

The first line contains an integer n, the number of elements in the linked list.

Each of the next n lines contains an integer a_i .

The next line contains an integer data denoting the data of the node that is to be inserted.

The last line contains an integer position.

constraints

- $ullet 1 \leq n \leq 1000$
- •1 $\leq a_i \leq$ 1000, where a_i is the i^{th} element of the linked list.
- $\bullet 0 \leq position \leq n.$

Output format

Return a reference to the list head. Locked code prints the list for you.

Examples

Input

Output

16 13 1 7

Submit a solution

Language: q++ - GNU C++ 11.4.0 Settings

