

## Max Chunks to make array sorted in C++

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

int maxChunksToSorted(vector<int>& arr) {
    int max_val = 0;
    int count = 0;

    for (int i = 0; i < arr.size(); i++) {
        max_val = max(max_val, arr[i]);

        if (i == max_val) {
            count++;
        }
    }

    return count;
}

int main() {
    vector<int> arr = {4, 3, 2, 1, 0};
    int res = maxChunksToSorted(arr);
    cout << res << endl;

    return 0;
}
```

### Input:

vector<int> arr = {4, 3, 2, 1, 0};

### 🔍 Dry Run Table:

Let's walk through the loop step-by-step and record values:

i	arr[i]	max_val (max so far)	i == max_val?	count
0	4	4	✗	0
1	3	4	✗	0
2	2	4	✗	0
3	1	4	✗	0
4	0	4	✓	1

### ✓ Output:

1