AlgoExpert

Solution 1 Solution 2

34 } 35 **Quad Layout**

++

Sublime

Monokai

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Run Code

Our Solution(s)

```
Run Code
```

Your Solutions

12px

Solution 1 Solution 2 Solution 3

```
#include <vector>
using namespace std;

vector<vector<int>> getPermutations(vector<int>> array) {
   // Write your code here.
   return {};
}
```

Custom Output Raw Output Submit Code

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
   #include <vector>
   using namespace std;
   void permutationsHelper(int i, vector<int> *array,
                           vector<vector<int>> *permutations);
   void swap(vector<int> *array, int i, int j);
10 // O(n*n!) time | O(n*n!) space
11 vector<vector<int>> getPermutations(vector<int> array) {
12
     vector<vector<int>>> permutations;
     permutationsHelper(0, &array, &permutations);
13
14
     return permutations;
15 }
16
   void permutationsHelper(int i, vector<int> *array,
18
                          vector<vector<int>> *permutations) {
      if (i == array->size() - 1) {
19
      permutations->push_back(*array);
20
      } else {
       for (int j = i; j < array->size(); j++) {
22
         swap(array, i, j);
         permutationsHelper(i + 1, array, permutations);
24
25
         swap(array, i, j);
26
27
28 }
29
30 void swap(vector<int> *array, int i, int j) {
31
     int tmp = array->at(i);
     array->at(i) = array->at(j);
32
33
     array->at(j) = tmp;
```

Run or submit code when you're ready.