一、题目说明

题目283. Move Zeroes，给定一组数，将该组数中的0移动末尾，其他数据相对位置不变。

二、我的解答

```cpp
class Solution{
    public:
        void moveZeroes(vector<int>& nums){
            if(nums.size()<2){
                return;
            }
            int len = nums.size();

            int i=0,j=0;
            //i指向更新的位置,j指向非0元素
            while(i<len &&j<len){
                if(nums[j]==0){
                    j++;
                }else{
                    nums[i] = nums[j];
                    i++;
                    j++;
                }
            }
            for(int t = i;t<len;t++){
                nums[t] = 0;
            }
        }
};
```

性能如下：

```
Runtime: 12 ms, faster than 97.09% of C++ online submissions for Move Zeroes.
Memory Usage: 9.5 MB, less than 87.50% of C++ online submissions for Move
Zeroes.
```

三、优化措施

从左到右遍历数组，统计0的个数，num[i]为整数，则将其移动到 `nums[i-count]`

```cpp
class Solution{
    public:
        void moveZeroes(vector<int>& nums){
            int count = 0;
            for(int i=0;i<nums.size();i++){
                if(nums[i]==0){
                    count++;
                }else if(count>0){
                    nums[i-count] = nums[i];
                    nums[i] = 0;
                }
            }
```

```
        }
};
```

性能

```
Runtime: 12 ms, faster than 97.09% of C++ online submissions for Move Zeroes.
Memory Usage: 9.5 MB, less than 84.72% of C++ online submissions for Move
Zeroes.
```