Fun with Sequences (Act 7)

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

-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 0 1 2 3