21. Merge Two Sorted Lists

```cpp
class Solution {
public:
    ListNode* mergeTwoLists(ListNode* list1, ListNode* list2) {
    ListNode dummy(0);
    ListNode* curr = &dummy;

    while (list1 && list2) {
        if (list1->val < list2->val) {
            curr->next = list1;
            list1 = list1->next;
        } else {
            curr->next = list2;
            list2 = list2->next;
        }
        curr = curr->next;
    }

    curr->next = list1 ? list1 : list2;

    return dummy.next;
    }
};
```

Problem List

Run | Submit | Premium

Description | Accepted × | Editorial | Solutions | Submissions

← All Submissions

Accepted 208 / 208 testcases passed

Editorial | Solution

aashima_narula submitted at Feb 13, 2025 21:58
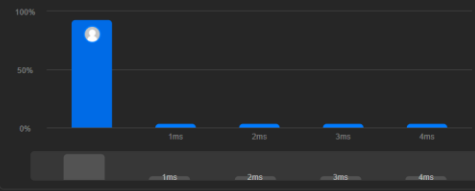
Runtime
0 ms | Beats **100.00%**
Analyze Complexity

Memory
19.32 MB | Beats **86.77%**

100%

50%

0%
1ms   2ms   3ms   4ms

1ms   2ms   3ms   4ms

Code | C++

```cpp
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     ListNode *next;
 *     ListNode() : val(0), next(nullptr) {}
 *     ListNode(int x) : val(x), next(nullptr) {}
 *     ListNode(int x, ListNode *next) : val(x), next(next) {}
```
View more

More challenges

Code

C++ | Auto

```cpp
        } else {
            curr->next = list2;
            list2 = list2->next;
        }
        curr = curr->next;
    }

    curr->next = list1 ? list1 : list2;

    return dummy.next;
    }
};
```

Saved   Ln 32, Col 3

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