Dickinson 2103: Monte and the Missing Number Block

You have a set of *N* blocks, where each block contains a unique integer greater than 0 and less than or equal to *N*. You like to line them up on the floor to create the sequence 1, 2, 3, ..., (*N* - 1), *N*. However your cat Monte also likes to play with these blocks and randomly steals and hides one and only one block and then rearranges the remaining blocks in order to hide his crime. You need to write a program to determine which number is missing from the sequence.

Notes: Since you may have a lot of input to read, please do the following:

1. If you are using C++, put the following line as the first statement in your main method: std::ios_base::sync_with_stdio (false);
2. If you are using Java, use the Reader class to read input. It is provided in the template for Java.

Input Format

Input will consist of a single integer *M* on the first line, where 1 ≤ M ≤ 10,000,000, where M represents the number of blocks remaining. This will be followed by *M* unique integers, one per line, where each integer is at least 1 and at most *M* + 1, representing the numbers remaining.

Output Format

Output should consist of a single integer representing the number that is missing from the sequence.

Sample Input

```
10
7
3
11
9
2
8
6
1
5
10
```

Sample Output

```
4
```