

# Almost sorted interval

Русский \ |

Shik loves sorted intervals. But currently he does not have enough time to sort all the numbers. So he decided to use *Almost sorted intervals*. An *Almost sorted interval* is a consecutive subsequence in a sequence which satisfies the following property:

1. The first number is the smallest.
2. The last number is the largest.

Please help him count the number of almost sorted intervals in this permutation.

*Note:* Two intervals are different if at least one of the starting or ending indices are different.

## Input Format

The first line contains an integer N.

The second line contains a permutation from 1 to N.

## Output Format

Output the number of almost sorted intervals.

## Constraints

$$1 \leq N \leq 10^6$$

## Sample Input

```
5
3 1 2 5 4
```

## Sample Output

```
8
```

## Explanation

The subsequences [3], [1], [1 2], [1 2 5], [2], [2 5], [5], [4] are almost sorted intervals.