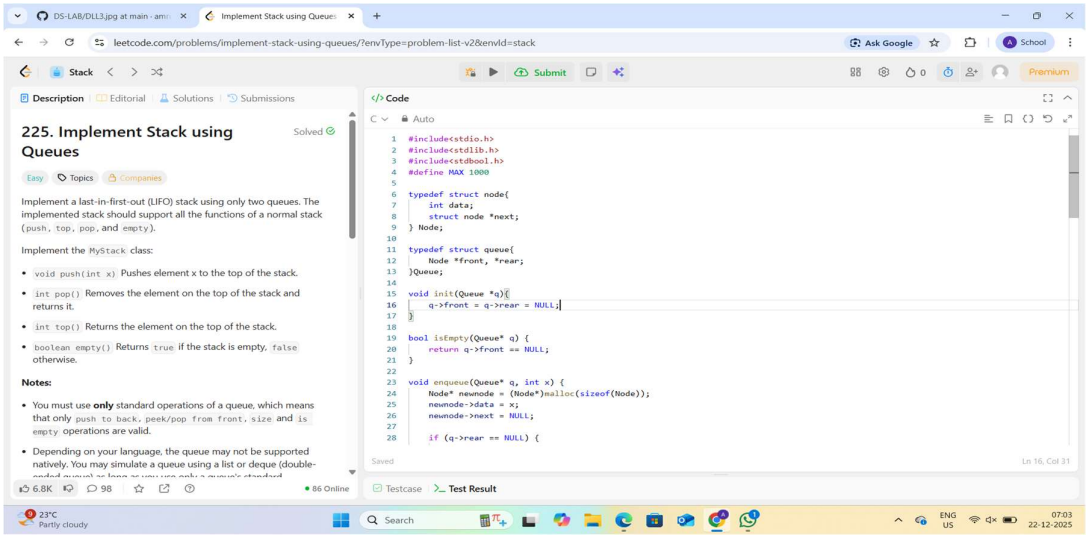
Implement Stack using Queues
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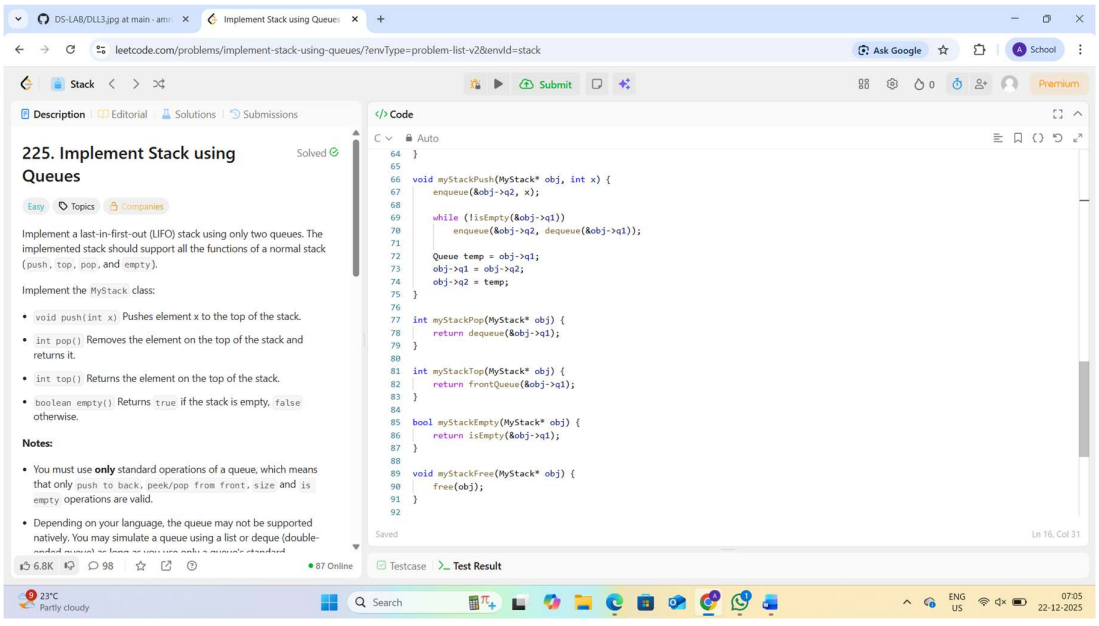
225. Implement Stack using Queues
Solved
Easy
Topics
Companies
Implement a last-in-first-out (LIFO) stack using only two queues. The implemented stack should support all the functions of a normal stack (push, top, pop, and empty).
Implement the MyStack class:
void push(int x) Pushes element x to the top of the stack.
int pop() Removes the element on the top of the stack and returns it.
int top() Returns the element on the top of the stack.
boolean empty() Returns true if the stack is empty, false otherwise.
Notes:
You must use only standard operations of a queue, which means that only push to back, peek/pop from front, size and is empty operations are valid.
Depending on your language, the queue may not be supported natively. You may simulate a queue using a list or deque (double-
Code
C
Auto
#include<stdio.h>
#include<stdlib.h>
#include<stdbool.h>
#define MAX 1000
typedef struct node{
int data;
struct node *next;
} Node;
typedef struct queue{
Node *front, *rear;
}Queue;
void init(Queue *q){
q->front = q->rear = NULL;
}
bool isEmpty(Queue* q) {
return q->front == NULL;
}
void enqueue(Queue* q, int x) {
Node* newnode = (Node*)malloc(sizeof(Node));
newnode->data = x;
newnode->next = NULL;
if (q->rear == NULL) {
Saved
Ln 16, Col 31
Testcase
Test Result
6.8K
98
86 Online
23°C
Partly cloudy
Search
ENG
US
07:03
22-12-2025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225. Implement Stack using Queues
Solved
Easy
Topics
Companies
Implement a last-in-first-out (LIFO) stack using only two queues. The implemented stack should support all the functions of a normal stack (push, top, pop, and empty).
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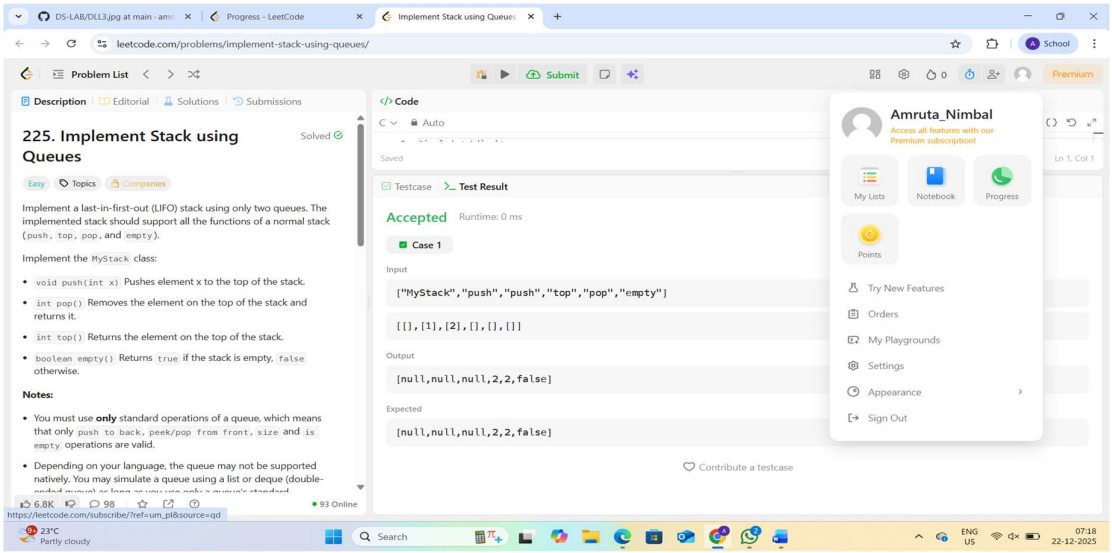
boolean empty() Returns true if the stack is empty, false otherwise.
Notes:
You must use only standard operations of a queue, which means that only push to back, peek/pop from front, size and is empty operations are valid.
Depending on your language, the queue may not be supported natively. You may simulate a queue using a list or deque (double-
Code
C
Auto
}
void myStackPush(MyStack* obj, int x) {
enqueue(&obj->q2, x);
while (!isEmpty(&obj->q1))
enqueue(&obj->q2, dequeue(&obj->q1));
Queue temp = obj->q1;
obj->q1 = obj->q2;
obj->q2 = temp;
}
int myStackPop(MyStack* obj) {
return dequeue(&obj->q1);
}
int myStackTop(MyStack* obj) {
return frontQueue(&obj->q1);
}
bool myStackEmpty(MyStack* obj) {
return isEmpty(&obj->q1);
}
void myStackFree(MyStack* obj) {
free(obj);
}
Saved
Ln 16, Col 31
Testcase
Test Result
6.8K
98
87 Online
23°C
Partly cloudy
Search
ENG
US
07:05
22-12-2025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Implement Stack using Queues
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225. Implement Stack using Queues
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Implement a last-in-first-out (LIFO) stack using only two queues. The implemented stack should support all the functions of a normal stack (push, top, pop, and empty).
Implement the MyStack class:
void push(int x) Pushes element x to the top of the stack.
int pop() Removes the element on the top of the stack and returns it.
int top() Returns the element on the top of the stack.
boolean empty() Returns true if the stack is empty, false otherwise.
Notes:
You must use only standard operations of a queue, which means that only push to back, peek/pop from front, size and is empty operations are valid.
Depending on your language, the queue may not be supported natively. You may simulate a queue using a list or deque (double-
Code
C
Auto
Saved
Ln 1, Col 1
Testcase
Test Result
Accepted
Runtime: 0 ms
Case 1
Input
["MyStack","push","push","top","pop","empty"]
[[],[1],[2],[],[],[]]
Output
[null,null,null,2,2,false]
Expected
[null,null,null,2,2,false]
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6.8K
98
93 Online
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Partly cloudy
Search
ENG
US
07:18
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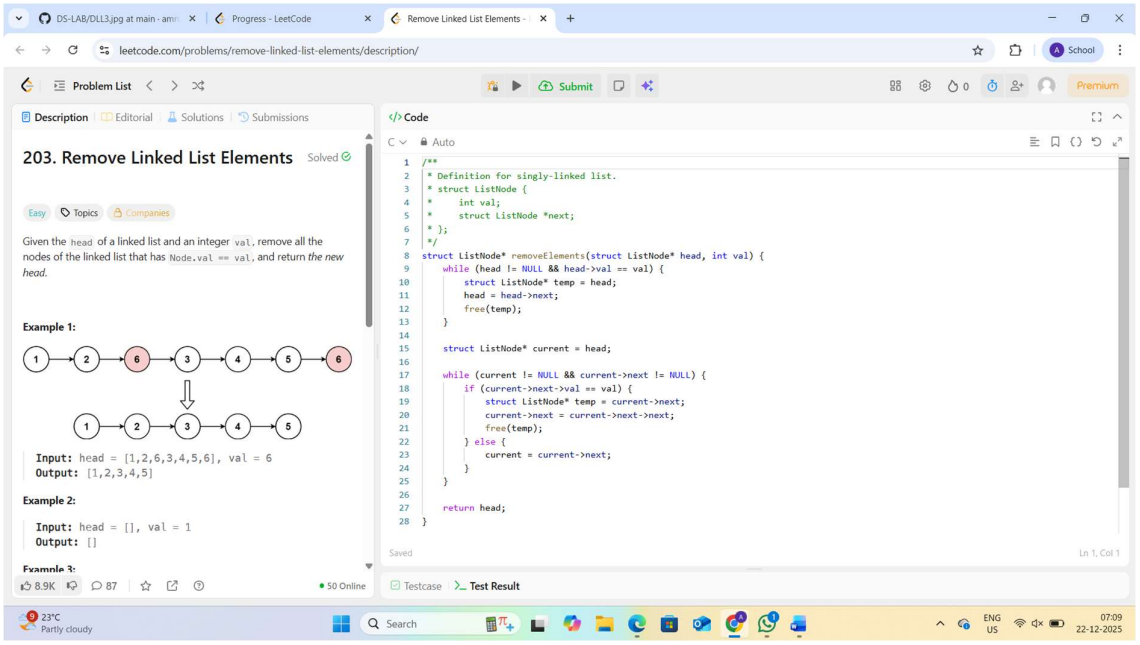
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Remove Linked List Elements -
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School
Problem List
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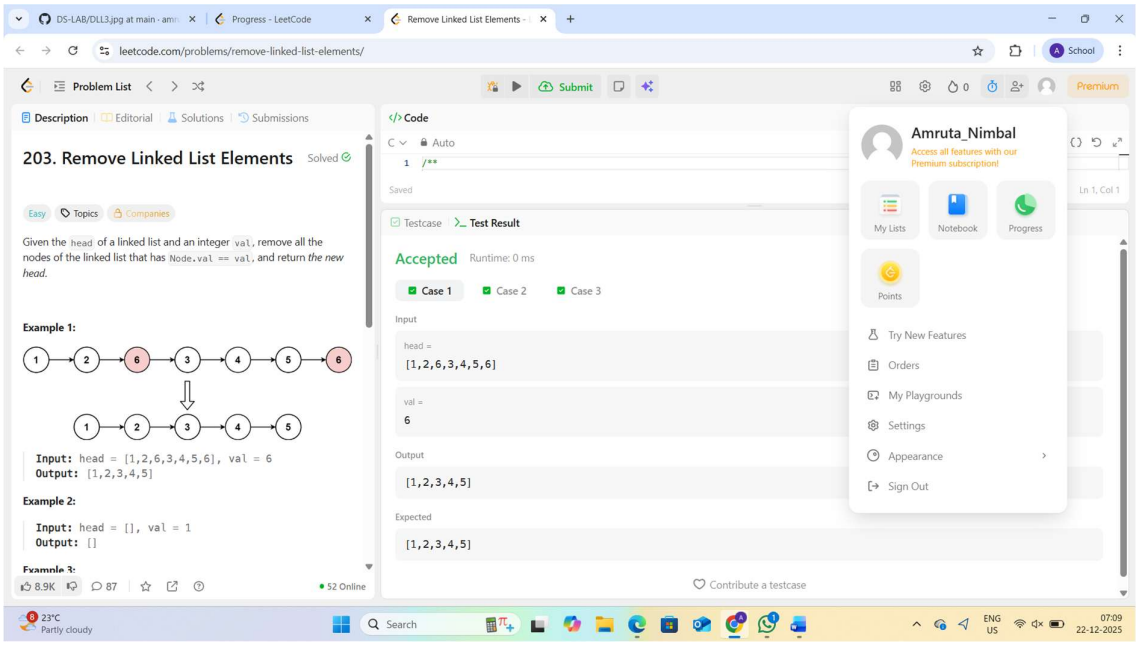
Submissions
203. Remove Linked List Elements
Solved
Easy
Topics
Companies
Given the head of a linked list and an integer val, remove all the nodes of the linked list that has Node.val == val, and return the new head.
Example 1:
Input: head = [1,2,6,3,4,5,6], val = 6
Output: [1,2,3,4,5]
Example 2:
Input: head = [], val = 1
Output: []
Example 3:
8.9K
87
50 Online
Code
Auto
/**
* Definition for singly-linked list.
* struct ListNode {
* int val;
* struct ListNode *next;
* };
*/
struct ListNode* removeElements(struct ListNode* head, int val) {
while (head != NULL && head->val == val) {
struct ListNode* temp = head;
head = head->next;
free(temp);
}
struct ListNode* current = head;
while (current != NULL && current->next != NULL) {
if (current->next->val == val) {
struct ListNode* temp = current->next;
current->next = current->next->next;
free(temp);
} else {
current = current->next;
}
}
return head;
}
Saved
Ln 1, Col 1
Testcase
Test Result
23°C
Partly cloudy
Search
ENG
US
07:09
22-12-2025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203. Remove Linked List Elements
Solved
Easy
Topics
Companies
Given the head of a linked list and an integer val, remove all the nodes of the linked list that has Node.val == val, and return the new head.
Example 1:
Input: head = [1,2,6,3,4,5,6], val = 6
Output: [1,2,3,4,5]
Example 2:
Input: head = [], val = 1
Output: []
Example 3:
8.9K
87
52 Online
Code
Auto
/**
Saved
Ln 1, Col 1
Testcase
Test Result
Accepted
Runtime: 0 ms
Case 1
Case 2
Case 3
Input
head =
[1,2,6,3,4,5,6]
val =
6
Output
[1,2,3,4,5]
Expected
[1,2,3,4,5]
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Partly cloudy
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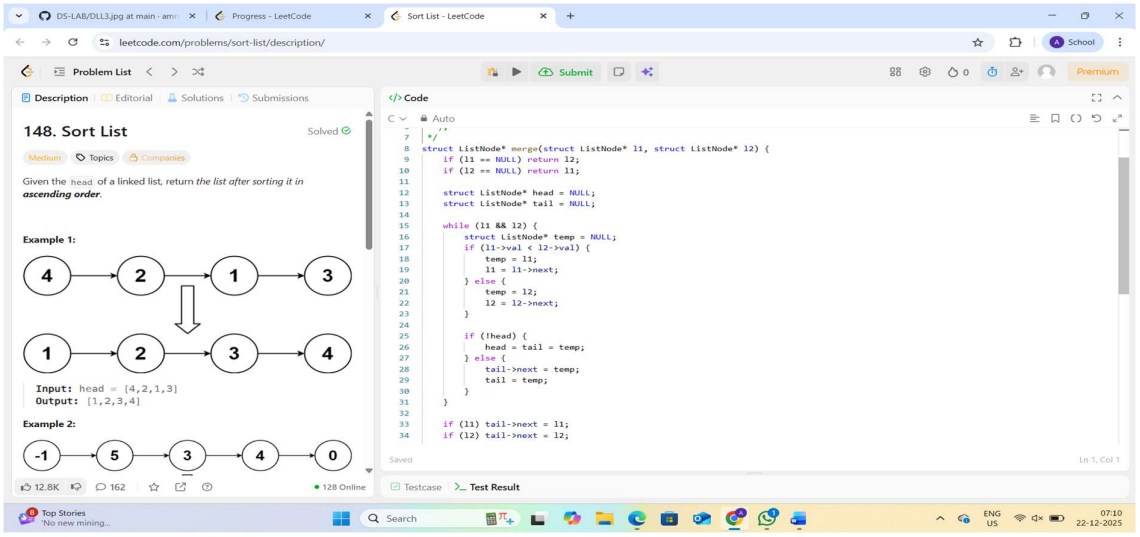
22-12-2025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Sort List - LeetCode
leetcode.com/problems/sort-list/description/
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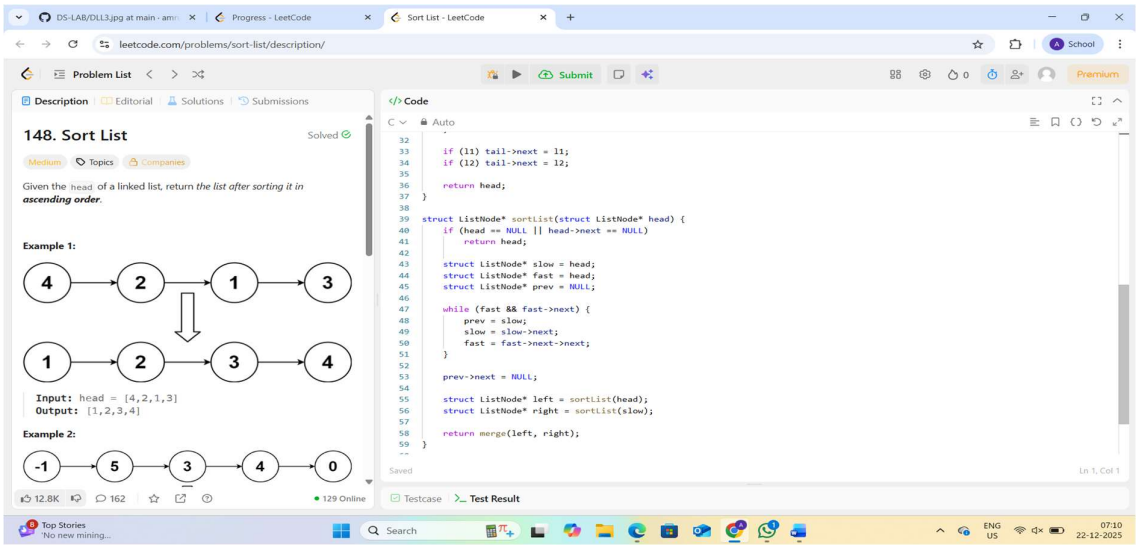
Submissions
148. Sort List
Solved
Medium
Topics
Companies
Given the head of a linked list, return the list after sorting it in ascending order.
Example 1:
Input: head = [4,2,1,3]
Output: [1,2,3,4]
Example 2:
12.8K
162
128 Online
Code
Auto
struct ListNode* merge(struct ListNode* l1, struct ListNode* l2) {
if (l1 == NULL) return l2;
if (l2 == NULL) return l1;
struct ListNode* head = NULL;
struct ListNode* tail = NULL;
while (l1 && l2) {
struct ListNode* temp = NULL;
if (l1->val < l2->val) {
temp = l1;
l1 = l1->next;
} else {
temp = l2;
l2 = l2->next;
}
if (!head) {
head = tail = temp;
} else {
tail->next = temp;
tail = temp;
}
}
if (l1) tail->next = l1;
if (l2) tail->next = l2;
Saved
Ln 1, Col 1
Testcase
Test Result
Top Stories
No new mining...
Search
ENG
US
07:10
22-12-2025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Sort List - LeetCode
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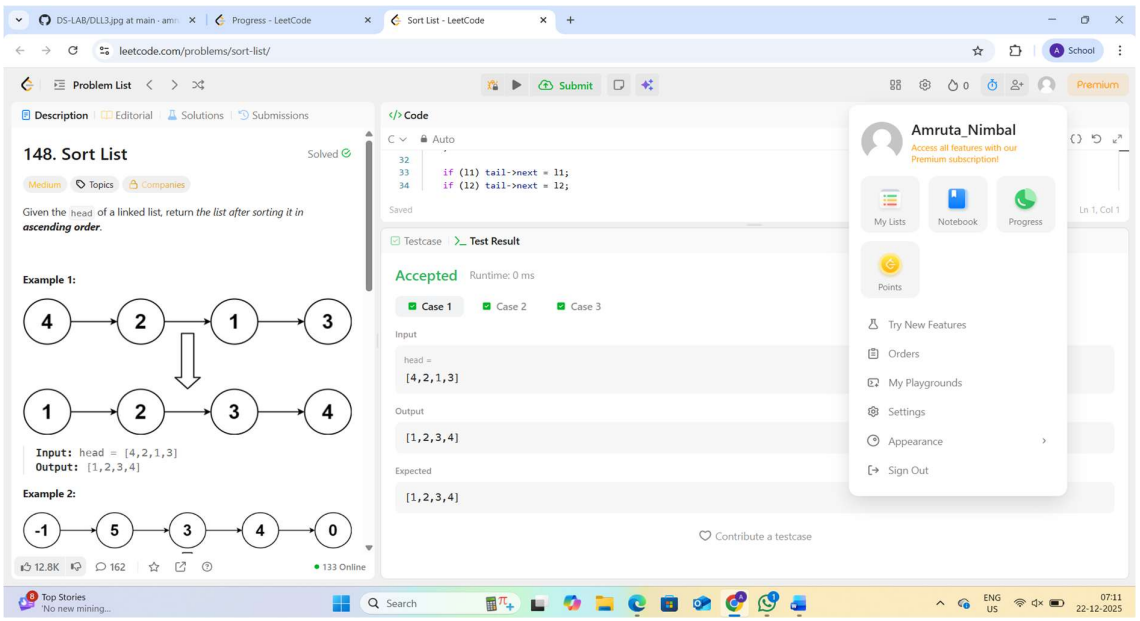
Solutions
Submissions
148. Sort List
Solved
Medium
Topics
Companies
Given the head of a linked list, return the list after sorting it in ascending order.
Example 1:
Input: head = [4,2,1,3]
Output: [1,2,3,4]
Example 2:
12.8K
162
129 Online
Code
Auto
if (l1) tail->next = l1;
if (l2) tail->next = l2;
return head;
}
struct ListNode* sortList(struct ListNode* head) {
if (head == NULL || head->next == NULL)
return head;
struct ListNode* slow = head;
struct ListNode* fast = head;
struct ListNode* prev = NULL;
while (fast && fast->next) {
prev = slow;
slow = slow->next;
fast = fast->next->next;
}
prev->next = NULL;
struct ListNode* left = sortList(head);
struct ListNode* right = sortList(slow);
return merge(left, right);
}
Saved
Ln 1, Col 1
Testcase
Test Result
Top Stories
No new mining...
Search
ENG
US
07:10
22-12-2025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148. Sort List
Solved
Medium
Topics
Companies
Given the head of a linked list, return the list after sorting it in ascending order.
Example 1:
Input: head = [4,2,1,3]
Output: [1,2,3,4]
Example 2:
12.8K
162
133 Online
Code
Auto
if (l1) tail->next = l1;
if (l2) tail->next = l2;
Saved
Ln 1, Col 1
Testcase
Test Result
Accepted
Runtime: 0 ms
Case 1
Case 2
Case 3
Input
head =
[4,2,1,3]
Output
[1,2,3,4]
Expected
[1,2,3,4]
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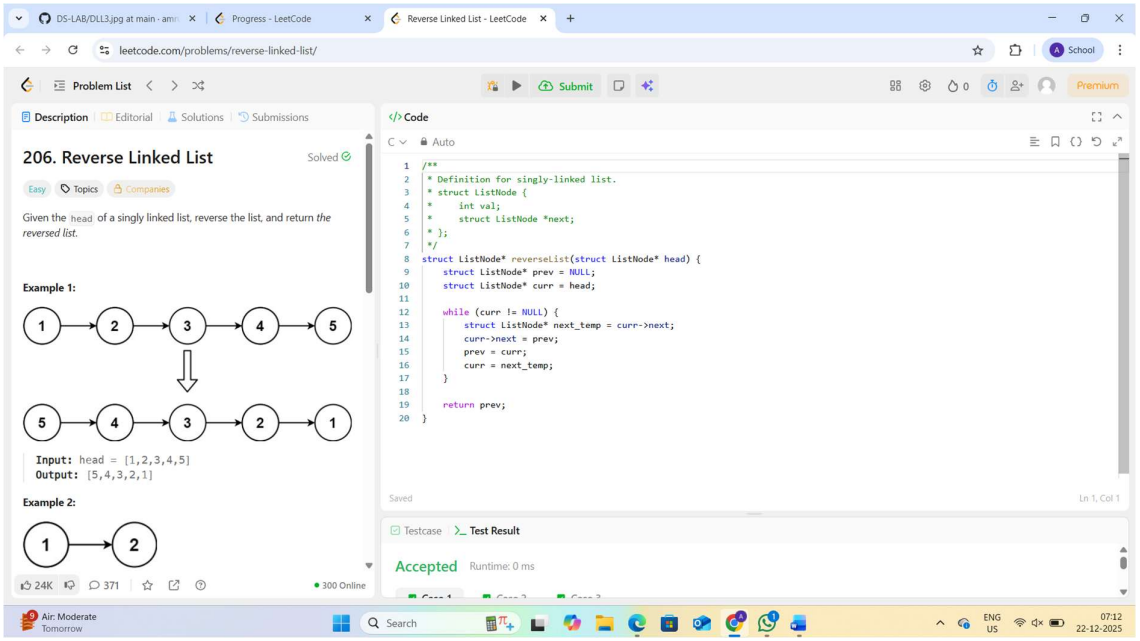
22-12-2025


Reverse Linked List - LeetCode
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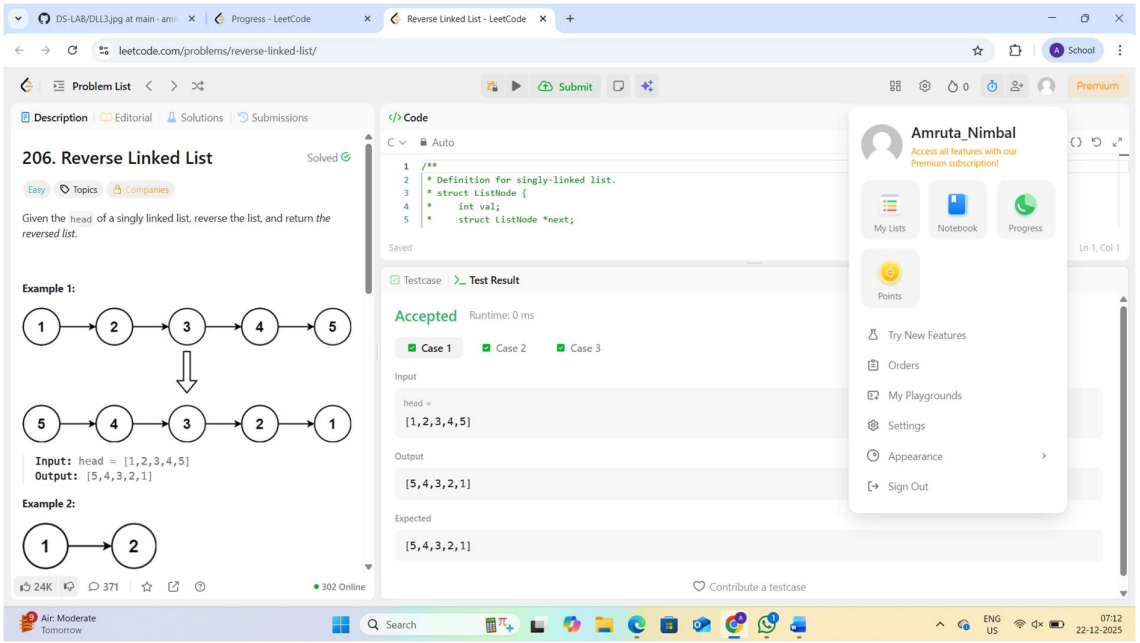
206. Reverse Linked List
Solved
Easy
Topics
Companies
Given the head of a singly linked list, reverse the list, and return the reversed list.
Example 1:
Input: head = [1,2,3,4,5]
Output: [5,4,3,2,1]
Example 2:
24K
371
300 Online
Code
Auto
/**
* Definition for singly-linked list.
* struct ListNode {
*   int val;
*   struct ListNode *next;
* };
*/
struct ListNode* reverseList(struct ListNode* head) {
struct ListNode* prev = NULL;
struct ListNode* curr = head;
while (curr != NULL) {
struct ListNode* next_temp = curr->next;
curr->next = prev;
prev = curr;
curr = next_temp;
}
return prev;
}
Saved
Ln 1, Col 1
Testcase
Test Result
Accepted
Runtime: 0 ms
Air: Moderate
Tomorrow
Search
ENG
US
07:12
22-12-2025


Reverse Linked List - LeetCode
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Problem List
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Description
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Submissions
206. Reverse Linked List
Solved
Easy
Topics
Companies
Given the head of a singly linked list, reverse the list, and return the reversed list.
Example 1:
Input: head = [1,2,3,4,5]
Output: [5,4,3,2,1]
Example 2:
24K
371
302 Online
Code
Auto
/**
* Definition for singly-linked list.
* struct ListNode {
*   int val;
*   struct ListNode *next;
Saved
Ln 1, Col 1
Testcase
Test Result
Accepted
Runtime: 0 ms
Case 1
Case 2
Case 3
Input
head =
[1,2,3,4,5]
Output
[5,4,3,2,1]
Expected
[5,4,3,2,1]
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ENG
US
07:12
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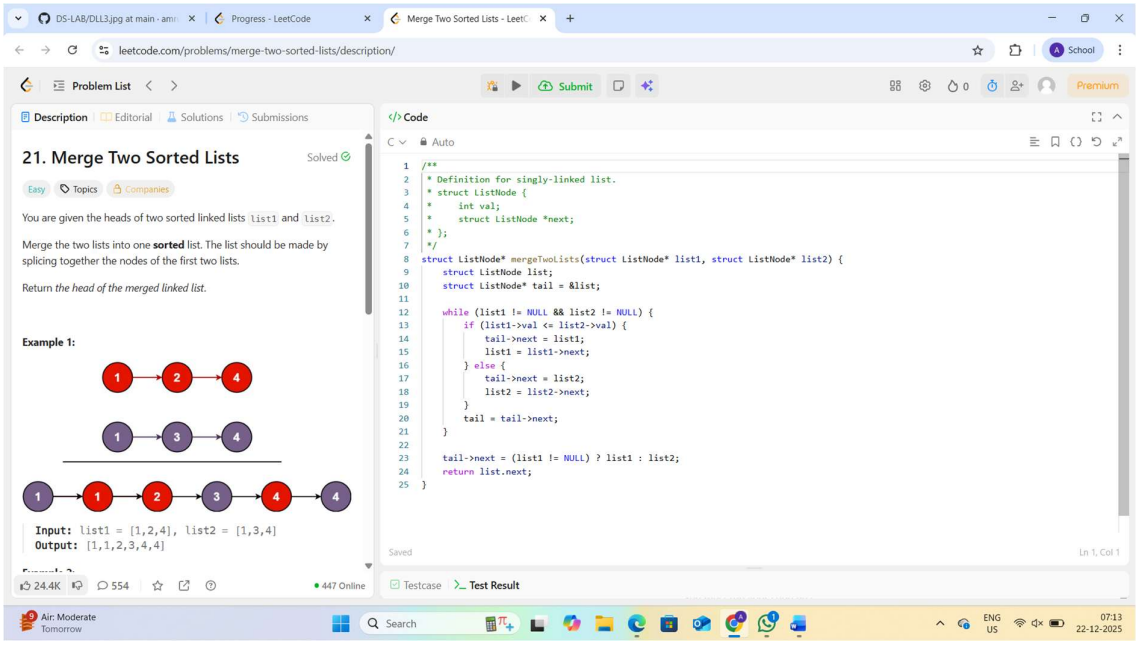
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Merge Two Sorted Lists - Leet
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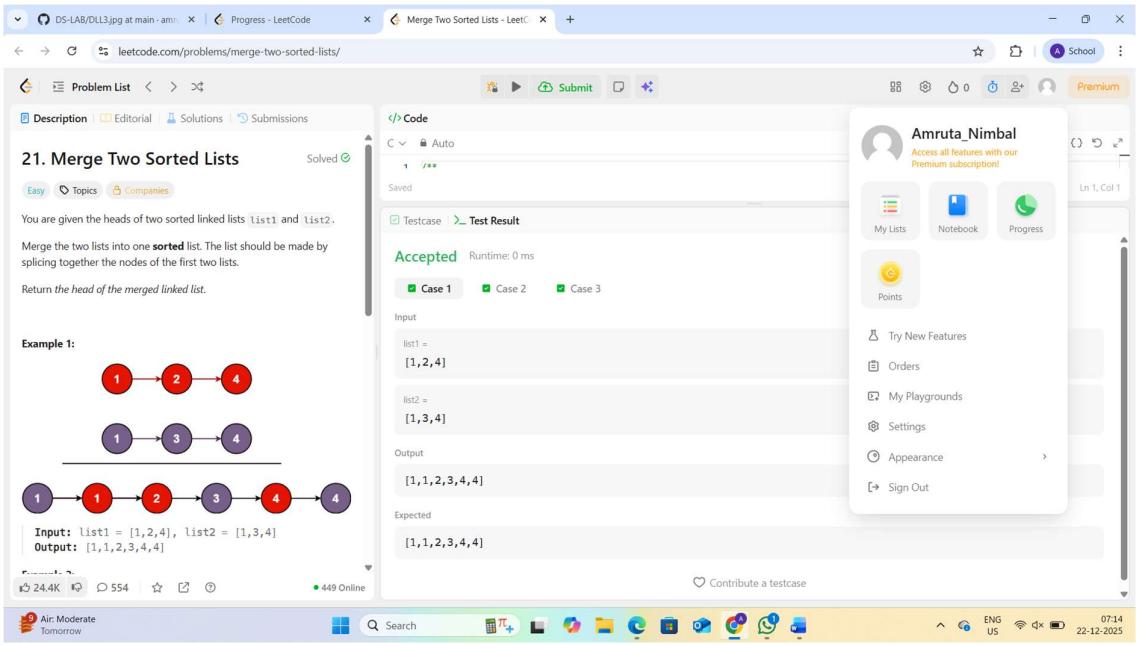
Submissions
21. Merge Two Sorted Lists
Solved
Easy
Topics
Companies
You are given the heads of two sorted linked lists list1 and list2.
Merge the two lists into one sorted list. The list should be made by splicing together the nodes of the first two lists.
Return the head of the merged linked list.
Example 1:
Input: list1 = [1,2,4], list2 = [1,3,4]
Output: [1,1,2,3,4,4]
24.4K
554
447 Online
Code
Auto
/**
* Definition for singly-linked list.
* struct ListNode {
* int val;
* struct ListNode *next;
* };
*/
struct ListNode* mergeTwoLists(struct ListNode* list1, struct ListNode* list2) {
struct ListNode list;
struct ListNode* tail = &list;
while (list1 != NULL && list2 != NULL) {
if (list1->val <= list2->val) {
tail->next = list1;
list1 = list1->next;
} else {
tail->next = list2;
list2 = list2->next;
}
tail = tail->next;
}
tail->next = (list1 != NULL) ? list1 : list2;
return list.next;
}
Saved
Ln 1, Col 1
Testcase
Test Result
Air: Moderate
Tomorrow
Search
ENG
US
07:13
22-12-2025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Merge Two Sorted Lists - Leet
leetcode.com/problems/merge-two-sorted-lists/
Problem List
Submit
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21. Merge Two Sorted Lists
Solved
Easy
Topics
Companies
You are given the heads of two sorted linked lists list1 and list2.
Merge the two lists into one sorted list. The list should be made by splicing together the nodes of the first two lists.
Return the head of the merged linked list.
Example 1:
Input: list1 = [1,2,4], list2 = [1,3,4]
Output: [1,1,2,3,4,4]
24.4K
554
449 Online
Code
Auto
Saved
Ln 1, Col 1
Testcase
Test Result
Accepted
Runtime: 0 ms
Case 1
Case 2
Case 3
Input
list1 =
[1,2,4]
list2 =
[1,3,4]
Output
[1,1,2,3,4,4]
Expected
[1,1,2,3,4,4]
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07:14
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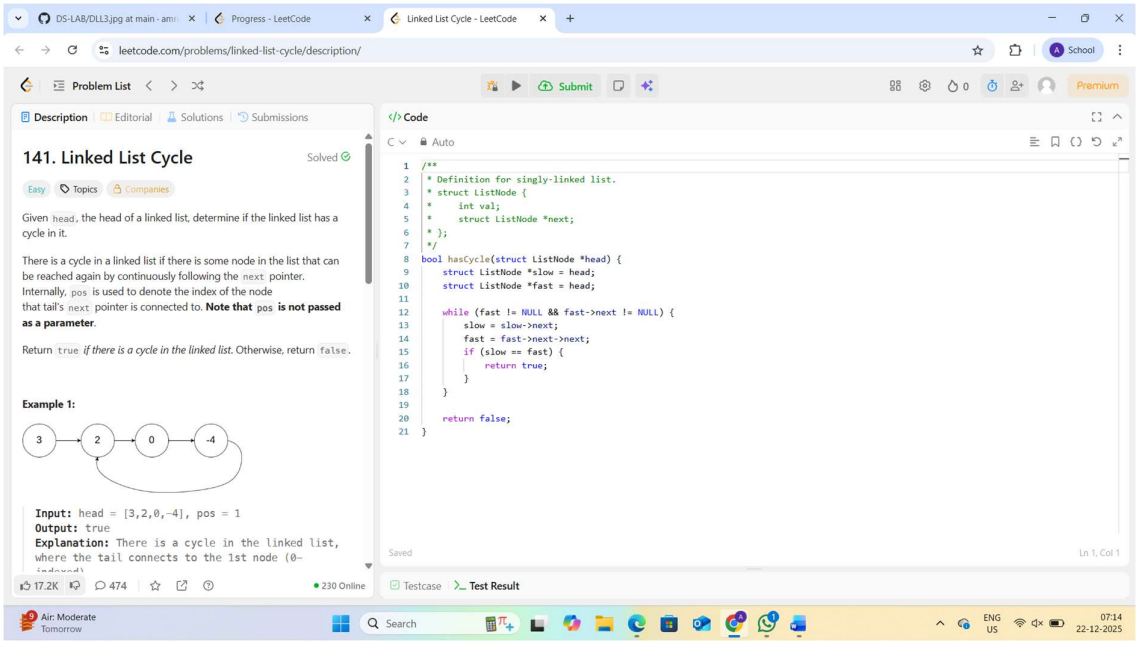
Linked List Cycle - LeetCode
leetcode.com/problems/linked-list-cycle/description/
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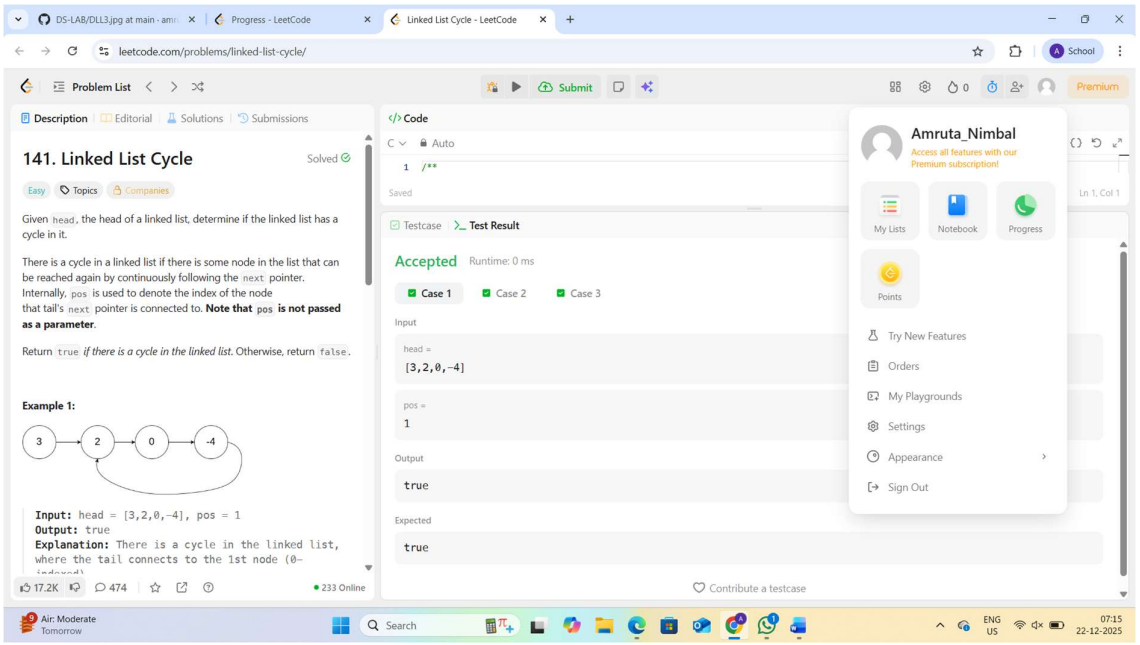
Premium
Description
Editorial
Solutions
Submissions
141. Linked List Cycle
Solved
Easy
Topics
Companies
Given head, the head of a linked list, determine if the linked list has a cycle in it.
There is a cycle in a linked list if there is some node in the list that can be reached again by continuously following the next pointer. Internally, pos is used to denote the index of the node that tail's next pointer is connected to. Note that pos is not passed as a parameter.
Return true if there is a cycle in the linked list. Otherwise, return false.
Example 1:
3
2
0
-4
Input: head = [3,2,0,-4], pos = 1
Output: true
Explanation: There is a cycle in the linked list, where the tail connects to the 1st node (0-
17.2K
474
230 Online
Code
Auto
/**
* Definition for singly-linked list.
* struct ListNode {
* int val;
* struct ListNode *next;
* };
*/
bool hasCycle(struct ListNode *head) {
struct ListNode *slow = head;
struct ListNode *fast = head;
while (fast != NULL && fast->next != NULL) {
slow = slow->next;
fast = fast->next->next;
if (slow == fast) {
return true;
}
}
return false;
}
Saved
Ln 1, Col 1
Testcase
Test Result
Air: Moderate
Tomorrow
Search
ENG
US
07:14
22-12-2025


Linked List Cycle - LeetCode
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Solved
Easy
Topics
Companies
Given head, the head of a linked list, determine if the linked list has a cycle in it.
There is a cycle in a linked list if there is some node in the list that can be reached again by continuously following the next pointer. Internally, pos is used to denote the index of the node that tail's next pointer is connected to. Note that pos is not passed as a parameter.
Return true if there is a cycle in the linked list. Otherwise, return false.
Example 1:
3
2
0
-4
Input: head = [3,2,0,-4], pos = 1
Output: true
Explanation: There is a cycle in the linked list, where the tail connects to the 1st node (0-
17.2K
474
233 Online
Code
Auto
/**
Saved
Ln 1, Col 1
Testcase
Test Result
Accepted
Runtime: 0 ms
Case 1
Case 2
Case 3
Input
head =
[3,2,0,-4]
pos =
1
Output
true
Expected
true
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142. Linked List Cycle II

Solved

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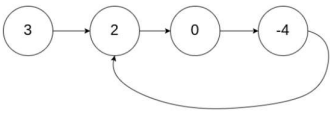
Given the `head` of a linked list, return *the node where the cycle begins. If there is no cycle, return* `null`.

There is a cycle in a linked list if there is some node in the list that can be reached again by continuously following the `next` pointer. Internally, `pos` is used to denote the index of the node that tail's `next` pointer is connected to (**0-indexed**). It is `-1` if there is no cycle. **Note that** `pos` **is not passed as a parameter**.

Do not modify the linked list.

Example 1:




```
Input: head = [3,2,0,-4], pos = 1
Output: tail connects to node index 1
```

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Code

Auto

```
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
struct ListNode *detectCycle(struct ListNode *head) {
    struct ListNode *slow = head;
    struct ListNode *fast = head;

    while (fast != NULL && fast->next != NULL) {
        slow = slow->next;
        fast = fast->next->next;
        if (slow == fast) {
            break;
        }
    }

    if (fast == NULL || fast->next == NULL) {
        return NULL;
    }

    slow = head;
    while (slow != fast) {
        slow = slow->next;
        fast = fast->next;
    }

    return slow;
}
```

Saved | Ln 1, Col 1

Testcase | Test Result

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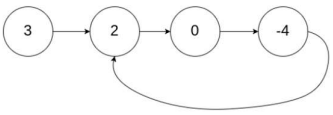


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Saved | Ln 1, Col 1

Testcase | Test Result

Accepted Runtime: 0 ms

Case 1 | Case 2 | Case 3

Input

head =
[3,2,0,-4]

pos =
1

Output

```
tail connects to node index 1
```

Expected

```
tail connects to node index 1
```

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Amruta_Nimbal

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