SOLVE LATER

Mancunian And Fantabulous Pairs

Attempted by: **791** / Accuracy: **50%** / Maximum Score: **30** /
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Tag(s): Data Structures, Math, Medium, Stack

First off, some definitions.
An array of length at least 2 having distinct integers is said to be fantabulous iff the second highest element lies **strictly to the left** of the highest value. For example, *[1, 2, 13, 10, 15]* is fantabulous as the second-highest value *13* lies to the left of highest value *15*.
For every fantabulous array, we define a fantabulous pair **(a, b)** where **a** denotes the index of the second-highest value (1-indexed) and **b** denotes the index of the highest value (1-indexed). In the above array, the fantabulous pair is (3, 5).
Mancunian challenges you to solve the following problem. Given an array, find the total number of **distinct** fantabulous pairs over all its subarrays.

Input:
The first line contains an integer **N** denoting the length of the array. The next line contains **N distinct** integers denoting the elements of the array.

Output:
Output a single integer which is the answer to the problem.

Constraints:

BEST SUBMISSIONS

LANGUAGE: C

TIME (sec) 1.07896 | MEMORY (KiB) 23628

by Hong Han

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THIS PROBLEM WAS ASKED IN

CHALLENGE NAME
April Easy '17

SOCIAL SHARE

$1 <= N <= 10^6$

$1 <=$ array elements $<= 10^9$

Array elements are distinct.

SAMPLE INPUT	SAMPLE OUTPUT
4 1 3 2 4	3

Explanation

Let us consider all the subarrays of the given array.
The subarray [1] is not fantabulous.
The subarray [2] is not fantabulous.
The subarray [3] is not fantabulous.
The subarray [4] is not fantabulous.
The fantabulous pair for subarray [1, 3] is (1, 2).
The subarray [3, 2] is not fantabulous.
The fantabulous pair for subarray [2, 4] is (1, 2).
The subarray [1, 3, 2] is not fantabulous.
The fantabulous pair for subarray [3, 2, 4] is (1, 3).
The fantabulous pair for subarray [1, 3, 2, 4] is (2, 4).
So, there are the **3** distinct pairs, which are (1, 2), (1, 3) and (2, 4).

Time Limit:	2.0 sec(s) for each input file.
Memory Limit:	256 MB
Source Limit:	1024 KB
Marking Scheme:	Marks are awarded when all the testcases pass.
Allowed Languages:	C, C++, C++14, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Swift, Visual Basic