

Problem I. Permutations again

Input file: `standard input`
Output file: `standard output`
Time limit: 1 second
Memory limit: 256 megabytes

Given a sequence A_i consisting of N integers. Find the number of pairs (L, R) for which the subsegment $\{A_L, A_{L+1}, \dots, A_R\}$ is a permutation of $R - L + 1$ numbers.

A permutation of K numbers is any sequence of numbers from 1 to K , where each element occurs only once.

Input

The first line contains number N — a sequence length. The second line contains N integers — sequence A_i elements.

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

$$1 \leq A_i \leq N$$

Output

Print the number of pairs (L, R) , fulfilling the condition.

Example

| standard input | standard output |
|----------------|-----------------|
| 3 3 1 2 | 3 |