- **MEDIUM**
- **Max Score: 40 Points**

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Smallest Positive missing number

You are given an array arr[] of N integers including 0. The task is to find the smallest positive number missing from the array.

Input Fornat

First line contains a single integer N denoting size of array

Second line contains N integers denoting elements of array

Output Format

Find the smallest positive number missing from the array.

Example 1

Input

```
5
1 2 3 4 5
```

Output

```
6
```

Explanation

All the numbers from 1 to 5 are present, so the next smallest number required is 6.

Example 2

Input

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

Output

```
4
```

Explanation

We only focus on positive number, and from 1-3 all positive numbers are present, so the only missing positive number is 4.

Constraints

```
1 <= N <= 1000000
```

```
-1000000 <= A[i] <= 1000000
```

- **Arrays**

My code

```
// n java
import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
```

```java
    public static void main (String[] args) throws
java.lang.Exception
    {
            //your code here
    Scanner s=new Scanner(System.in);
    int n=s.nextInt();
    int arr[]=new int[n+1];
    int b[]=new int[n+1];
    for(int i=1;i<=n;i++)
      arr[i]=s.nextInt();
    for(int i=1;i<=n;i++)
      b[i]=0;
     for(int i=1;i<=n;i++)
      {
        int a=arr[i];
        if(a>n||a<0)continue;
        b[a]=a;
      }
    for(int i=1;i<=n;i++)
      if(b[i]==0){System.out.print(i);return;}
    System.out.print(n+1);
     }
}
```