

Sakura

Input file: **standard input**
Output file: **standard output**
Time limit: 4 seconds
Memory limit: 256 megabytes

Given A_1, A_2, \dots, A_n , please count the number of valid pairs of (l, r) where $l \leq r$ and $A_l + A_r = \max_{i=l}^r A_i$.

Input

The first line contains a single integer n ($1 \leq n \leq 500000$).

The second line contains n integers, indicating A_1, A_2, \dots, A_n ($0 \leq A_i \leq 10^9, 1 \leq i \leq n$).

Output

Output a single integer, indicating the number of valid (l, r) pairs.

Example

standard input	standard output
6 1 3 2 5 7 4	2