

Good Integers duplicate in C++

```
#include <iostream>
#include <vector>
#include <algorithm>

using namespace std;

int GoodIntegers(int arr[], int n) {
    sort(arr, arr + n); // Sort the array

    int ans = 0;
    int lessCount = 0;

    if (arr[0] == 0) {
        ans++;
    }

    for (int i = 1; i < n; ++i) {
        if (arr[i] != arr[i - 1]) {
            lessCount = i;
        }

        if (arr[i] == lessCount) {
            ans++;
        }
    }

    return ans;
}

int main() {
    int arr[] = {0, 1, 5, 7, 8, 9, 4};
    int n = sizeof(arr) / sizeof(arr[0]);

    cout << GoodIntegers(arr, n) << endl;

    return 0;
}
```

Goal of the Function:

Count how many elements in the array are **equal to the number of elements less than it**.

🔗 Step-by-step Dry Run

► Step 1: Sort the array

Initial array: {0, 1, 5, 7, 8, 9, 4}

Sorted array: {0, 1, 4, 5, 7, 8, 9}

n = 7

Variables: ans = 0, lessCount = 0

Index (i)	arr[i]	arr[i-1]	arr[i] != arr[i-1]	lessCount	arr[i] == lessCount	ans
0	0	-	-	0	✓ (0 == 0)	1
1	1	0	✓	1	✓ (1 == 1)	2
2	4	1	✓	2	✗ (4 != 2)	2
3	5	4	✓	3	✗ (5 != 3)	2
4	7	5	✓	4	✗ (7 != 4)	2
5	8	7	✓	5	✗ (8 != 5)	2
6	9	8	✓	6	✗ (9 != 6)	2

✓ Final Answer: 2

The two good integers are:

- 0: there are 0 elements less than it → good
- 1: there is 1 element less than it → good