Searching

Input file:	`standard input`
Output file:	`standard output`
Time limit:	2 seconds
Memory limit:	64 megabytes

Given a number N and an array A of N numbers. Determine if the number X **exists** in array A or **not** and print its position **(0-index)**.

Note: X may be found **once** or **more than once** and **may not be found**.

Input

First line contains a number N ($1 \leq N \leq 10^5$) number of elements.

Second line contains N numbers ($0 \leq A_i \leq 10^9$).

Third line contains a number X ($0 \leq X \leq 10^9$).

Output

Print the **position** of X in the first time you find it. If it doesn't **exist** print **-1**.

Examples

standard input	standard output
3 3 0 1 0	1
5 1 3 0 4 5 10	-1
4 2 3 2 1 2	0