Given an array of integers, write a function that determines whether the array contains any duplicates. Your function should return true if any element appears at least twice in the array, and it should return false if every element is distinct.

Example

 For a = [1, 2, 3, 1], the output should be containsDuplicates(a) = true.

There are two 1s in the given array.

 For a = [3, 1], the output should be containsDuplicates(a) = false.

The given array contains no duplicates.

Input/Output

- [execution time limit] 20 seconds (swift)
- [input] array.integer a

Guaranteed constraints:

```
0 \le a.length \le 10^5,
-2 \cdot 10^9 \le a[i] \le 2 \cdot 10^9.
```

• [output] boolean

[Swift3] Syntax Tips

```
// Prints help message to the console
// Returns a string
func helloWorld(name: String) -> String {
    print("This prints to the console when you Run Tests");
    return "Hello, " + name;
}
```