E. Special Segments of Permutation

time limit per test: 2 seconds
memory limit per test: 512 megabytes
input: standard input
output: standard output

You are given a permutation p of n integers $1, 2, ..., n$ (a permutation is an array where each element from 1 to n occurs exactly once).

Let's call some subsegment $p[l, r]$ of this permutation special if $p_l + p_r = \max\limits_{i=l}^{r} p_i$. Please calculate the number of special subsegments.

Input

The first line contains one integer n ($3 \le n \le 2 \cdot 10^5$).

The second line contains n integers $p_1, p_2, ..., p_n$ ($1 \le p_i \le n$). All these integers are pairwise distinct.

Output

Print the number of special subsegments of the given permutation.

Examples

input Copy

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

output Copy

```
2
```

input Copy

```
3
1 3 2
```

output Copy

```
1
```

Note

Special subsegments in the first example are $[1, 5]$ and $[1, 3]$.

The only special subsegment in the second example is $[1, 3]$.