

52. Max Chunks To Make Sorted You are given an integer array `arr` of length `n` that represents a permutation of the integers in the range `[0, n - 1]`. 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 = [4,3,2,1,0]` Output: 1 Explanation: Splitting into two or more chunks will not return the required result. For example, splitting into `[4, 3]`, `[2, 1, 0]` will result in `[3, 4, 0, 1, 2]`, which isn't sorted.

PROGRAM:-

```
def maxChunksToSorted(arr):
    max_value = 0
    chunks = 0

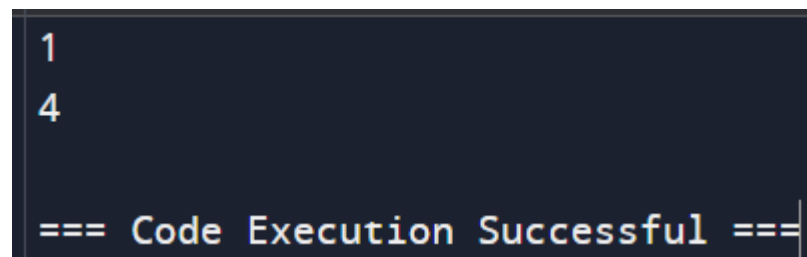
    for i, num in enumerate(arr):
        max_value = max(max_value, num)
        if i == max_value:
            chunks += 1

    return chunks

# Example usage:
arr = [4, 3, 2, 1, 0]
print(maxChunksToSorted(arr)) # Output: 1

# Another example:
arr = [1, 0, 2, 3, 4]
print(maxChunksToSorted(arr)) # Output: 4
```

OUTPUT:-



```
1
4

=== Code Execution Successful ===
```

TIME COMPLEXITY:- $O(n)$