

ALL



1

2

3

4

5

3. Split The Array

There is an array *val* of *n* integers. A *good subarray* is defined as:

- Subarray *val* [*i* to *j*] is a 'good subarray' only if $\text{gcd}(\text{val}[i], \text{val}[j]) > 1$ (where $0 \leq i \leq j < n$).

Split the whole array in such a way that each split subarray is a 'good' one and the value of each element in the array *val*, belongs to exactly one subarray. Calculate the minimum number of split subarrays with each being a 'good subarray'.

Note:

- $\text{gcd}(a,b)$ = Greatest common divisor of two number *a* and *b*.

Function Description

Complete the *splitTheArray* function in the editor below.
The function must return an integer denoting the minimum number of split subarrays, where each is a 'good subarray'.

splitTheArray has one parameter:

val: A integer array of *n* integers.

Constraints

- $1 \leq n < 10^5$
- $2 \leq \text{val}[i] \leq 10^6$ (where $0 \leq i \leq j < n$)

► Input Format For Custom Testing

▼ Sample Case 0

Sample Input For Custom Testing

```
5
2
3
2
3
3
```

Sample Output

```
2
```

Explanation

2 subarrays created are:

subarray[1..3] = {2,3,2} here $\text{gcd}(2,2) > 1$

subarray[4..5] = {3,3} here $\text{gcd}(3,3) > 1$

Other splittings are also possible.

► Sample Case 1

Python 3

Autocomplete Loading...



```
1 > #!/bin/python3 ...
10 #
11 # Complete the 'splitTheArray' function below.
12 #
13 # The function is expected to return an INTEGER.
14 # The function accepts INTEGER_ARRAY val as parameter.
15 #
16
17 def splitTheArray(val):
18     # Write your code here
19 > if __name__ == '__main__': ...
```

Line: 10 Col: 1

Test Results

Custom Input

Run



Submit Code