

Active Courses

Data Structures & Algori

CodeHelp - Upcoming S

Summary of Sliding Win

Beautiful Array - LeetCo

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Contest Home

Coding Problems

Problem

Submissions

## Make the array beautiful

Accuracy: 22.62%   Submissions: 673+   Points: 20

Given an array of positive and negative integers. You have to make the array beautiful. An array is beautiful if two adjacent integers,  $arr[i]$  and  $arr[i+1]$  have same sign. And you can do the following operation any number of times until the array becomes beautiful.

- If two adjacent integers have different sign, remove them.

Return the beautiful array after performing the above operation.

**Note:**

- An empty array is also a beautiful array. There can be many adjacent integers with different sign. So **remove adjacent integers** with **different** sign from **left to right**.
- Only for this problem 0 is considered as a **positive** number.

**Example 1:**

**Input:** 4 2 -2 1  
**Output:** 4 1  
**Explanation:** As at indices 1 and 2 , 2 and -2 have different sign, they are removed. And the the final array is: 4 1.

**Example 2:**

**Input:** 2 -2 1 -1  
**Output:** []  
**Explanation:** As at indices 0 and 1, 2 and -2 have different sign, so they are removed. Now the array is 1 -1. Now 1 and -1 are also removed as they have different sign. So the final array is empty.

**Your Task:**

You don't need to read input or print anything. Your task is to complete the function **makeBeautiful()** which takes an

C++ (g++ 5.4)

```
1 // } Driver Code Ends
9 // User function Template for C++
10
11 class Solution {
12 public:
13     vector<int> makeBeautiful(vector<int> arr) {
14         // code here
15     }
16 };
17 // } Driver Code Ends
```

Custom Input

Compile & Run

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## Reverse both parts

Accuracy: 71.8%

Submissions: 188+

Points: 30

Given a linked list and a number k. You have to reverse first part of linked list with k nodes and the second part with n-k nodes.

**Example 1:**

**Input:** 1 -> 2 -> 3 -> 4 -> 5

k = 2

**Output:** 2 -> 1 -> 5 -> 4 -> 3

**Explanation:** As k = 2 , so the first part 2 nodes: 1 -> 2 and the second part with 3 nodes: 3 -> 4 -> 5. Now after reversing the first part: 2 -> 1 and the second part: 5 -> 4 -> 3. So the output is: 2 -> 1 -> 5 -> 4 -> 3

**Example 2:**

**Input:** 1 -> 2 -> 4 -> 3

k = 3

**Output:** 4 -> 2 -> 1 -> 3

**Explanation:** As k = 3 , so the first part 3 nodes: 4 -> 2 -> 1 and the second part with 1 nodes: 3. Now after reversing the first part: 1 -> 2 -> 4 and the second part: 3. So the output is: 1 -> 2 -> 4 -> 3

**Your Task:**

You don't need to read input or print anything. Your task is to complete the function **reverse()** which takes head node of the linked list and a integer k as input parameters and returns head node of the linked list after reversing both parts.

**Expected Time Complexity:** O(N)

C++ (g++ 5.4)

```
1 // } Driver Code Ends
49 //User function Template for C++
50
51 class Solution
52 {
53 public:
54     Node *reverse(Node *head, int k)
55     {
56         // code here
57     }
58 };
59
60 // } Driver Code Ends
```

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Submissions

### Minimum time to empty the array

Accuracy: 36.87% Submissions: 198+ Points: 40

Given an array of integers. You have to empty the array by doing the following operations any number of times.

- Remove the integer at index 0 if it is the minimum of the array.
- Remove the integer at index 0 and append it to the array.

Return the minimum time to empty the array.Each operation takes one unit of time.

**Example 1:**

**Input:** 4 5 1 3 2

**Output:** 10

**Explanation:** We can empty the array by following the below steps:

- 5 1 3 2 4,removed 4 and appended it to the array.
- 1 3 2 4 5,removed 5 and appended it to the array.
- 3 2 4 5,removed 1 as it is the minimum of the array.
- 2 4 5 3,removed 3 and appended it to the array.
- 4 5 3,removed 2 as it is the minimum of the array.
- 5 3 4,removed 4 and appended it to the array.
- 3 4 5,removed 5 and appended it to the array.
- 4 5,removed 3 as it is the minimum of the array.
- 5, removed 4 as it is the minimum of the array.
- Finally the array is empty after removing 5.

**Example 2:**

**Input:** 1 2 3

**Output:** 3

**Your Task:**

You don't need to read input or print anything. Your task is to complete the function **minimumTime()** which takes an array **arr[]** as input parameter and returns an

C++ (g++ 5.4)

```
1 // } Driver Code Ends
9 // User Function Template for C++
10
11 class Solution {
12 public:
13     int minimumTime(vector<int> arr) {
14         // code here
15     }
16 };
17 // } Driver Code Ends
```

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Problem

Submissions

### Find anagrams in linked list

Accuracy: 43.68% Submissions: 87+ Points: 50

Given a **linked list of characters** and a **string S**. Return all the anagrams of the string present in the given linked list. In case of overlapping anagrams choose the first anagram from left (for more clear explanation, look at the first example).

**Example 1:**

**Input:** a -> b -> c -> a -> d -> b -> c -> a  
S = bac

**Output:** [a -> b -> c, b -> c -> a]

**Explanation:** In the given linked list, there are three anagrams:

1. a -> b -> c -> a -> d -> b -> c -> a
2. a -> b -> c -> a -> d -> b -> c -> a
3. a -> b -> c -> a -> d -> b -> c -> a

But in 1 and 2, a -> b -> c and b -> c -> a are overlapping. So we take a -> b -> c as it comes first from left. So the output is:

[a->b->c,b->c->a]

**Example 2:**

**Input:** a -> b -> d -> c -> a  
S = bac

**Output:** []

**Explanation:** Since there are no anagrams, we return an empty array.

**Your Task:**

You don't need to read input or print anything. Your task is to complete the function **findAnagrams()** which takes head node of the linked list and a string S as input parameters and returns an array of linked list.

**Expected Time Complexity:** O(N)

C++ (g++ 5.4)

1 // } Driver Code Ends

41 /\*

42

43 Definition for singly Link List Node

44 struct Node

45 {

46 char data;

47 Node\* next;

48 Node(char x) { data = x; next = NULL; }

49 };

50

51 You can also use the following for printing the link list.

52 printList(Node\* node);

53 \*/

54

55 class Solution {

56 public:

57 vector<Node\*> findAnagrams(struct Node\* head, string s) {

58 // code here

59 }

60 };

61

62 // } Driver Code Ends

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Problem

Submissions

Construct smallest string

Accuracy: 13.46% Submissions: 89+ Points: 60

Given a string **A** and you have two empty string **B** and **C**. You can do the following operations any number of times:

- Remove the first character of **A** and insert it at the end of **B**.
- Remove the last character of **B** and insert it at the end of **C**.

You have to empty the string **A** and make the string **C** lexicographically smallest by performing above operations and using the string **B**. At the end **B** should also be empty.

Example 1:

Input: A = fde

Output: def

Explanation:

**Step 1:** Remove the first character of A i.e. 'f' and insert it at end of B. So now A = de and B = f.

**Step 2:** Remove the first character of A i.e. 'd' and insert it at end of B. So now A = e and B = fd.

**Step 3:** Remove the last character of B i.e. 'd' and insert it at end of C. So now A = e, B = f and C = d.

**Step 4:** Remove the first character of A i.e. 'e' and insert it at end of B. So now A is empty, B = fe and C = d.

**Step 5:** Remove the last character of B i.e. 'e' and insert it at end of C. So now A is empty, B = f and C = de.

**Step 6:** Remove the last character of B i.e. 'f' and insert it at end of C. So now A is empty, B is also empty and C = def.

Example 2:

Input: A = acdb

Output: abdc

Your Task:

You don't need to read input or print anything. Your task is to complete the function **constructSmallestString()** which takes a string as input parameter and returns a string.

C++ (g++ 5.4)

```
1 // Driver Code Ends
9 // User Function Template for C++
10
11 class Solution {
12 public:
13     string constructSmallestString(string A) {
14         // code here
15     }
16 };
17
18 // Driver Code Ends
```

Custom Input

Compile & Run

Submit