

Integer to Roman (/problems/integer-to-roman/)

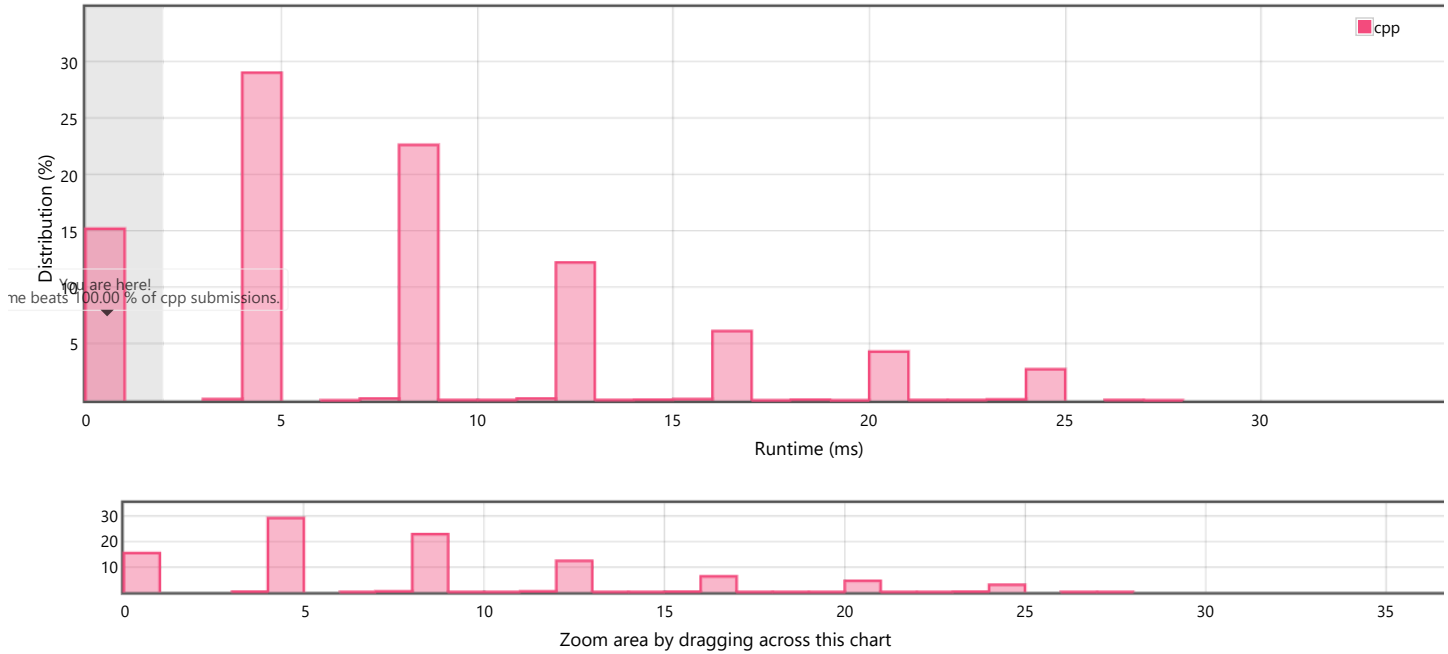
Submission Detail

3999 / 3999 test cases passed.

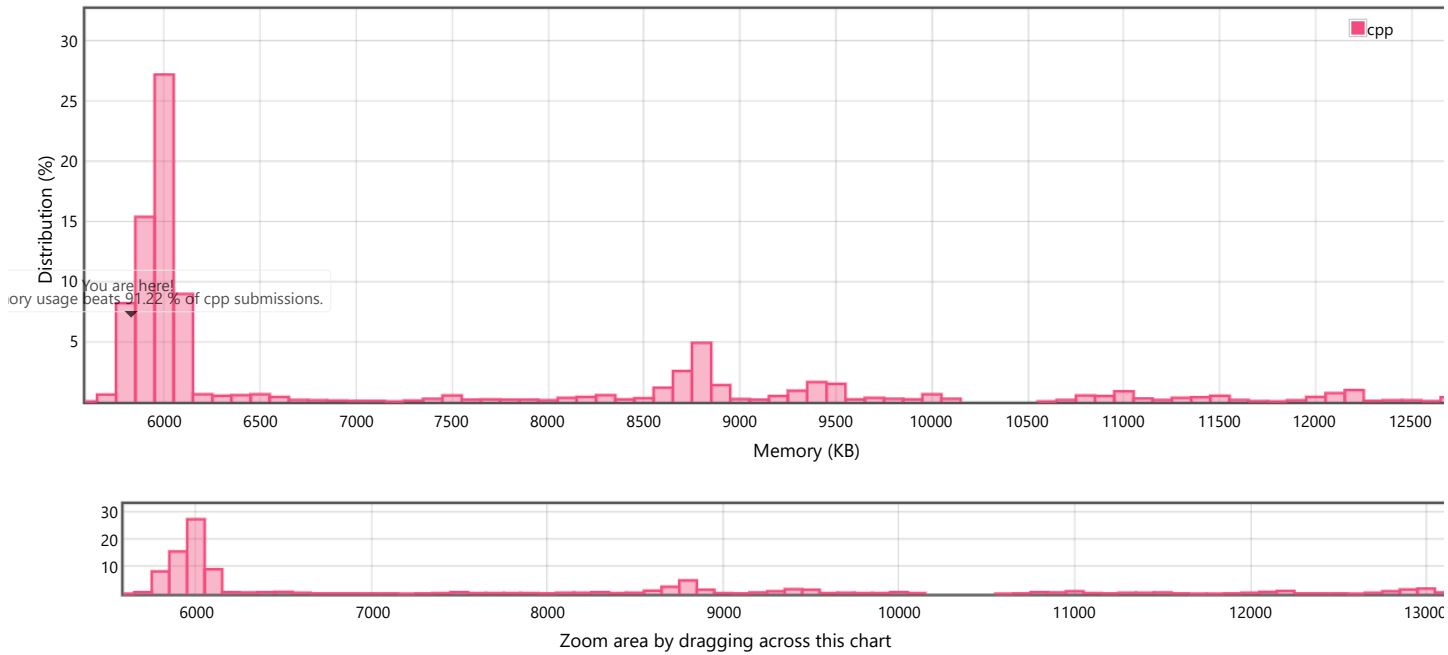
Runtime: **0 ms**
Memory Usage: **5.8 MB**

Status: **Accepted**
Submitted: **0 minutes ago**

Accepted Solutions Runtime Distribution



Accepted Solutions Memory Distribution



Invite friends to challenge **Integer to Roman**

◀ 19

Submitted Code: 0 minutes ago

Language: cpp

Edit Code


```
1 class Solution {
2 public:
```

```
3     string intToRoman(int num)
4     {
5         char sym[7] = {'I','V','X','L','C','D','M'};
6         int div = 1000;
7         int index = (sizeof(sym)/sizeof(char)) - 1;
8         string ans;
9
10        while(num!=0 && div!=0 && index>=0)
11        {
12            int quo = num/div;
13            num = num % div;
14
15            if(quo>=5)
16            {
17                //out of range
18                if((index+1) >= (sizeof(sym)/sizeof(char)))
19                    return ans;
20
21                // >5
22                index++;
23
24                if(quo == 9)
25                {
26                    //out of range
27                    if((index+1) >= (sizeof(sym)/sizeof(char)))
28                        return ans;
29
30                    // 10 - 1 : IX
31                    ans = ans + sym[index-1] + sym[index+1];
32                }
33                else
34                {
35                    // 5
36                    ans = ans + sym[index];
37
38                    // 1~3
39                    for(int i = 0; i < (quo%5); i++)
40                        ans = ans + sym[index-1];
41                }
42                index--;
43            }
44            else if(quo > 0)
45            {
46                if(quo == 4)
47                {
48                    //out of range
49                    if((index+1) >= (sizeof(sym)/sizeof(char)))
50                        return ans;
51
52                    // 5 - 1: IV
53                    ans = ans + sym[index] + sym[index+1];
54                }
55                else
56                {
57                    // 1~3
58                    for(int i = 0; i < (quo%5); i++)
59                        ans = ans + sym[index];
60                }
61            }
62        }
63
64        div = div / 10;
65        index = index - 2;
66    }
67
68    return ans;
69 }
70 }
71 };
```

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