Gainesville Python Ninjas
May 27 2015

Monthly Python Meetup

Agenda:

(0) Introductions

(1) Eat food

(2) Connect to Internet (optional)

(3) Solve Coding Challenge

(4) Discuss/Examine Solution from Challenge

(5) Announcements

(6) Fin

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Coding Challenge

Instructions:

Given an array **A** of **N** integers, make a Python function that returns the minimal positive integer **Z** that does not occur in A.

For example, given: A = [1, 3, 6, 4, 1, 2] , the function should return 5.

Rules:

N is between 1 and 100,000

Submit Answer Here:

https://codility.com/demo/take-sample-test/missing_integer/

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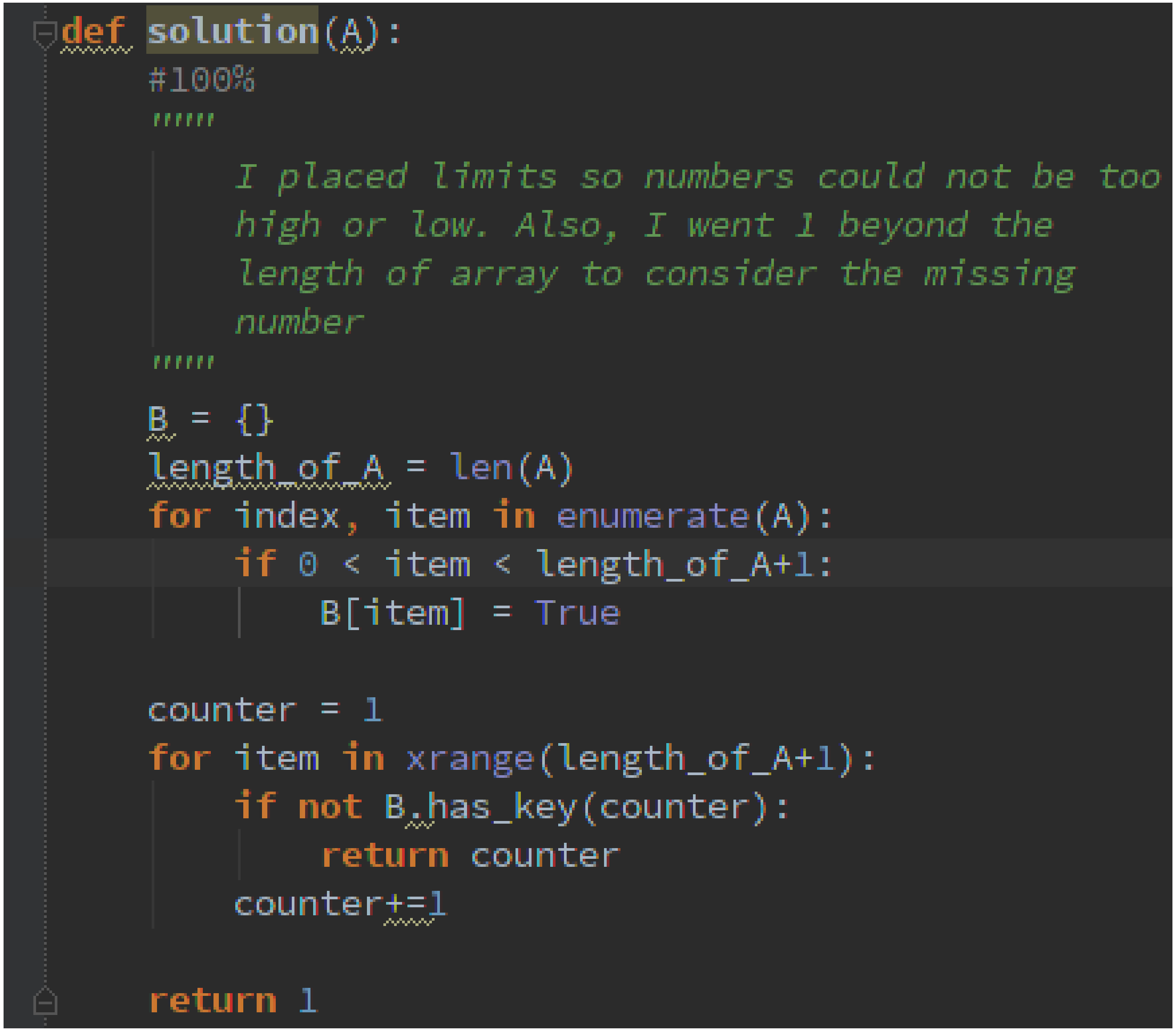
Possible Solution

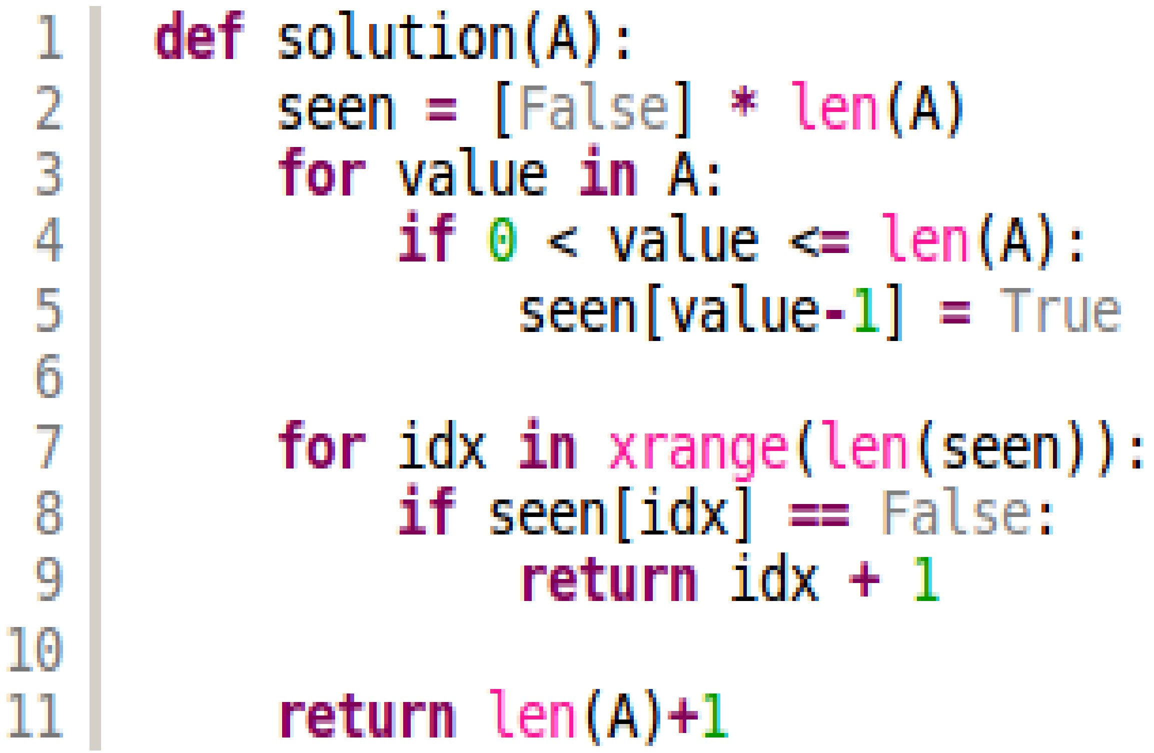


```python
def solution(A):
    #100%
    """
        I placed limits so numbers could not be too
        high or low. Also, I went 1 beyond the
        length of array to consider the missing
        number
    """
    B = {}
    length_of_A = len(A)
    for index, item in enumerate(A):
        if 0 < item < length_of_A+1:
            B[item] = True

    counter = 1
    for item in xrange(length_of_A+1):
        if not B.has_key(counter):
            return counter
        counter+=1

    return 1
```

Another Possible Solution



```
def solution(A):
    seen = [False] * len(A)
    for value in A:
        if 0 < value <= len(A):
            seen[value-1] = True

    for idx in xrange(len(seen)):
        if seen[idx] == False:
            return idx + 1

    return len(A)+1
```

Taken From:

http://www.martinkysel.com/codility-missinginteger-solution/

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Annoucements

- In my free time, I'm building a website to help students grade each other's homework in the web. It's called Peer2Grade. Here is a demo:

  http://youtu.be/3VPxN2VL3uE

- The calculator app we designed from the last meetup now works on my phone. The online repo is: https://github.com/sudouser2010/simple-calc

Do Announcements Here:

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