

# 027. Remove Element

## 027 Remove Element

- Two pointers+array

### Description

Given an array and a value, remove all instances of that value **in-place** and return the new length.

Do not allocate extra space for another array, you must do this by **modifying the input array in-place** with  $O(1)$  extra memory.

The order of elements can be changed. It doesn't matter what you leave beyond the new length.

**Example:**

Given `nums = [3,2,2,3]`, `val = 3`,

Your function should return `length = 2`, with the first two elements of `nums` being 2.

### 1. Thought line

### 2. Two pointers+array

```
class Solution {
public:
    int removeElement(vector<int>& nums, int val) {
        for (auto st = nums.begin(); st != nums.end(); ){
            if (*st == val)
                nums.erase(st);
            else ++st;
        }
        return nums.size();
    }
};
```