Fun with Sequences (Act 7)

You are given a sequence of n integers $S = s_1, s_2 \ldots s_n$ and a sequence of m integers $Q = q_1, q_2 \ldots q_m$. If $(q_1 + q_2 + \ldots + q_m)/m < (s_1 + s_2 + \ldots + s_n)/n$ please print the sequence S and otherwise please print the sequence Q.

Input data specification

In the first line you are given one integer $2 <= n <= 100$, and in the following line n integers: $-100 <= s_i <= 100$.

In the third line you are given one integer $2 <= m <= 100$, and in the following line m integers: $-100 <= q_i <= 100$.

Output data specification

The sequence of requested integers separated by spaces in the same order as in the input.

Example 1

Input:
5
-2 -1 0 1 4
6
-3 -2 -1 1 2 3

Output:
-2 -1 0 1 4

Example 2

Input:
5
-2 -1 1 2 3
6
-2 -1 0 1 2 3

Output:
-2 -1 1 2 3