

Temperature Problem

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Given an array of integers temperatures represents the daily temperatures, return an array answer such that answer[i] is the number of days you have to wait after the ith day to get a warmer temperature. If there is no future day for which this is possible, keep answer[i] == 0 instead.

Input

First line contains n, size of the temperature array. Second line contains n space separated integers i.e. the daily temperatures

Example

standard input	standard output
4 30 40 50 60	1 1 1 0

Note

Example 1:

Input: temperatures = [73,74,75,71,69,72,76,73]

Output: [1,1,4,2,1,1,0,0]

Example 2:

Input: temperatures = [30,40,50,60]

Output: [1,1,1,0]

Example 3:

Input: temperatures = [30,60,90]

Output: [1,1,0]