Special Segments

Time: 1 sec / Memory: 256 MB

Problem Statement

You are given a permutation $p = p_1, p_2, \ldots, p_n$

We call some subsegment $p[l, r]$ of this permutation "special" if and only if

$$p_l + p_r = max_{l \leq i \leq r} p_i.$$

Please calculate the total number of special subsegments.

Note that a permutation is an array where each element from 1 to n occurs exactly once.

Input

The first line contains one integer n.

The second line contains n integers $p_1, p_2, \ldots, p_n$.

Output

Output the number of special subsegments of the given permutation.

Constraints

$3 \leq n \leq 2 \cdot 10^5$
$1 \leq p_i \leq n$
All integers in p are pairwise distinct.

Example

Input1:

```
10
5 1 6 2 8 3 4 10 9 7
```

Output1:

```
3
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