

768. Max Chunks To Make Sorted II

You are given an integer array `arr`.

We split `arr` into some number of **chunks** (i.e., partitions), and individually sort each chunk. After concatenating them, the result should equal the sorted array.

Return *the largest number of chunks we can make to sort the array*.

Example 1:

Input: `arr = [5,4,3,2,1]`

Output: 1

Explanation:

Splitting into two or more chunks will not return the required result.

For example, splitting into `[5, 4]`, `[3, 2, 1]` will result in `[4, 5, 1, 2, 3]`, which isn't sorted.

Example 2:

Input: `arr = [2,1,3,4,4]`

Output: 4

Explanation:

We can split into two chunks, such as `[2, 1]`, `[3, 4, 4]`.

However, splitting into `[2, 1]`, `[3]`, `[4]`, `[4]` is the highest number of chunks possible.

Constraints:

- `1 <= arr.length <= 2000`
- `0 <= arr[i] <= 108`

- ```
import sys
class Solution:
 def maxChunksToSorted(self, arr: List[int]) -> int:
 leftMax = [0]*len(arr)
 rightMin = [sys.maxsize]*(len(arr)+1)
 tempMax = 0
 tempMin = sys.maxsize
 for i in range(len(arr)):
 tempMax = max(tempMax, arr[i])
 leftMax[i] = tempMax
```

```
for i in range(len(arr)-1,-1,-1):
 tempMin = min(tempMin,arr[i])
 rightMin[i] = tempMin

count = 0
for i in range(0,len(arr)):
 if leftMax[i]<=rightMin[i+1]:
 count = count+1
return count
```