

HW_Contains Duplicate?

Take an integer array `arr` as input and print "**true**" if any value appears at least twice in the array, else print "**false**" if every element is distinct.

NOTE :- After answering the question, attempt the related question in the linked resource to improve your understanding of the question . Question Link -> <https://leetcode.com/problems/contains-duplicate/>

Input Format

- An Integer N.
- N integers depicting elements of array.

Constraints

- 1 <= arr.length <= 10^5
- -10^9 <= arr[i] <= 10^9

Output Format

- "true" or "false"

Sample Input 0

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

Sample Output 0

```
false
```

Sample Input 1

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

Sample Output 1

```
true
```

Submitted Code

```
Language: Java 15
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner sc = new Scanner(System.in);
8         int n = sc.nextInt();
9         int [] arr = new int[n];
10        for(int i =0;i<n;i++)arr[i]=sc.nextInt();
11
12        Map<Integer , Integer> hm = new HashMap<>();
13
14        for(int i=0;i<n;i++){
15            hm.put(arr[i],hm.getOrDefault(arr[i],0)+1);
16        }
17
18        for(Integer key : hm.keySet()){
19            if(hm.get(key)>1){System.out.print(true);return;}
20        }
21        System.out.print(false);
22    }
23 }
```

Handwritten notes:

- for very small we can use sorting
- for Sample Input 0: 1 2 3 4 5 → false
- for Sample Input 1: 1 2 2 3 1 → true (2 is circled)
- for Sample Input 2: 1 2 3 3 4 → true (3 is circled)
- for Sample Input 3: 1 2 3 4 5 → false

Handwritten notes:

- Key: 1, 2, 3, 4, 5
- Value: 1, 2, 3, 4, 5
- HashMap
- Threshold
- if (hm.get(key) > 1) { return true; }
- else { return false; }
- arr[7] = 5
- hashcode