

Sherlock and Subarray

Problem Statement

Watson gives an array $A_1, A_2 \dots A_N$ to Sherlock. He asks him to count the number of contiguous subarrays $A_i, A_{i+1} \dots A_j$ such that $1 \leq i \leq j \leq N$ and the largest element of that subarray occurs only once in that subarray.

Input Format

First line contains T , the number of testcases.

Each testcase contains an integer N in the first line. This is followed by N integers denoting the array A in the second line.

Output Format

For each testcase, print the required answer in one line.

Constraints

$$1 \leq T \leq 10$$

$$1 \leq N \leq 10^5$$

$$1 \leq A_i \leq 10^5$$

Sample Input

```
2
3
1 2 3
4
2 2 1 2
```

Sample Output

```
6
6
```

Explanation

Let's denote $A_i, A_{i+1} \dots A_j$ by $S[i, j]$

First testcase:

All subarrays satisfy.

Second testcase:

$S[1, 1], S[2, 2], S[3, 3], S[4, 4], S[2, 3], S[3, 4]$ satisfy.