

Fun with Sequences (Act 4)

You are given S - a sequence of n integers $S = s_1, s_2 \dots s_n$, Q - a sequence of n integers $Q = q_1, q_2 \dots q_n$ and a nonnegative parameter x .

Please print in ascending order all such i , that $s_i = q_{i+y}$, where $-x \leq y \leq x$.

Input data specification

In the first line you are given two integers $2 \leq n \leq 100$, $0 \leq x < n$ and in the following two lines n integers in each of the line:

$-100 \leq s_i, q_i \leq 100$

Output data specification

The sequence of requested integers separated by spaces.

Example 1

Input:

```
5 2
-1 2 -1 1 -1
3 -2 -1 1 2
```

Output:

```
1 3 4 5
```

Example 2

Input:

```
6 4
-1 2 2 2 2 -2
3 -2 3 3 3 -1
```

Output:

```
6
```

Example 3

Input:

```
6 0
-1 2 10 12 6 -2
2 -2 10 21 6 -1
```

Output:

```
3 5
```