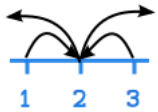
Activate Fountain

There is a one-dimensional garden of length *n*. In each position of the *n* length garden, a fountain has been installed. The fountain at the i^{th} position has a value *a[i] (where 1 ≤ i ≤ n)* that describes the coverage limit of fountain *i*. A fountain can cover the range from the position ***max((i - a[i]), 1)*** to ***min((i + a[i]), n)***.

For example, if garden length *n = 3* and *a = {1, 2, 1}, then:*

For position *1: a[1] = 1*, range = *1* to *2*.
For position *2: a[2] = 2*, range = *1* to *3*.
For position *3: a[3] = 1*, range = *2* to *3*.



In the beginning, all the fountains are switched off. Determine the minimum number of fountains that must be activated so that whole *n* length garden will be covered by water. In the example, the *1* fountain at position *a[2]* covers the whole garden.

Function Description

Complete the function *fountainActivation* in the editor below. The function must return an integer that denotes the minimum number of fountains that must be activated to cover the entire garden by water.

fountainActivation has the following parameter:
a[a[1],...a[n]]: an array of integers

Constraints

- $1 \le n \le 10^5$
- $0 \le a[i] \le min(n,100)$ (where $1 \le i \le 10^5$)

Input Format For Custom Testing

The first line contains an integer, *n*, that denotes the number of elements in *a*.

Each line *i* of the *n* subsequent lines (where $1 \le i \le n$) contains an integer that describes *a[i]*.

Sample Case 0

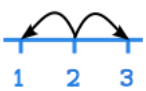
Sample Input For Custom Testing

```
3
1
1
1
```

Sample Output

```
1
```

Explanation



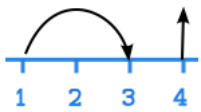
Here, *a = {1, 1, 1}*
If the 2^{nd} fountain is active, the range from position *1* to *3* will be covered. The total number of fountains needed is *1*.

```
4
2
0
0
0
0
```

Sample Output

```
2
```

Explanation



Here, *a = {2, 0, 0, 0}*.
The *1st* fountain will cover the range from *1* to *3* and the *4th* fountain will cover only the position *4*. The total number of fountains needed is *2*.

YOUR ANSWER

We recommend you take a quick tour of our editor before you proceed. The timer will pause up to 90 seconds for the tour. Start tour

For help on how to read input and write output in Python 3, click here.

Draft saved 04:22 pm View Code Diff Python 3

```
#!/bin/python3 ...

#
# Complete the 'fountainActivation' function below.
#
# The function is expected to return an INTEGER.
# The function accepts INTEGER_ARRAY a as parameter.
#

def fountainActivation(a):
    # Write your code here
    score = 0
    j = 0




if __name__ == '__main__':
    fptr = open(os.environ['OUTPUT_PATH'], 'w')

    a_count = int(input().strip())

    a = []

    for _ in range(a_count):
        a_item = int(input().strip())
        a.append(a_item)

    result = fountainActivation(a)

```

Bolt Hiring Event First Tour | 02m : 12s to test end | 1/2 Attempted | Khachatur

Line: 22 Col: 5

Test against custom input

Run Code | Submit code & Continue

(You can submit any number of times)

Download sample test cases *The input/output files have Unix line endings. Do not use Notepad to edit them on windows.*

Status: No test cases passed.

- ✗ Test case 0
- ✗ Test case 1
- ✗ Test case 2
- ✗ Test case 3
- ✗ Test case 4
- ✗ Test case 5
- ✗ Test case 6
- ✗ Test case 7

Compiler Message

```
Wrong Answer
```

Input (stdin) Download

```
3
1
1
1
```

Your Output (stdout)

```
0

```

Expected Output Download

```
1
```