

DSA Mock Test 1

1. 283. Move Zeroes

Given an integer array `nums`, move all 0's to the end of it while maintaining the relative order of the non-zero elements.

```
//Time Complexity :O(n)
//Space Complexity: O(1)
class Solution {
public:
    void moveZeroes(vector<int>& nums) {
        int non_zero=0;
        for(int i=0; i<nums.size();i++)
        {
            if(nums[i]!=0)
            {
                int temp = nums[i];
                nums[i] = nums[non_zero];
                nums[non_zero] = temp;
                non_zero++;
            }
        }
    }
};
```

2. 387. First Unique Character in a String

Given a string *s*, find the first non-repeating character in it and return its index. If it does not exist, return -1.

```
//Time Complexity :O(n)
```

```
//Space Complexity: O(1)
```

```
class Solution {  
  
public:  
  
    int firstUniqChar(string s) {  
  
        map<char, int> G;  
  
        for(int i=0;i<s.size();i++)  
  
        {  
  
            G[s[i]]++;  
  
        }  
  
        for(int i=0;i<s.size();i++)  
  
        {  
  
            if (G[s[i]]==1)  
  
            {  
  
                return i;  
  
            }  
  
        }  
  
        return -1;  
  
    }  
  
};
```