List of prices of N rings in a jewellery shop are given in form an array. A dealer wants to buy expensive rings in following way, He calculates all subarrays of size greater than one and checks if product of first and last element is **less than or equals** to the most expensive ring in that subarray. Then he buys the expensive ring.
For example for following subarray of [1,2,1]:
[2,1] 2*1<=2 , hence this counts in the final answer.

Calculate how many such subarrays are there.

Input format:
First line contains the number N (number of rings). Second line contains N spaced integers [P1,P2,P3,…PN], the prices of rings.

Constraints:
1<= N <= 5 * 10^5
1<= Pi<= 10^9

Output format:
Print a single long integer denoting number of such subarrays.

Sample input:
5
1 1 2 4 2

Sample output:
8