A Subarray Problem

Time limit: 1.0s   **Memory limit:** 512M

Given a permutation p of the integers 1 to N, find the number of subarrays that satisfy the following property:

- If the maximum element it contains is M, then it contains all of the integers 1 to M

Input Specification

The first line will contain N.

The following line will contain N integers p_i for $1 \le i \le N$.

Output Specification

Output the number of subarrays with the described property.

Constraints

$1 \le N \le 10^6$

$1 \le p_i \le N$

The given p_i are guaranteed to form a permutation of the integers 1 to N.

Sample Input 1

```
1
1
```

Sample Output 1

```
1
```

Sample Input 2

```
2
2 1
```

Sample Output 2

```
2
```

Sample Input 3

```
3
1  3  2
```

Sample Output 3

```
2
```