

Solved

Medium Topics Companies Hint

You have a queue of integers, you need to retrieve the first unique integer in the queue.

Implement the `FirstUnique` class:

- `FirstUnique(int[] nums)` Initializes the object with the numbers in the queue.
- `int showFirstUnique()` returns the value of **the first unique** integer of the queue, and returns **-1** if there is no such integer.
- `void add(int value)` insert value to the queue.

Example 1:

```

["FirstUnique", "showFirstUnique", "add", "showFirstUnique", "add", "showFirstUnique", "add", "showFirstUnique"]
[[[2,3,5], [], [5], [], [2], [], [3], []]]
Output:
[null,2,null,2,null,3,null,-1]
Explanation:
FirstUnique firstUnique = new FirstUnique([2,3,5]);
firstUnique.showFirstUnique(); // return 2
firstUnique.add(5);           // the queue is now [2,3,5,5]
firstUnique.showFirstUnique(); // return 2
firstUnique.add(2);           // the queue is now [2,3,5,5,2]
firstUnique.showFirstUnique(); // return 3
firstUnique.add(3);           // the queue is now [2,3,5,5,2,3]
firstUnique.showFirstUnique(); // return -1

```

Example 2:

```

Input:
["FirstUnique","showFirstUnique","add","add","add","add","add","showFirstUnique"]
[[[7,7,7,7,7]],[],[7],[3],[3],[7],[17],[]]

Output:
[null,-1,null,null,null,null,17]

Explanation:
FirstUnique firstUnique = new FirstUnique([7,7,7,7,7]);
firstUnique.showFirstUnique(); // return -1
firstUnique.add(7);           // the queue is now [7,7,7,7,7,7]
firstUnique.add(3);           // the queue is now [7,7,7,7,7,7,3]
firstUnique.add(3);           // the queue is now [7,7,7,7,7,7,3,3]
firstUnique.add(7);           // the queue is now [7,7,7,7,7,7,3,3,7]
firstUnique.add(17);          // the queue is now [7,7,7,7,7,7,3,3,7,17]
firstUnique.showFirstUnique(); // return 17

```

Example 3:

```
Input:
["FirstUnique","showFirstUnique","add","showFirstUnique"]
[[[809],[],[809],[ ]]]

Output:
[null,809,null,-1]

Explanation:
FirstUnique firstUnique = new FirstUnique([809]);
firstUnique.showFirstUnique(); // return 809
firstUnique.add(809);         // the queue is now [809,809]
firstUnique.showFirstUnique(); // return -1
```

Constraints:

- `1 <= nums.length <= 10^5`
- `1 <= nums[i] <= 10^8`
- `1 <= value <= 10^8`
- At most 50000 calls will be made to `showFirstUnique` and `add`.

Seen this question in a real interview before? 1/5

Yes No

Accepted 84.5K | Submissions 157.6K | Acceptance Rate 53.6%

Topics

Companies

 Hint 1

 Hint 2

 Hint 3

Discussion (3)

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Code

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```

1 class firstUnique:
2     def __init__(self, nums: List[int]):
3         self.dictx = {}
4
5         for each in nums:
6             if each not in self.dictx:
7                 self.dictx[each] = 1
8             else:
9                 self.dictx[each] += 1
10
11
12 def showFirstUnique(self) -> int:
13     for key, value in self.dictx.items():
14         if value == 1:
15             return key
16     return -1
17
18
19 def add(self, value: int) -> None:
20     if value not in self.dictx:
21         self.dictx[value] = 1
22     else:
23         self.dictx[value] += 1
24

```

☁ Saved

Testcase > Test Result

Accepted Runtime: 46 ms

- Case 1
- Case 2
- Case 3

Input

```
["FirstUnique","showFirstUnique","add","showFirstUnique","add","showFirstUnique","add","showFirstUnique"]
```

```
[[2,3,5],[],[5],[],[2],[],[3],[]]
```

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Output

$\epsilon_{\text{max}} = 0$, $\epsilon_{\text{min}} = 0$, $\epsilon_{\text{max}} = 0$, $\epsilon_{\text{min}} = 0$