

First Missing Positive

Total

Question

Solution

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Accepted: **46478** Total Submissions: **204320** Difficulty: **Hard**

Given an unsorted integer array, find the first missing positive integer.

For example,

Given `[1,2,0]` return `3`,

and `[3,4,-1,1]` return `2`.

Your algorithm should run in $O(n)$ time and uses constant space.

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Python ▼



```
1 class Solution(object):
2     def firstMissingPositive(self, nums):
3         """
4         :type nums: List[int]
5         :rtype: int
6         """
7         i=0
8         while i<len(nums):
9             if nums[i]>0 and nums[i] <= len(nums):
10                 if nums[nums[i]-1] == nums[i]:
11                     i+=1
12                     continue
13                 tmp = nums[nums[i]-1]
14                 nums[nums[i]-1] = nums[i]
15                 nums[i] = tmp
16                 i-=1
17             i+=1
18         for i in range(len(nums)):
19             if nums[i] != i+1:
20                 return i+1
21         return len(nums)+1
```

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