

Submission Detail

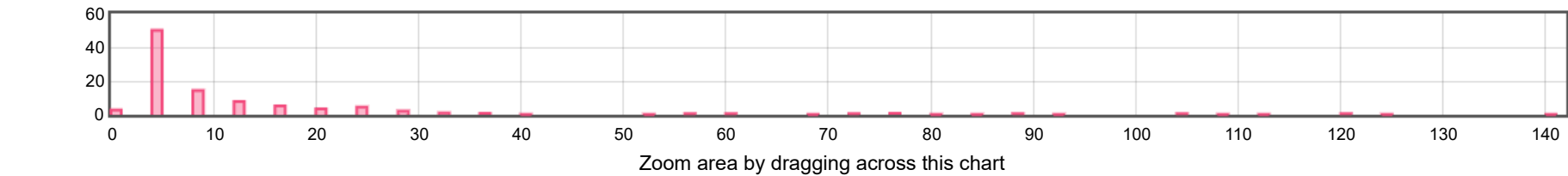
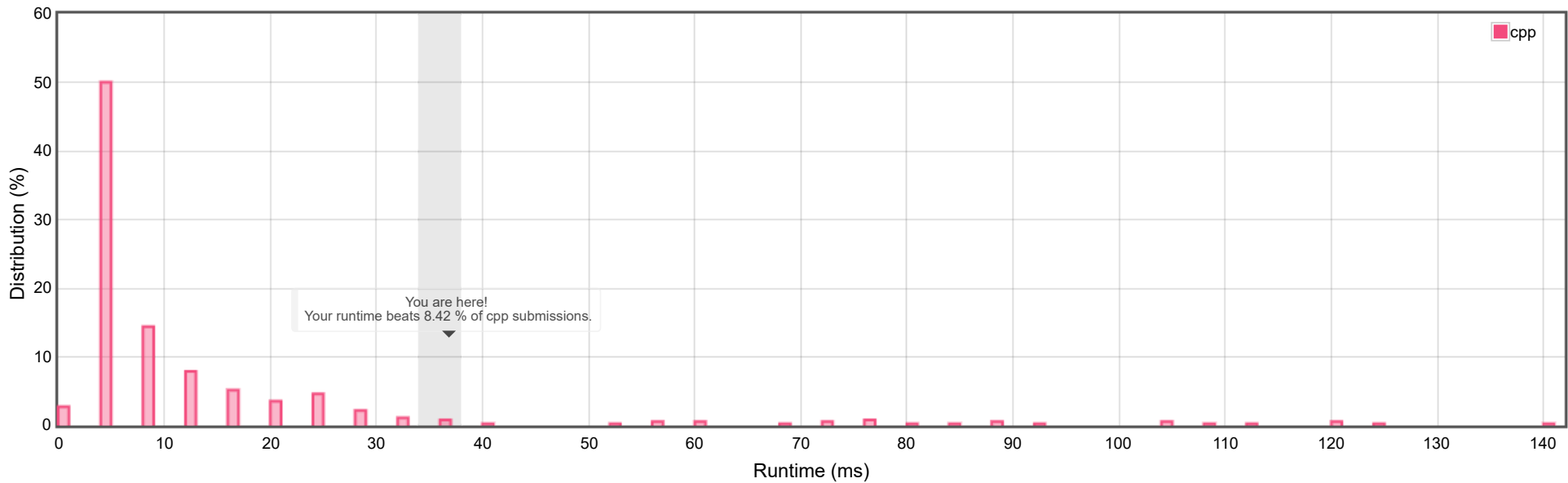
32 / 32 test cases passed.

Runtime: 36 ms

Status: Accepted

Submitted: 35 minutes ago

Accepted Solutions Runtime Distribution



Submitted Code: 35 minutes ago

Language: cpp

Edit Code


```
1 class Solution {
2 public:
3     int slidingPuzzle(vector<vector<int>>& board) {
4         int count = 0;
5         queue<vector<vector<int>>> q;
6         map<vector<vector<int>>, bool> visited;
7         q.push(board);
8         while(!q.empty()) {
9             vector<vector<vector<int>>> boards;
10            while (!q.empty()) {
11                boards.push_back(q.front());
12                q.pop();
13            }
14            for (int i = 0; i < boards.size(); i++) {
15                vector<vector<int>> b(boards[i]);
16                if (goal(b)) {
17                    return count;
18                }
19                visited[b] = true;
20                int zero_i = 0, zero_j = 0;
21                bool f = false;
22                for (zero_i = 0; zero_i < 2; zero_i++) {
23                    for (zero_j = 0; zero_j < 3; zero_j++) {
24                        if (b[zero_i][zero_j] == 0) {
25                            f = true;
26                            break;
27                        }
28                    }
29                    if (f) {
30                        break;
31                    }
32                }
33                if (zero_i == 0) {
34                    vector<vector<int>> tmp(b);
35                    mSwap(tmp, zero_i, zero_j, zero_i + 1, zero_j);
36                    if (!visited[tmp])
37                        q.push(tmp);
38                } else {
39                    vector<vector<int>> tmp(b);
40                    mSwap(tmp, zero_i, zero_j, zero_i - 1, zero_j);
41                    if (!visited[tmp])
42                        q.push(tmp);
```

```

43     }
44     if (zero_j == 0) {
45         vector<vector<int>> tmp(b);
46         mSwap(tmp, zero_i, zero_j, zero_i, zero_j + 1);
47         if (!visited[tmp])
48             q.push(tmp);
49     } else if (zero_j == 1) {
50         vector<vector<int>> tmp(b);
51         mSwap(tmp, zero_i, zero_j, zero_i, zero_j - 1);
52         if (!visited[tmp])
53             q.push(tmp);
54         mSwap(tmp, zero_i, zero_j, zero_i, zero_j - 1);
55         mSwap(tmp, zero_i, zero_j, zero_i, zero_j + 1);
56         if (!visited[tmp])
57             q.push(tmp);
58     } else {
59         vector<vector<int>> tmp(b);
60         mSwap(tmp, zero_i, zero_j, zero_i, zero_j - 1);
61         if (!visited[tmp])
62             q.push(tmp);
63     }
64 }
65 count++;
66 }
67 return -1;
68 }
69 void mSwap(vector<vector<int>> &arr, int row1, int col1, int row2, int col2) {
70     int tmp = arr[row1][col1];
71     arr[row1][col1] = arr[row2][col2];
72     arr[row2][col2] = tmp;
73 }
74 bool goal(vector<vector<int>> &board) {
75     return board[0][0] == 1 && board[0][1] == 2 && board[0][2] == 3 &&
76         board[1][0] == 4 && board[1][1] == 5 && board[1][2] == 0;
77 }
78 void printarr(vector<vector<int>> &arr) {
79     for (int i = 0; i < 2; i++) {
80         for (int j = 0; j < 3; j++) {
81             printf("%d ", arr[i][j]);
82         }
83         printf("\n");
84     }
85 }
86 };

```

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