

Problem 2057: Smallest Index With Equal Value

Problem Information

Difficulty: Easy

Acceptance Rate: 72.86%

Paid Only: No

Tags: Array

Problem Description

Given a **0-indexed** integer array `nums`, return **the smallest index `i` of `nums` such that $i \bmod 10 == \text{nums}[i]$** , or **-1** if such index does not exist.

$x \bmod y$ denotes the **remainder** when x is divided by y .

Example 1:

Input: nums = [0,1,2] **Output:** 0 **Explanation:** i=0: $0 \bmod 10 = 0 == \text{nums}[0]$. i=1: $1 \bmod 10 = 1 == \text{nums}[1]$. i=2: $2 \bmod 10 = 2 == \text{nums}[2]$. All indices have $i \bmod 10 == \text{nums}[i]$, so we return the smallest index 0.

Example 2:

Input: nums = [4,3,2,1] **Output:** 2 **Explanation:** i=0: $0 \bmod 10 = 0 != \text{nums}[0]$. i=1: $1 \bmod 10 = 1 != \text{nums}[1]$. i=2: $2 \bmod 10 = 2 == \text{nums}[2]$. i=3: $3 \bmod 10 = 3 != \text{nums}[3]$. 2 is the only index which has $i \bmod 10 == \text{nums}[i]$.

Example 3:

Input: nums = [1,2,3,4,5,6,7,8,9,0] **Output:** -1 **Explanation:** No index satisfies $i \bmod 10 == \text{nums}[i]$.

Constraints:

* $1 \leq \text{nums.length} \leq 100$ * $0 \leq \text{nums}[i] \leq 9$

Code Snippets

C++:

```
class Solution {
public:
    int smallestEqual(vector<int>& nums) {
        }
    };
}
```

Java:

```
class Solution {
    public int smallestEqual(int[] nums) {
        }
    }
}
```

Python3:

```
class Solution:
    def smallestEqual(self, nums: List[int]) -> int:
```