

876. Middle of the Linked List

Easy 10K 292

Companies

Given the `head` of a singly linked list, return the *middle node* of the linked list.

If there are two middle nodes, return **the second middle node**.

**Example 1:**

1 → 2 → 3 → 4 → 5

Input: head = [1,2,3,4,5]  
Output: [3,4,5]  
Explanation: The middle node of the list is node 3.

**Example 2:**

1 → 2 → 3 → 4 → 5 → 6

Input: head = [1,2,3,4,5,6]  
Output: [4,5,6]

```
1 struct ListNode* middleNode(struct ListNode* head){
2     struct ListNode* p1 = head;
3     struct ListNode* p2 = head;
4     if(head == NULL) return NULL;
5     else {
6         while(p2 != NULL && p2->next != NULL) {
7             p2 = p2->next->next;
8             p1 = p1->next;
9         }
10        return p1;
11    }
12 }
13 }
```

Testcase Result

Accepted Runtime: 0 ms

Case 1 Case 2

Input

head = [1,2,3,4,5]

Output

[3,4,5]

Console Run Submit

32°C Haze

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75. Sort Colors

Medium 15.8K 554

Companies

Given an array `nums` with `n` objects colored red, white, or blue, sort them **in-place** so that objects of the same color are adjacent, with the colors in the order red, white, and blue.

We will use the integers `0`, `1`, and `2` to represent the color red, white, and blue, respectively.

You must solve this problem without using the library's sort function.

Example 1:

Input: `nums = [2,0,2,1,1,0]`  
Output: `[0,0,1,1,2,2]`

Example 2:

Input: `nums = [2,0,1]`  
Output: `[0,1,2]`

Constraints:

- `n == nums.length`

1 void sortColors(int\* nums, int numsSize){

2 int idx, count0s = 0, count1s = 0, count2s = 0;

3 for (idx = 0; idx < numsSize ; idx++) {

4 switch (nums[idx]) {

5 case 0:

6 count0s++;

7 break;

8 case 1:

9 count1s++;

10 break;

11 case 2:

12 count2s++;

13 break;

14 }

15 }

16 idx = 0;

Testcase Result

Accepted Runtime: 1 ms

Case 1 Case 2

Input

nums =

[2,0,2,1,1,0]

Output

[0,0,1,1,2,2]

Console Run Submit

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Reverse String - LeetCode

Reverse String - LeetCode

leetcode.com/problems/reverse-string/

Problem List

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22-07-2023

Description

Editorial

Solutions (9.5K)

Submissions

### 344. Reverse String

Easy 7.6K 1.1K

Companies

Write a function that reverses a string. The input string is given as an array of characters `s`.

You must do this by modifying the input array **in-place** with **O(1)** extra memory.

**Example 1:**

Input: `s = ["h","e","l","l","o"]`

Output: `["o","l","l","e","h"]`

**Example 2:**

Input: `s = ["H","a","n","n","a","h"]`

Output: `["h","a","n","n","a","H"]`

**Constraints:**

- `1 <= s.length <= 105`
- `s[i]` is a printable ascii character.

1

2

3

4

5

6

7

8

9

10

```
void reverseString(char* s, int sSize){
    char* left = s;
    char* right = s + sSize - 1;

    while (left < right) {
        char temp = *right;
        *right-- = *left;
        *left++ = temp;
    }
}
```

Testcase

Result

Accepted Runtime: 4 ms

Case 1 Case 2

Input

s =

["h","e","l","l","o"]

Output

["o","l","l","e","h"]

Console

Run

Submit

11. Container With Most Water

Medium 25.4K 1.4K

Companies


You are given an integer array `height` of length `n`. There are `n` vertical lines drawn such that the two endpoints of the `i`<sup>th</sup> line are `(i, 0)` and `(i, height[i])`.

Find two lines that together with the x-axis form a container, such that the container contains the most water.

Return the maximum amount of water a container can store.

**Notice** that you may not slant the container.

**Example 1:**



1

2

3

4

5

6

7

8

0

1

2

3

4

5

6

7

8

1

2

3

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12

```
1 int maxArea(int* arr, int N){
2     int max = 0, test, i=0, j=N-1;
3     while(j>i){
4         test = arr[i];
5         if(test>arr[j]) test = arr[j];
6         test = (j - i) * test;
7         if(max < test) max = test;
8         if(arr[i] < arr[j]) i++;
9         else j--;
10    }
11    return max;
12 }
```

Testcase

Result

Accepted Runtime: 5 ms

Case 1 Case 2

Input

height =

[1, 8, 6, 2, 5, 4, 8, 3, 7]

Output

49

Console

Run

Submit

32°C Haze

Search

ENG IN

11:17 22-07-2023

26. Remove Duplicates from Sorted Array

Easy 11.8K 15.7K

Companies

Given an integer array `nums` sorted in **non-decreasing order**, remove the duplicates **in-place** such that each unique element appears only **once**. The **relative order** of the elements should be kept the **same**. Then return the number of unique elements in `nums`.

Consider the number of unique elements of `nums` to be `k`, to get accepted, you need to do the following things:

- Change the array `nums` such that the first `k` elements of `nums` contain the unique elements in the order they were present in `nums` initially. The remaining elements of `nums` are not important as well as the size of `nums`.
- Return `k`.

**Custom Judge:**

The judge will test your solution with the following code:

```
int[] nums = [...]; // Input array
int[] expectedNums = [...]; // The expected answer with correct length

int k = removeDuplicates(nums); // Calls your implementation

assert k == expectedNums.length;
for (int i = 0; i < k; i++) {
    assert nums[i] == expectedNums[i];
}
```

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

```
int removeDuplicates(int* nums, int numsSize){
    int k = 1;

    int* ptr_insert = nums;
    int* ptr_scanner = nums;
    int* ptr_end = nums + numsSize - 1;

    while (ptr_scanner < ptr_end) {
        while (*ptr_scanner == *ptr_insert && ptr_scanner < ptr_end) {
            ptr_scanner++;
        }

        if (*ptr_scanner != *ptr_insert) {
            ptr_insert++;
            *ptr_insert = *ptr_scanner;
            k++;
        }
    }
}
```

Testcase Result

Accepted Runtime: 4 ms

Case 1 Case 2

Input

nums = [1,1,2]

Output

[1,2]

Console Run Submit

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Search

ENG IN 11:31 22-07-2023

Sort Array By Parity II - LeetCode

leetcode.com/problems/sort-array-by-parity-ii/

Problem List

Premium

Description

Editorial

Solutions (2.1K)

Submissions

## 922. Sort Array By Parity II

Easy 2.4K 86

Companies

Given an array of integers `nums`, half of the integers in `nums` are **odd**, and the other half are **even**.

Sort the array so that whenever `nums[i]` is odd, `i` is **odd**, and whenever `nums[i]` is even, `i` is **even**.

Return *any* answer array that satisfies this condition.

**Example 1:**

Input: `nums = [4,2,5,7]`

Output: `[4,5,2,7]`

Explanation: `[4,7,2,5]`, `[2,5,4,7]`, `[2,7,4,5]` would also have been accepted.

**Example 2:**

Input: `nums = [2,3]`

Output: `[2,3]`

**Constraints:**

- $2 \leq \text{nums.length} \leq 10^4$

i C Auto

1 int\* sortByParityII(int\* nums, int numsSize, int\* returnSize){  
2 \*returnSize = numsSize;  
3 int\* result = malloc(sizeof(int)\*numsSize);  
4 int even = 0;  
5 int odd = 1;  
6 for(int i = 0; i<numsSize;i++){  
7 if(nums[i] % 2 == 0){  
8 result[even] = nums[i];  
9 even += 2;  
10 }else{  
11 result[odd] = nums[i];  
12 odd += 2;  
13 }  
14 }  
15  
16 return result;  
17 }

Testcase Result

Accepted Runtime: 1 ms

Case 1 Case 2

Input

nums =  
[4,2,5,7]

Output

[4,5,2,7]

Console

Run Submit

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Search

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Valid Palindrome - LeetCode

leetcode.com/problems/valid-palindrome/

Problem List

Premium

Description

Editorial

Solutions (10.8K)

Submissions

## 125. Valid Palindrome

Easy 7.4K 7.5K

Companies

A phrase is a **palindrome** if, after converting all uppercase letters into lowercase letters and removing all non-alphanumeric characters, it reads the same forward and backward. Alphanumeric characters include letters and numbers.

Given a string `s`, return `true` if it is a **palindrome**, or `false` otherwise.

**Example 1:**

Input: `s = "A man, a plan, a canal: Panama"`  
Output: `true`  
Explanation: "amanaplanacanalpanama" is a palindrome.

**Example 2:**

Input: `s = "race a car"`  
Output: `false`  
Explanation: "raceacar" is not a palindrome.

**Example 3:**

Input: `s = ""`

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```
    } else if ('a' <= s[i] && s[i] <= 'z'){
        sym1 = s[i];
        flag = 0;
    } else if ('0' <= s[i] && s[i] <= '9'){
        sym1 = s[i];
        flag = 0;
    } else {
        i++;
    }
}
flag = 1;
while(flag && i <= k){
    if('A' <= s[k] && s[k] <= 'Z'){
        sym2 = s[k] + 32;
        flag = 0;
    } else if ('a' <= s[k] && s[k] <= 'z'){
```

Testcase

Result

Accepted

Runtime: 0 ms

Case 1

Case 2

Case 3

Input

`s =`  
`"A man, a plan, a canal: Panama"`

Output

`true`

Console

Run

Submit

32°C

Haze

Search

ENG

IN

11:46

22-07-2023

125. Valid Palindrome

Easy 7.4K 7.5K

A phrase is a **palindrome** if, after converting all uppercase letters into lowercase letters and removing all non-alphanumeric characters, it reads the same forward and backward. Alphanumeric characters include letters and numbers.

Given a string *s*, return *true* if it is a **palindrome**, or *false* otherwise.

**Example 1:**

Input: *s* = "A man, a plan, a canal: Panama"  
Output: *true*  
Explanation: "amanaplanacanalpanama" is a palindrome.

**Example 2:**

Input: *s* = "race a car"  
Output: *false*  
Explanation: "raceacar" is not a palindrome.

**Example 3:**

Input: *s* = "  
Output: *true*  
Explanation: "" is an empty string which is a palindrome.

```

class Solution {
public:
    bool isPalindrome(string s) {
        int i = 0, j = s.size() - 1;
        while (i < j) {
            while (i < j && !isalnum(s[i])) i++;
            while (i < j && !isalnum(s[j])) j--;
            if (s[i] != s[j]) return false;
            i++; j--;
        }
        return true;
    }
};

```

Testcase Result

Accepted

Case 1 Case 2 Case 3

Input

s =  
"race a car"

Output

false

Console

Run Submit



125. Valid Palindrome

Easy 7.4K 7.5K

Companies

A phrase is a **palindrome** if, after converting all uppercase letters into lowercase letters and removing all non-alphanumeric characters, it reads the same forward and backward. Alphanumeric characters include letters and numbers.

Given a string `s`, return `true` if it is a **palindrome**, or `false` otherwise.

Example 1:

Input: `s = "A man, a plan, a canal: Panama"`  
Output: `true`  
Explanation: "amanaplanacanalpanama" is a palindrome.

Example 2:

Input: `s = "race a car"`  
Output: `false`  
Explanation: "raceacar" is not a palindrome.

Example 3:

Input: `s = " "`

17  
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```
        } else if ('a' <= s[i] && s[i] <= 'z'){
            sym1 = s[i];
            flag = 0;
        } else if ('0' <= s[i] && s[i] <= '9'){
            sym1 = s[i];
            flag = 0;
        } else {
            i++;
        }
    }
    flag = 1;
    while(flag && i <= k){
        if('A' <= s[k] && s[k] <= 'Z'){
            sym2 = s[k] + 32;
            flag = 0;
        } else if ('a' <= s[k] && s[k] <= 'z'){
```

Testcase

Result

Accepted

Runtime: 0 ms

Case 1 Case 2 Case 3

Input

`s =  
" "`

Output

`true`

Console

Run Submit

32°C  
Haze

Search

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22-07-2023