Write a function:

int solution(int A[], int N);

that, given a non-empty zero-indexed array A of N integers, returns the minimal positive integer (greater than 0) that does not occur in A.

For example, given:

A[0] = 1

A[1] = 3

A[2] = 6

A[3] = 4

A[4] = 1

A[5] = 2

the function should return 5.

Assume that:

* N is an integer within the range [1..100,000];
* each element of array A is an integer within the range [−2,147,483,648..2,147,483,647].

Complexity:

* expected worst-case time complexity is O(N);
* expected worst-case space complexity is O(N), beyond input storage (not counting the storage required for input arguments).

Elements of input arrays can be modified.