Problem # 941 : Valid Mountain Array (Easy)

<https://leetcode.com/problems/valid-mountain-array/>

My Solution:

<https://leetcode.com/problems/valid-mountain-array/discuss/967873/Simple-Python-3-Solution-Runtime-beats-94.08>

1. Let n be the length of the array A.
2. If n is less than 3, then return False.
3. Let k be the index of the maximum element in A.
4. If k is at either end of the array, i.e. at 0 or n - 1, then return False.
5. The elements of A from index 0 to k should be strictly increasing. If not, then return False.
6. The elements of A from index k to n-1 should be strictly decreasing. If not, then return False.
7. Otherwise, return True.

class Solution:

def validMountainArray(self, A: List[int]) -> bool:

n = len(A)

if n < 3:

return False

k = A.index(max(A))

if k == 0 or k == n-1:

return False

for i in range(k):

if A[i+1] <= A[i]:

return False

for i in range(k, n-1):

if A[i] <= A[i+1]:

return False

return True