

H. Rank problem

Petya moved to another school. In physical education class, he needed to determine his place in the ranks. Help him do it.

Input data
The program receives as input a non-increasing sequence of natural numbers, meaning the growth of each person in the ranks. After that, the number X is entered - Petya's height. All numbers in the input data are natural and do not exceed 200.

Output
Print the number under which Petya should join the ranks. If there are people in the ranks with the same height, the same as Petya's, then he must stand after them.

Examples of input data
165 163 160 160 157 157 155 154
162

output
3

input data
165 163 160 160 157 157 155 154
160

output
5

with array & without



```
void rankNum() {
    int number;
    int petya;
    vector<int> arr;

    cout << "Type in numbers for height ranks (&
end list with '0'):";

    while (1) {
        cin >> number;
        arr.push_back(number);
        if (number == 0) {
            break;
        }
    }
    // printVector(arr);
    cout << "What is Petya's height? ";
    cin >> petya;
    int final;
    for (int i = 0; i < arr.size(); i++) {
        // Start loop to find where petya # fits
in arr
        if (arr[i] >= petya) { // current index
value is not equal to next index value

// and current index value is greater than or
equal to petya
            //cout << "Rank for Petya is: " << i +
1 << endl; // petya index would be 1 after
current index
            final = i + 1;
        }
        else {
            break;
        }
    }
    cout << "Rank for Petya is: " << final <<
endl;
}

void printVector(vector<int> arr) {
    for (int i = 0; i < arr.size(); i++) {
        cout << arr[i] << " ";
    }
    cout << endl;
}

void rankNum() {
    int number;
    int petya;
    vector<int> arr;

    while (1) {
        cin >> number;
        arr.push_back(number);
        if (number == 0) {
            break;
        }
    }
    printVector(arr);
    cin >> petya;
```