

Note: Write a solution with $O(n)$ time complexity and $O(1)$ additional space complexity, since this is what you would be asked to do during a real interview.

Given an array `array` that contains only numbers in the range from `1` to `array.length`, find the first duplicate number for which the second occurrence has the minimal index. In other words, if there are more than `1` duplicated numbers, return the number for which the second occurrence has a smaller index than the second occurrence of the other number does. If there are no such elements, return `-1`.

Example

- For `array = [2, 3, 3, 1, 5, 2]`, the output should be
`firstDuplicate(array) = 3`.
There are `2` duplicates: numbers `2` and `3`. The second occurrence of `3` has a smaller index than the second occurrence of `2` does, so the answer is `3`.
- For `array = [2, 4, 3, 5, 1]`, the output should be
`firstDuplicate(array) = -1`.

Input/Output

- [execution time limit] 4 seconds (js)**
- [input] array.integer array**

Guaranteed constraints:

$1 \leq \text{array.length} \leq 10^4$,
 $1 \leq a[i] \leq a.length$.

- [output] integer**

The element in `a` that occurs in the array more than once and has the minimal index for its second occurrence. If there are no such elements, return `-1`.

[JavaScript (ES6)] Syntax Tips

```
// Prints help message to the console
// Returns a string
function helloWorld(name) {
    console.log("This prints to the console when you Run Tests");
    return "Hello, " + name;
}
```