sorted Arrays

<https://leetcode.com/problems/median-of-two-sorted-arrays/>

Hard

There are two sorted arrays **nums1** and **nums2** of size m and n respectively.

Find the median of the two sorted arrays. The overall run time complexity should be $O(\log(m+n))$.

You may assume **nums1** and **nums2** cannot be both empty.

Example 1:

```
nums1 = [1, 3]
```

```
nums2 = [2]
```

The median is 2.0

Example 2:

```
nums1 = [1, 2]
```

```
nums2 = [3, 4]
```

The median is $(2 + 3)/2 = 2.5$