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

```cpp
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();
    }
};
```