

# Missing Numbers (FP)

Original problem: [Missing Numbers](#)

Sometimes you need to compare lists of number, but sorting each one normally will take too much time. Instead you can use alternative methods to find the differences between each list.

## Challenge

Numeros The Artist was arranging two identical lists A and B into specific orders. The arrangements of the two arrays were random, Numeros was very proud of his arrangements. Unfortunately, some numbers got left out of List A. Can you find the missing numbers from A without messing up his order?

## Details

There are many duplicates in the lists, but you need to find the extra numbers, i.e.  $B - A$ . Print the numbers in numerical order. Print each missing number once, even if it is missing multiple times. The numbers are all within a range of 100 from each other.

## Input Format

There will be four lines of input:

$n$  - the size of the first list  
This is followed by  $n$  numbers that makes up the first list.  
 $m$  - the size of the second list  
This is followed by  $m$  numbers that makes up the second list.

## Output Format

Output all the numbers (in ascending order) that are in B but not in A.

## Constraints

$1 \leq n, m \leq 200000$   
 $-10000 \leq x \leq 10000, x \in B$   
 $X_{\max} - X_{\min} < 101$

## Sample Input

```
10
203 204 205 206 207 208 203 204 205 206
13
203 204 204 205 206 207 205 208 203 206 205 206 204
```

## Sample Output

```
204 205 206
```

## Explanation

Although 204 presented in both arrays, but 204's frequency in A is smaller than that of B. Similarly 205 and 206 occur twice in A but thrice in B. So, these three numbers constitute the output. The rest of the numbers occur at least as many times in A as they do in B - so they are not "missing numbers".