

LEETCODE SOLUTIONS

1.TWO SUM

Runtime: 106 ms | Beats 15.18%
Memory: 8.77 MB | Beats 34.41%

```
int* twoSum(int* nums, int numsSize, int target, int* returnSize) {
    int i, j;
    int* result = (int*)malloc(2 * sizeof(int));
    *returnSize = 2;

    for(i=0;i<numsSize-1;i++){
        for(j=i+1;j<numsSize;j++){
            if(nums[i]+nums[j]==target){
                result[0]=i;
                result[1]=j;
                return result;
            }
        }
    }
    return NULL;
}
```

Testcase | Test Result
Accepted Runtime: 0 ms
Case 1 Case 2 Case 3
Input
nums = [2, 7, 11, 15]
target = 9

26.Remove duplicates from sorted array

Runtime: 0 ms | Beats 100.00%
Memory: 12.48 MB | Beats 12.25%

```
int removeDuplicates(int* nums, int numsSize) {
    if (numsSize==0) return 0;
    int k=1;

    for (int i=1;i<numsSize;i++){
        if(nums[i]==nums[k-1]){
            nums[k]=nums[i];
            k++;
        }
    }
    return k;
}
```

Testcase | Test Result
Accepted Runtime: 0 ms
Case 1 Case 2
Input
nums = [1,1,2]
Output
[1,2]
Expected
[1,2]

35.Search insert position

```
int searchInsert(int* nums, int numsSize, int target) {
    for (int i = 0; i < numsSize; i++) {
        if (nums[i] >= target) {
            return i;
        }
    }
    return numsSize;
}
```

Runtime: 0 ms | Beats 100.00%
Memory: 8.25 MB | Beats 51.66%

Testcase | Test Result
Accepted | Runtime: 0 ms
Case 1 | Case 2 | Case 3

Input:
nums = [1,3,5,6]
target = 5

Output:
2

203.Remove Linked List Elements

```
/* Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
struct ListNode* removeElements(struct ListNode* head, int val) {
    struct ListNode dummy;
    dummy.next = head;
    struct ListNode* curr = &dummy;
    while(curr->next != NULL){
        if(curr->next->val == val){
            struct ListNode* temp = curr->next;
            curr->next = curr->next->next;
            free(temp);
        } else{
            curr = curr->next;
        }
    }
    return dummy.next;
}
```

Runtime: 2 ms | Beats 20.21%
Memory: 12.72 MB | Beats 15.21%

Testcase | Test Result
Accepted | Runtime: 0 ms
Case 1 | Case 2 | Case 3

Input:

876.Middle of the Linked List

This screenshot shows the LeetCode problem 876 Middle of the Linked List page. The code is written in C and uses a two-pointer approach to find the middle node of a singly-linked list. The runtime is 0 ms (100.00%) and memory usage is 8.43 MB (57.28%). The code has been accepted and submitted by Ramith on Nov 30, 2023 at 23:43.

```
1 /**
2  * Definition for singly-linked list.
3  * struct ListNode {
4  *     int val;
5  *     struct ListNode *next;
6  * };
7 */
8 struct ListNode* middleNode(struct ListNode* head) {
9     struct ListNode* first_ptr = head;
10    struct ListNode* second_ptr = head;
11    while(first_ptr != NULL && first_ptr->next != NULL){
12        second_ptr = second_ptr->next;
13        first_ptr = first_ptr->next->next;
14    }
15    return second_ptr;
16 }
```

109.Convert sorted list to Binary Search Tree

This screenshot shows the LeetCode problem 109 Convert sorted list to Binary Search Tree page. The code is written in C and uses a recursive approach to convert a sorted linked list into a binary search tree. The runtime is 7 ms (59.23%) and memory usage is 21.53 MB (27.31%). The code has been accepted and submitted by Ramith on Dec 22, 2023 at 08:42.

```
1 struct TreeNode* createBST(struct ListNode* low, struct ListNode* high) {
2     if (low == high)
3         return NULL;
4
5     struct ListNode* slow = low;
6     struct ListNode* fast = low;
7
8     while (fast != high && fast->next != high) {
9         slow = slow->next;
10        fast = fast->next->next;
11    }
12
13    struct TreeNode* node = (struct TreeNode*)malloc(sizeof(struct TreeNode));
14    node->val = slow->val;
15    node->left = createBST(low, slow);
16    node->right = createBST(slow->next, high);
17
18    return node;
19 }
```

1669. Merge in between linked lists

```
1 /**
2  * Definition for singly-linked list.
3  * struct ListNode {
4  *     int val;
5  *     struct ListNode *next;
6  * };
7 */
8
9 struct ListNode* mergeInBetween(struct ListNode* list1, int a, int b, struct ListNode* list2) {
10    struct ListNode* curr = list1;
11
12    for (int i = 0; i < a - 1; i++) {
13        curr = curr->next;
14    }
15
16    struct ListNode* beforeA = curr;
17
18    for (int i = a; i < b; i++) {
19        curr = curr->next;
20    }
21
22    curr->next = list2;
23
24    while (list2->next != NULL) {
25        list2 = list2->next;
26    }
27
28    list2->next = curr->next;
29
30    curr->next = NULL;
31
32    return beforeA;
33}
```