

# 快速排序

<https://github.com/sangjianshun/Master-School/blob/master/quickSort.py>



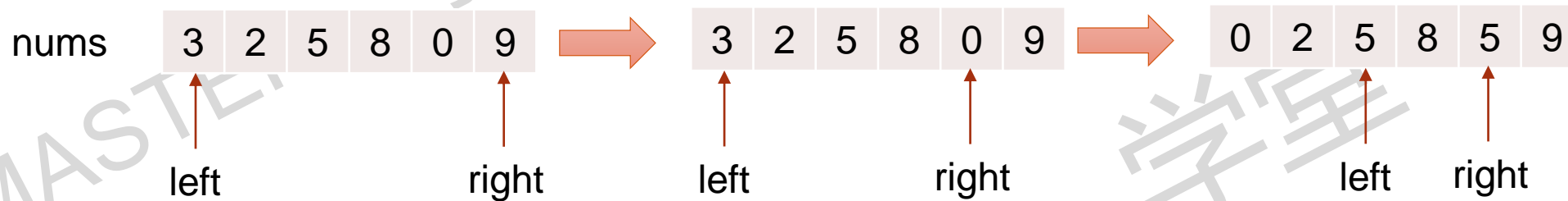
问题描述



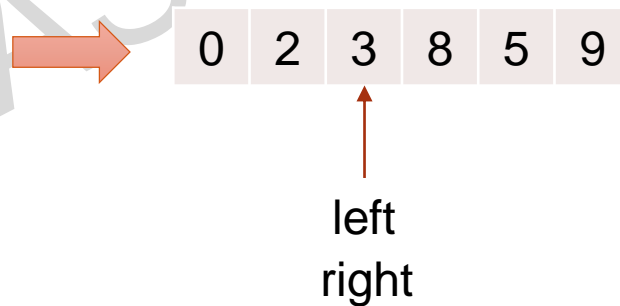
# 快速排序



问题求解：快速排序



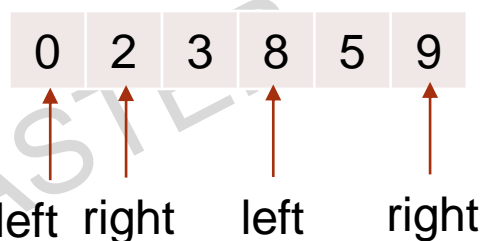
tmp=nums[left]=3



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```
def quickSort(nums, left, right):  
    if left == right:  
        return  
    left0 = left  
    right0 = right  
  
    tmp = nums[left]  
    while left < right:  
        while left < right and nums[right] > tmp:  
            right -= 1  
        nums[left] = nums[right]  
        while left < right and nums[left] < tmp:  
            left += 1  
        nums[right] = nums[left]  
    nums[left] = tmp  
    quickSort(nums, left0, left)  
    quickSort(nums, left + 1, right0)  
    return nums
```