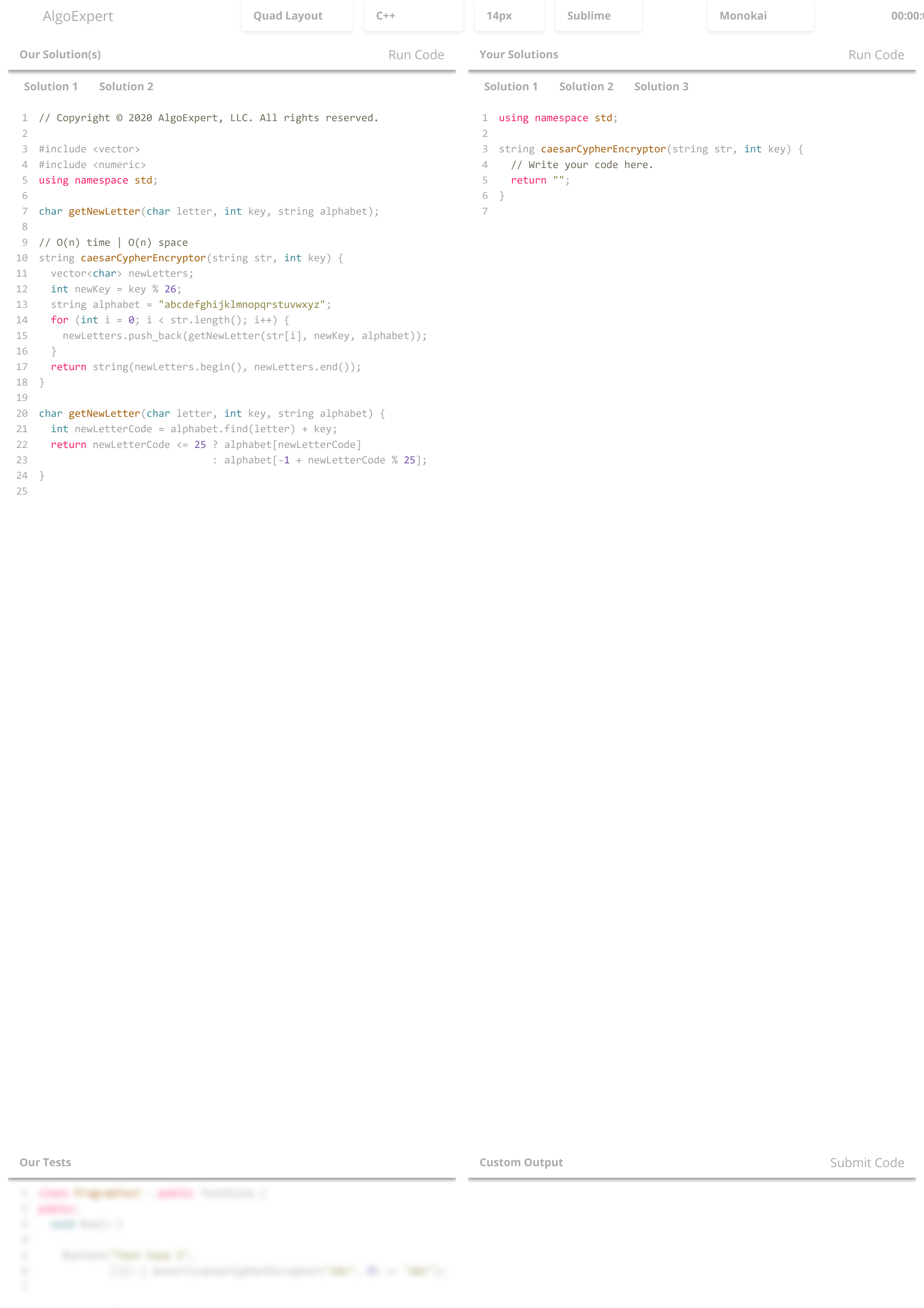

```
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#include <vector>
#include <numeric>
using namespace std;

char getNewLetter(char letter, int key, string alphabet);

// O(n) time | O(n) space
string caesarCypherEncryptor(string str, int key) {
  vector<char> newLetters;
  int newKey = key % 26;
  string alphabet = "abcdefghijklmnopqrstuvwxyz";
  for (int i = 0; i < str.length(); i++) {
    newLetters.push_back(getNewLetter(str[i], newKey, alphabet));
  }
  return string(newLetters.begin(), newLetters.end());
}

char getNewLetter(char letter, int key, string alphabet) {
  int newLetterCode = alphabet.find(letter) + key;
  return newLetterCode <= 25 ? alphabet[newLetterCode]
                             : alphabet[-1 + newLetterCode % 25];
}

```

```
class ProgramTest : public TestSuite {
public:
  void Run() {

    RunTest("Test Case 1",
            []() { assert(caesarCypherEncryptor([illegible]) == [illegible]); });

```

```
using namespace std;

string caesarCypherEncryptor(string str, int key) {
  // Write your code here.
  return "";
}

```

Run or submit code when you're ready.