

Problem 215: Kth Largest Element in an Array

Problem Information

Difficulty: Medium

Acceptance Rate: 68.57%

Paid Only: No

Tags: Array, Divide and Conquer, Sorting, Heap (Priority Queue), Quickselect

Problem Description

Given an integer array `nums` and an integer `k`, return the `k`th largest element in the array.

Note that it is the `k`th largest element in the sorted order, not the `k`th distinct element.

Can you solve it without sorting?

Example 1:

Input: nums = [3,2,1,5,6,4], k = 2 **Output:** 5

Example 2:

Input: nums = [3,2,3,1,2,4,5,5,6], k = 4 **Output:** 4

Constraints:

$1 \leq k \leq \text{nums.length} \leq 10^5$ $-10^4 \leq \text{nums}[i] \leq 10^4$

Code Snippets

C++:

```
class Solution {  
public:
```

```
int findKthLargest(vector<int>& nums, int k) {  
  
}  
};
```

Java:

```
class Solution {  
    public int findKthLargest(int[] nums, int k) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def findKthLargest(self, nums: List[int], k: int) -> int:
```