

# Tight Arrays



We call an array of integers *tight* if every pair of adjacent integers in the array has an absolute difference  $\leq 1$ . For example, the array  $[3, 4, 4, 3, 2, 1, 2, 3, 4, 4, 5, 5]$  is tight, but the array  $[1, 2, 4, 3, 3]$  is not:



The diagram above shows the absolute differences between each pair of adjacent elements. Note that the second array is *not* tight, because it has a pair of adjacent elements whose absolute difference is greater than 1.

Given  $a$ ,  $b$ , and  $c$ , complete the function below by returning the length of the shortest tight array such that the first element is  $a$ , the last element is  $c$ , and the array contains  $b$ .

## Input Format

Three space-separated integers describing the respective values of  $a$ ,  $b$ , and  $c$ .

## Constraints

- $1 \leq a, b, c \leq 100$

## Output Format

Return a single integer denoting the length of the shortest tight array such that the first element is  $a$ , the last element is  $c$ , and the array contains the element  $b$ .

## Sample Input 0

```
5 7 11
```

## Sample Output 0

```
7
```

## Explanation 0

Given  $a = 5$ ,  $b = 7$ , and  $c = 11$ , we want to find the length of the shortest tight array starting with  $a$ , ending with  $c$ , and containing  $b$ .

The shortest possible tight array we can construct is  $[5, 6, 7, 8, 9, 10, 11]$ . We then return its length, 7, as our answer.

## Sample Input 1

```
3 1 2
```

## Sample Output 1

```
4
```

## Explanation 1

Given  $a = 3$ ,  $b = 1$ , and  $c = 2$ , the shortest possible tight array we can construct is  $[3, 2, 1, 2]$ . We then return its length, 4, as our answer.

### Sample Input 2

5 5 6

### Sample Output 2

2

### Explanation 2

Given  $a = 5$ ,  $b = 5$ , and  $c = 6$ , the shortest possible tight array we can construct is  $[5, 6]$ . We then return its length,  $2$ , as our answer.