

Diameter of Binary Tree (/problems/diameter-of-binary-tree/)

Submission Detail

104 / 104 test cases passed.

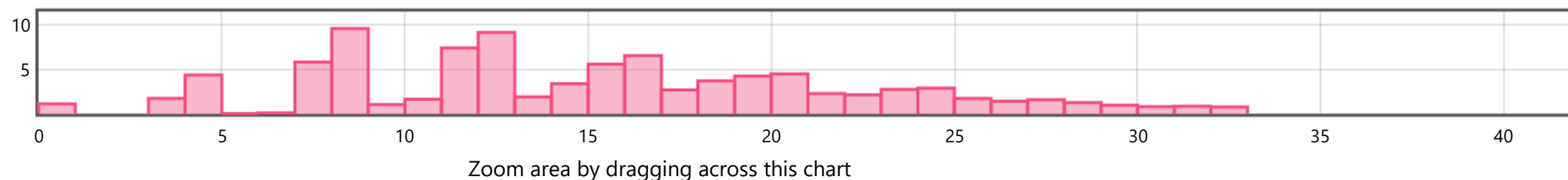
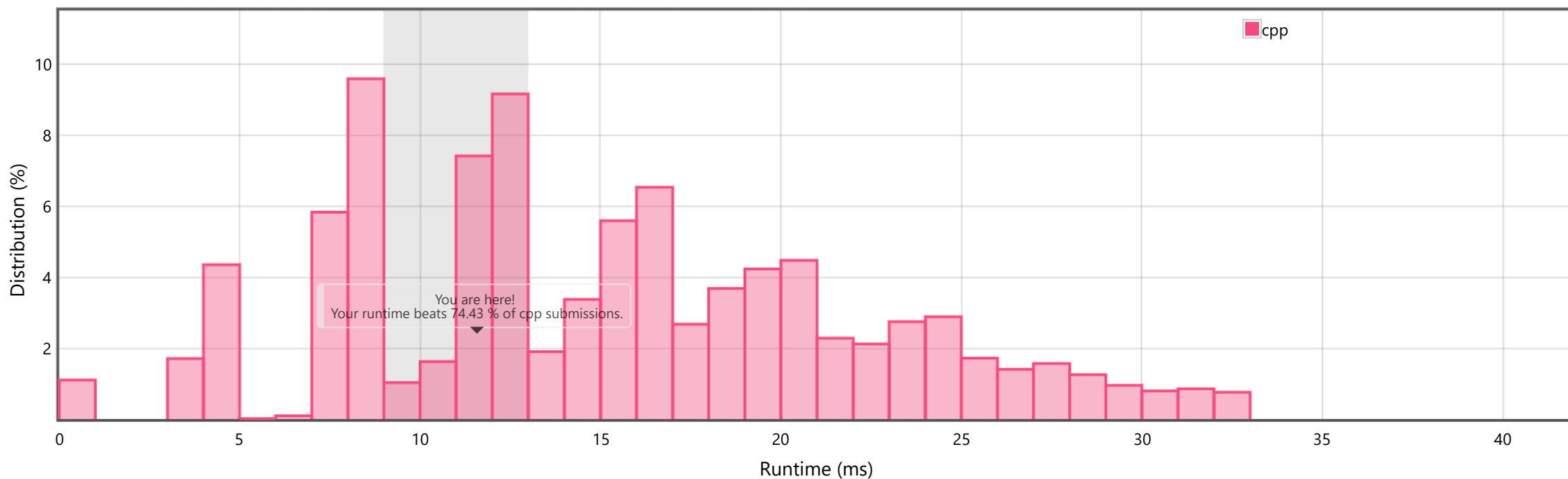
Runtime: **11 ms**

Memory Usage: **20.4 MB**

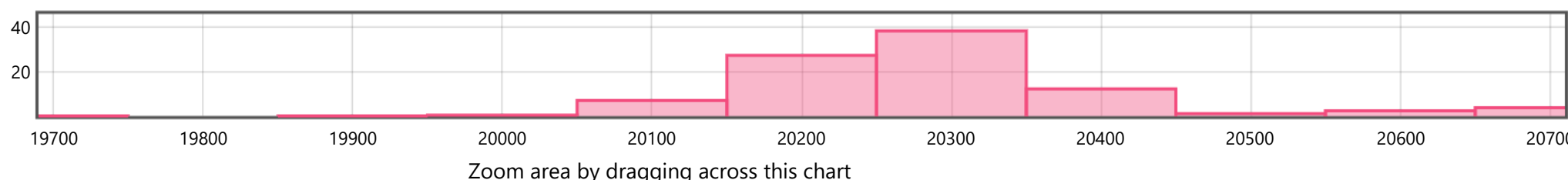
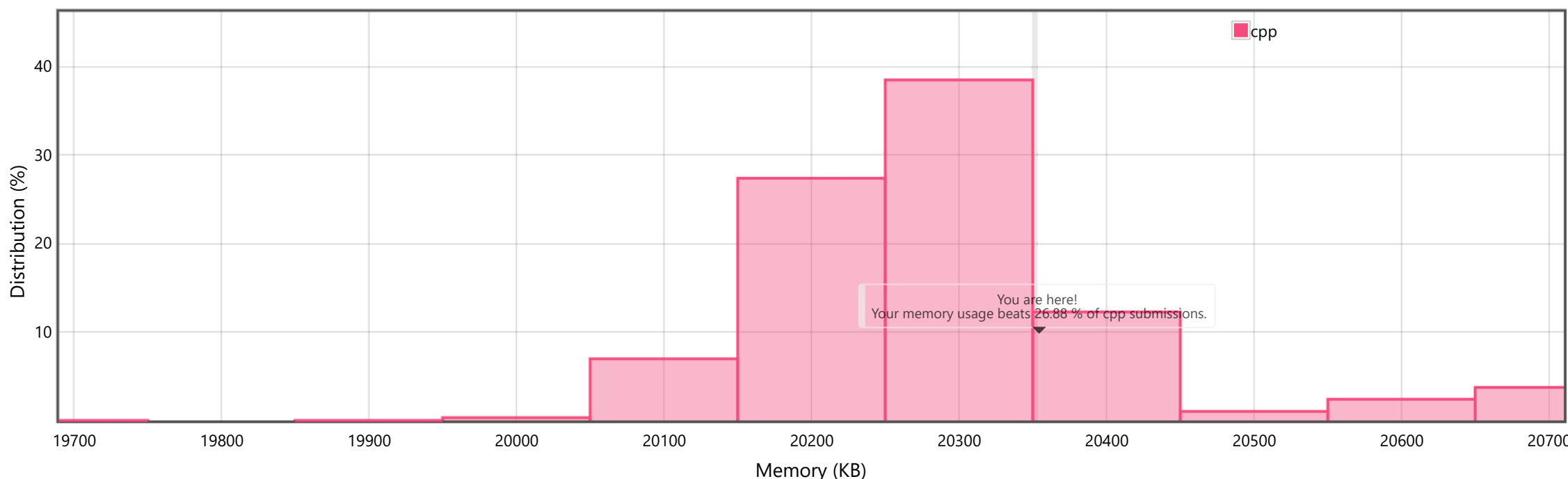
Status: **Accepted**

Submitted: 0 minutes ago

Accepted Solutions Runtime Distribution



Accepted Solutions Memory Distribution



Invite friends to challenge **Diameter of Binary Tree**

Submitted Code: 0 minutes ago

Language: cpp

[Edit Code](#)

```

1  /**
2   * Definition for a binary tree node.
3   * struct TreeNode {
4   *     int val;
5   *     TreeNode *left;
6   *     TreeNode *right;
7   *     TreeNode() : val(0), left(nullptr), right(nullptr) {}
8   *     TreeNode(int x) : val(x), left(nullptr), right(nullptr) {}
9   *     TreeNode(int x, TreeNode *left, TreeNode *right) : val(x), left(left), right(right) {}
10  * };*/
11  class Solution {
12  public:
13      int ans = 0;
14      int height(TreeNode* root){
15          if(root == NULL)
16              return 0;
17
18          int l = height(root->left);
19          int r = height(root->right);
20
21          ans = max(ans, (l + r));
22          return max(l, r) + 1;
23      }
24      int diameterOfBinaryTree(TreeNode* root) {
25          if(root == NULL)
26              return 0;
27
28          int l = height(root->left);
29          int r = height(root->right);
30
31          return max(ans, (l + r));
32      }
33  };

```

[Back to problem \(/problems/diameter-of-binary-tree/\)](/problems/diameter-of-binary-tree/)

