Explore(/explore/)   Problems(/problemset/all/)   Interview ^New   Contest ^(/contest/)   Discuss(/discuss/)   LeetCode is hiring! Apply NOW. (https://leetcode.com/jobs/)   🔔   ◊ opalindromic-paths in-a-binary-tree/)
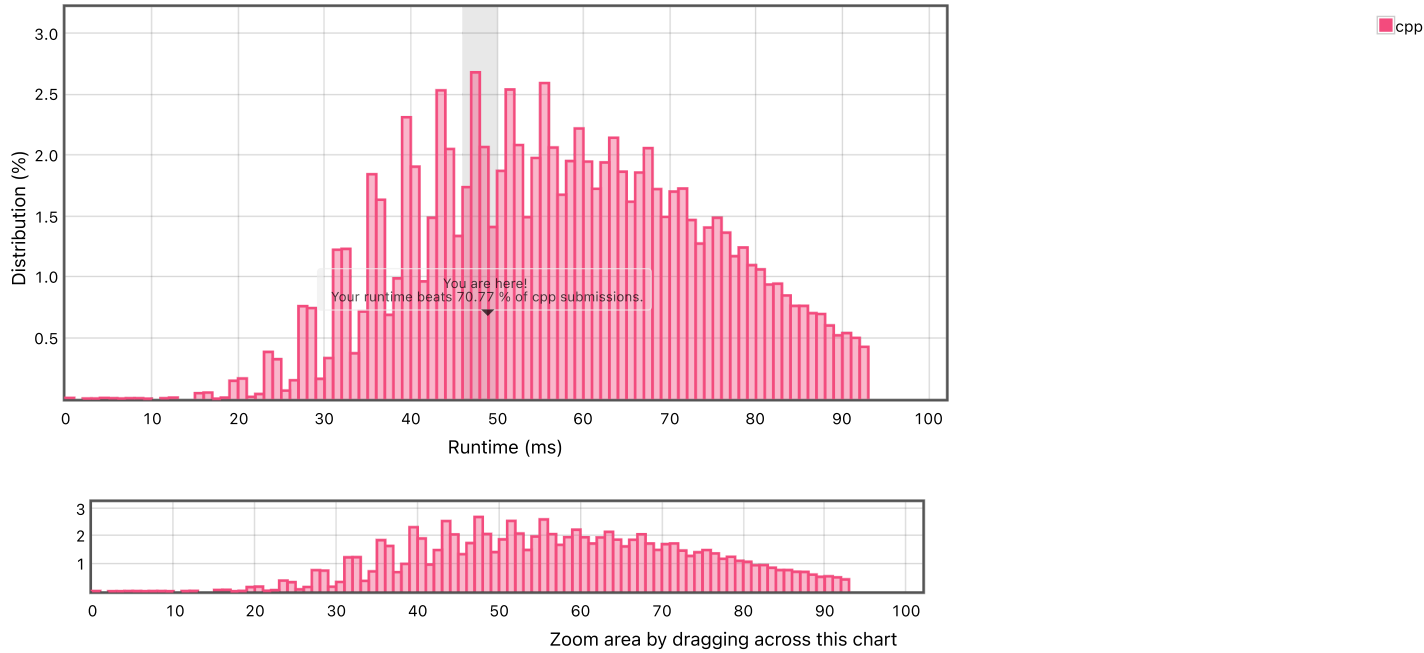
Add Two Numbers (/problems/add-two-numbers/)

Submission Detail

1568 / 1568 test cases passed.   Status: Accepted
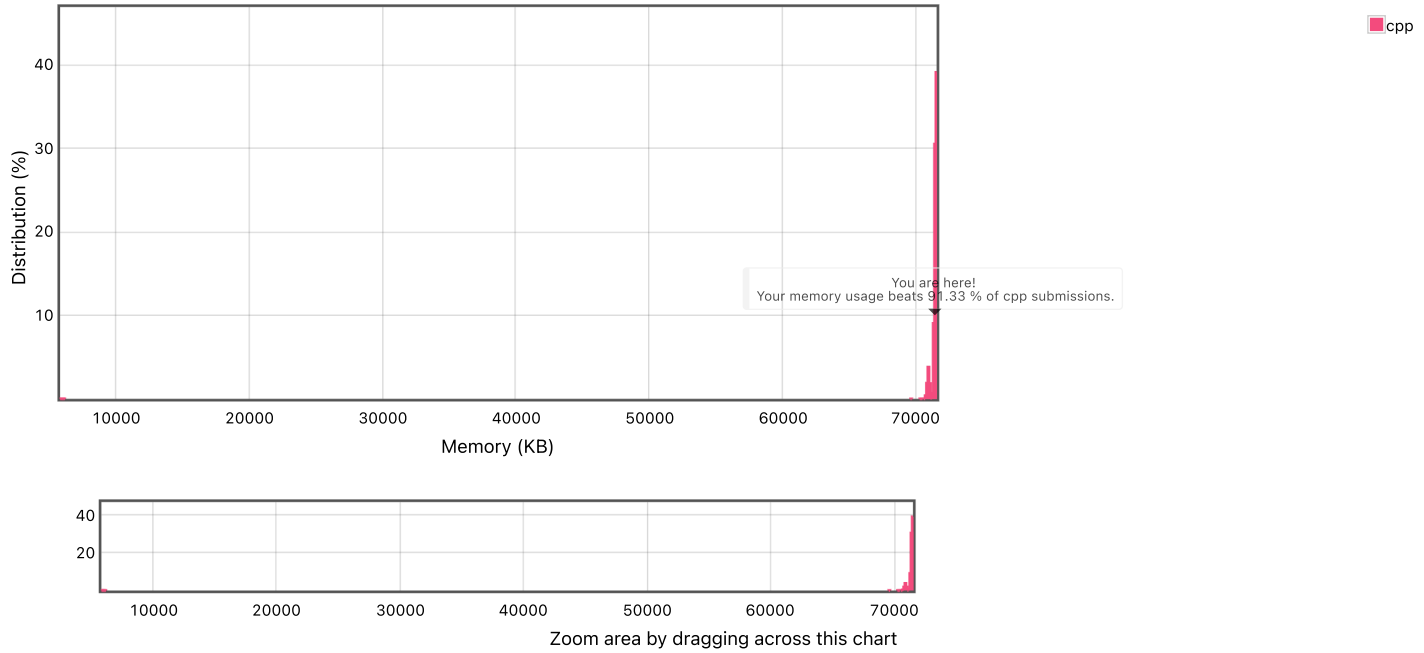
Runtime: **48 ms**   Submitted: **2 weeks, 5 days ago**
Memory Usage: **71.3 MB**

Accepted Solutions Runtime Distribution

You are here!
Your runtime beats 70.77 % of cpp submissions.

Zoom area by dragging across this chart

Accepted Solutions Memory Distribution

You are here!
Your memory usage beats 91.33 % of cpp submissions.

Zoom area by dragging across this chart

Invite friends to challenge **Add Two Numbers**

◄ 130

Submitted Code: 2 weeks, 5 days ago

Language: cpp

Edit Code

```cpp
1   /**
2    * Definition for singly-linked list.
3    * struct ListNode {
4    *      int val;
5    *      ListNode *next;
6    *      ListNode() : val(0), next(nullptr) {}
7    *      ListNode(int x) : val(x), next(nullptr) {}
8    *      ListNode(int x, ListNode *next) : val(x), next(next) {}
9    * };
10   */
11  #include <stdio.h>      /* printf */
12  #include <math.h>       /* pow */
13  class Solution {
14  public:
15      ListNode* addTwoNumbers(ListNode* l1, ListNode* l2) {
16          int in1=0;
17          int in2=0;
18          int k=0;
19
20
21          ListNode* solution_ptr= new ListNode(); //this pointer allocates
22          ListNode* solution = solution_ptr; // points at head of solution
23
24
25          while(l1 !=nullptr|| l2!=nullptr){
26
27              if (k>0){
28
29              if(solution_ptr->next!=nullptr)
30                  solution_ptr=solution_ptr->next;
31              else{
32                  solution_ptr->next=new ListNode();
33                  solution_ptr= solution_ptr->next;
34              }
35              }
36
37
38              in1=0;
39              in2=0;
40              if(l1!=nullptr){
41              in1=l1->val;
42              }
43              if (l2!=nullptr){
44              in2=l2->val;
45              }
46          //l1, l2 next all initialize to 0 if non-existing, else as stated.
47
48              if(solution_ptr->val+in1+in2>=10){ //plus one to the next decimal
                        place
49
50                  solution_ptr->val=solution_ptr->val+in1+in2-10;
51                  solution_ptr->next= new ListNode(1); //add to next decimal
                        place
52
53              }else{
54                  //no greater than 10 case
55                  solution_ptr->val= solution_ptr->val+(in1+in2);
56              }
57
58          if(l1!=nullptr){
59              l1=l1->next;}
60
61              if (l2!=nullptr){
62
63                  l2=l2->next;}
64
65              k++; //counting iteration
66
67          }
68          return solution;
69      }
70
71
```

```
72
73  };
74
```

Back to problem (/problems/add-two-numbers/)

Help Center (/support) | Jobs (/jobs) | Bug Bounty (/bugbounty) | Online Interview (/interview/) | Students (/student) | Terms (/terms) | Privacy Policy (/privacy)

United States (/region)