

Search a 2D Matrix (/problems/search-a-2d-matrix/)

Submission Detail

133 / 133 test cases passed.

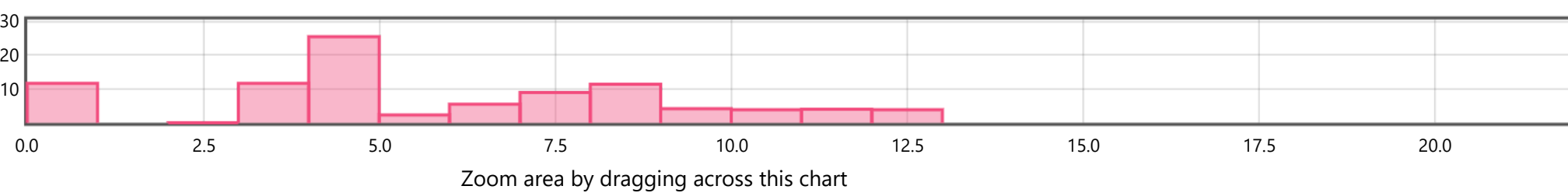
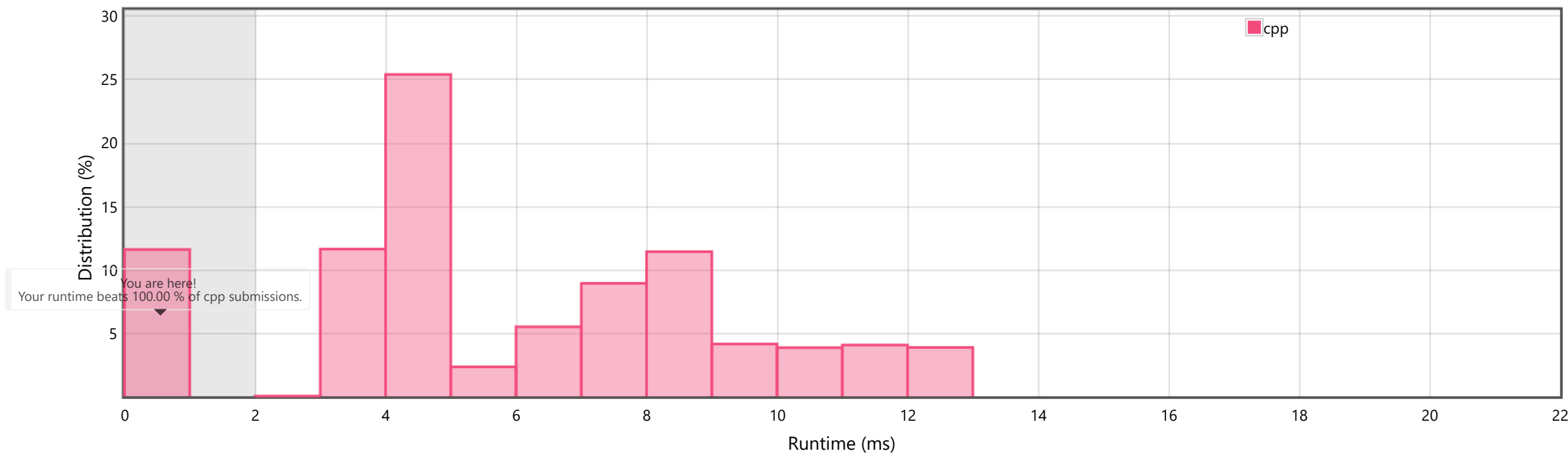
Runtime: 0 ms

Memory Usage: **9.4 MB**

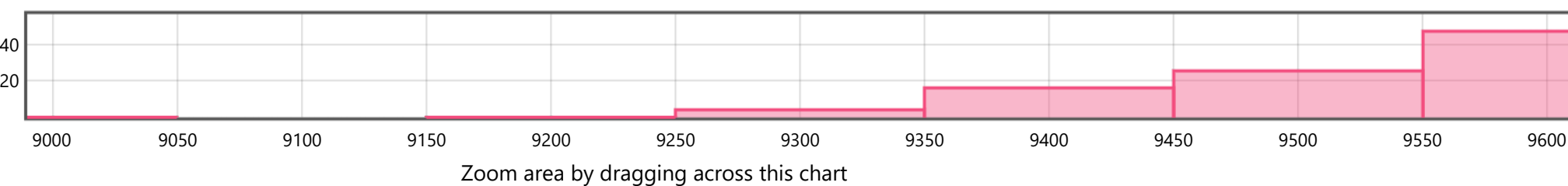
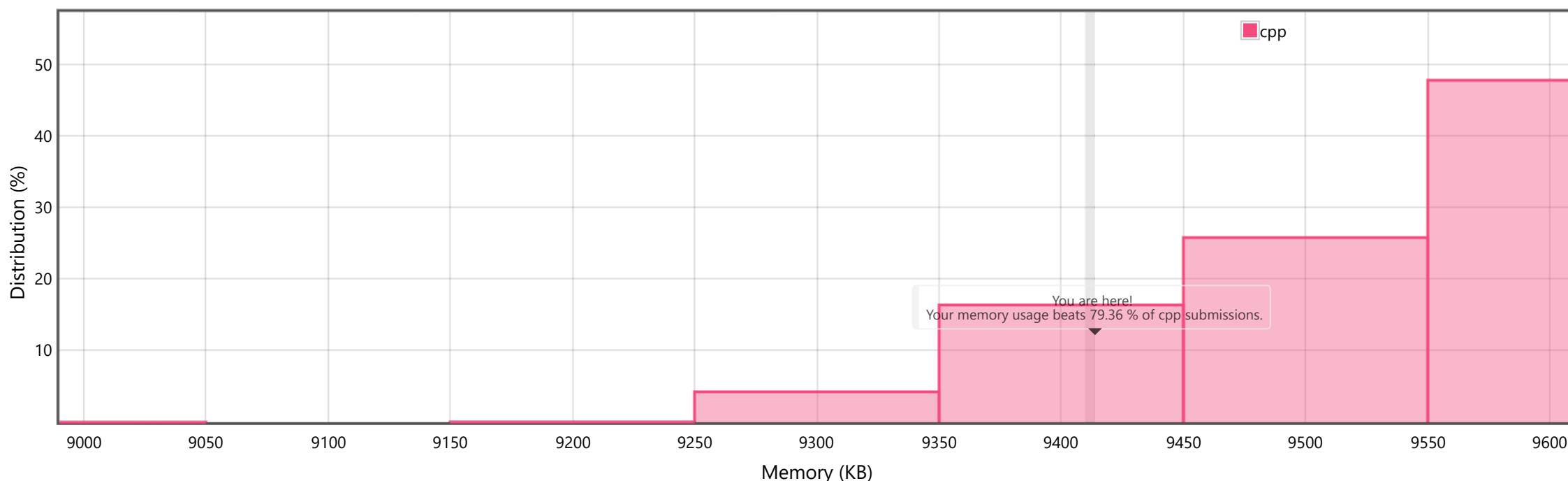
Status: **Accepted**

Submitted: 0 minutes ago

Accepted Solutions Runtime Distribution



Accepted Solutions Memory Distribution



Invite friends to challenge **Search a 2D Matrix**

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Submitted Code: 0 minutes ago

Language: cpp

[Edit Code](#)

```

1 class Solution {
2     public:
3         int search(vector<int>& arr, int target){
4             int l = 0;
5             int r = arr.size() - 1;
6             int mid = l + (r - l) / 2;
7             while(l <= r){
8                 mid = l + (r - l) / 2;
9                 if(arr[mid] == target)
10                     return mid;
11                 else if(target > arr[mid])
12                     l = mid + 1;
13                 else r = mid - 1;
14             }
15             return -1;
16         }
17         bool searchMatrix(vector<vector<int>>& matrix, int target) {
18             /*
19              Approach->
20              Traverse every row
21              check if target lies between first and last element of row
22              if(lies)
23                  then do binary search in current row and find if target is present in current row
24              else
25                  continue to next row
26             */
27             for(int i = 0; i < matrix.size(); i++){
28                 if(target >= matrix[i][0] and target <= matrix[i][matrix[i].size() - 1]){
29                     int ans = search(matrix[i], target);
30                     if(ans != -1)
31                         return true;
32                     else return false;
33                 }
34             }
35             return false;
36         }
37     };

```

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