1426 Find N Unique Integers Sum up to Zero (link)

Description

Given an integer `n`, return **any** array containing `n` **unique** integers such that they add up to `0`.

Example 1:

```
Input: n = 5
Output: [-7,-1,1,3,4]
Explanation: These arrays also are accepted [-5,-1,1,2,3] , [-3,-1,2,-2,4].
```

Example 2:

```
Input: n = 3
Output: [-1,0,1]
```

Example 3:

```
Input: n = 1
Output: [0]
```

Constraints:

- `1 <= n <= 1000`

(scroll down for solution)

Solution

Language: cpp

Status: Accepted

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

class Solution {
public:
    vector<int> sumZero(int n) {
        vector<int> result;

        for (int i = 1; i <= n/2; ++i) {
            result.push_back(i);
            result.push_back(-i);
        }

        if (n % 2 == 1) {
            result.push_back(0);
        }

        return result;
    }
};
```