

A – Zebra

Time Limit: 2 sec
Memory Limit: 1024 MB

There is a pack of N zebras moving in a line. i is the position of the zebra from the leading zebra. Find the value of j such that the following statement is true: "the i -th zebra from the leading zebra of the pack is the j -th zebra from the back."

Constraints

$$1 \leq N \leq 100$$

$$1 \leq i \leq N$$

Input:

Input is given from Standard Input in the following format:

N i

Output:

Print the answer.

Examples:

Input 1	Output 1
4 2	3

The second zebra from the leading zebra of a zebra pack with 4 zebras is the third zebra from the back.

Input 2	Output 2
1 1	1

Input 3	Output 3
15 11	5

B – Library Mysteries

Time Limit: 2 sec

Memory Limit: 1024 MB

Imagine a grand library with 2,000,001 meticulously cataloged books. These books are placed only on the top row of shelf A (all books are placed in one row). Each book placed represents a coordinate in this row. The coordinates of these books are -1000000 , -999999 , -999998 , ..., 999999 , 1000000 making it a true literary marvel.

Among them some K consecutive books are in striking black leather covers, while others are in white. Now, a peculiar mystery unfolds, and you find a black leather book at coordinate X .

Your task is to unveil the mystery and print the coordinates of all black leathered books in ascending order.

Constraints

$$1 \leq K \leq 100$$

$$0 \leq X \leq 100$$

All values in input are integers.

Input:

Input is given from Standard Input in the following format:

K X

Output:

Print all coordinates that potentially contain a black leather book, in ascending order, with spaces in between.

Example:

Input 1	Output 1
3 7	5 6 7 8 9

We know that there are three black leather books, and the book at coordinate 7 is in black leather.

There are three possible cases:

The three black leathered books are placed at coordinates 5, 6, and 7.

The three black leathered books are placed at coordinates 6, 7, and 8.

The three black leathered books are placed at coordinates 7, 8, and 9.

Thus, five coordinates potentially contain a black leathered book: 5, 6, 7, 8, and 9.

Input 2	Output 2
4 0	-3 -2 -1 0 1 2 3

Negative coordinates can also contain a book leathered black.

Input 3	Output 3
1 100	100

C – Centers

Time Limit: 2 sec

Memory Limit: 1024 MB

You are given a sequence $A = (A_1, A_2, \dots, A_{3N})$ of length $3N$ where each of $1, 2, \dots$, and N occurs exactly three times.

For $i = 1, 2, \dots, N$, let $f(i)$ be the index of the middle occurrence of i in A . Sort $1, 2, \dots, N$ in ascending order of $f(i)$.

Formally, $f(i)$ is defined as follows.

Suppose that those j such that $A_j = i$ are $j = \alpha, \beta, \gamma$ ($\alpha < \beta < \gamma$). Then, $f(i) = \beta$.

Constraints

$1 \leq N \leq 10^5$

$1 \leq A_j \leq N$

i occurs in A exactly three times, for each $i = 1, 2, \dots, N$.

All input values are integers.

Input:

The input is given from Standard Input in the following format:

N

$A_1 A_2 \dots A_{3N}$

Output:

Print the sequence of length N obtained by sorting $1, 2, \dots, N$ in ascending order of $f(i)$, separated by spaces.

Examples:

Input	Output
3 1 1 3 2 3 2 2 3 1	1 3 2

1 occurs in A at A_1, A_2, A_9 , so $f(1) = 2$.

2 occurs in A at A_4, A_6, A_7 , so $f(2) = 6$.

3 occurs in A at A_3, A_5, A_8 , so $f(3) = 5$.

Thus, $f(1) < f(3) < f(2)$, so 1, 3, and 2 should be printed in this order.

Input	Output
1 1 1 1	1

Input	Output
4 2 3 4 3 4 1 3 1 1 4 2 2	3 4 1 2