

# 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

```
1 class Solution {
2 public:
3     int removeElement(vector<int>& nums, int val) {
4         for (auto st = nums.begin(); st != nums.end(); ){
5             if (*st == val)
6                 nums.erase(st);
7             else ++st;
8         }
9         return nums.size();
10    }
11 };
```