

## 100136. Count the Number of Good Partitions

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You are given a **0-indexed** array `nums` consisting of **positive** integers.

A partition of an array into one or more **contiguous** subarrays is called **good** if no two subarrays contain the same number.

Return the **total number** of good partitions of `nums`.

Since the answer may be large, return it **modulo**  $10^9 + 7$ .

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Hard

### Example 1:

**Input:** `nums = [1,2,3,4]`

**Output:** 8

**Explanation:** The 8 possible good partitions are: (`[1]`, `[2]`, `[3]`, `[4]`), (`[1]`, `[2]`, `[3,4]`), (`[1]`, `[2,3]`, `[4]`), (`[1]`, `[2]`, `[3,4]`), (`[1,2]`, `[3]`, `[4]`), (`[1,2]`, `[3,4]`), (`[1,2,3]`, `[4]`), and (`[1,2,3,4]`).

### Example 2:

**Input:** `nums = [1,1,1,1]`

**Output:** 1

**Explanation:** The only possible good partition is: (`[1,1,1,1]`).

### Example 3:

**Input:** `nums = [1,2,1,3]`

**Output:** 2

**Explanation:** The 2 possible good partitions are: (`[1,2,1]`, `[3]`) and (`[1,2,1,3]`).

### Constraints:

- $1 \leq \text{nums.length} \leq 10^5$
- $1 \leq \text{nums}[i] \leq 10^9$

JavaScript



```
1 const mod = 1e9 + 7;
2
3 const numberOfGoodPartitions = (a) => {
4   let first = new Map(), last = new Map(); // save first/last occurrence index of value
5   a.map((x, i) => {
6     if (!first.has(x)) first.set(x, i);
7     last.set(x, i);
8   })
9   let n = a.length, imos = Array(n + 1).fill(0), res = 1;
10  for (const [x, i] of first) {
11    imos[i]++;
12    imos[last.get(x)]--;
13  }
14  for (let i = 0; i < n; i++) imos[i + 1] += imos[i];
15  for (let i = 0; i < n - 1; i++) {
16    if (imos[i] == 0) res = res * 2 % mod;
17  }
18  return res;
19 };
```

☐ Custom Testcase

Use Example Testcases

Run

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