

# Inverted Pyramid

*Filename:* pyramid

*Time Limit:* 2 seconds

Tanmay is about to begin walking up a pyramid with  $N$  steps, when he notices that there is a piece of paper on each step. Each piece of paper has a distinct number from 1 to  $N$  written on it. When Tanmay steps up and reads a piece of paper, he asks "how many numbers larger than this one have I seen?"

## Problem

Find the sum of the answers to Tanmay's questions, after reaching the top of the pyramid.

## Input

Each test case consists of a line containing a positive integer  $N \leq 2 \times 10^5$ , followed by a line containing a permutation of the positive integers between 1 and  $N$ .

## Output

Print a single integer, the sum of the answers to the questions Tanmay asked at each step: "How many IDs have I seen so far which were larger than the ID on this paper?"

## Samples

Input	Output
3 1 2 3	0
4 1 3 2 4	1
6 4 1 3 6 5 2	7
1 1	0
3 3 2 1	3