Question1 : Given an integer array arr, remove a subarray (can be empty) from the array such that the remaining elements in arr are non-decreasing.

A subarray is a contiguous subsequence of the array.

Return the length of the shortest subarray to remove.

Example 1:

Input: arr = [1,2,3,10,4,2,3,5]
Output: 3
Explanation: The shortest subarray we can remove is [10,4,2] of length 3. The remaining elements after that will be [1,2,3,3,5] which are sorted.
Another correct solution is to remove the subarray [3,10,4].

Example 2:

Input: arr = [5,4,3,2,1]
Output: 4
Explanation: Since the array is strictly decreasing, we can only keep a single element. Therefore we need to remove a subarray of length 4, either [5,4,3,2] or [4,3,2,1].

Example 3:

Input: arr = [1,2,3]
Output: 0
Explanation: The array is already non-decreasing. We do not need to remove any elements.

Example 4:

Input: arr = [1]
Output: 0

Constraints:

- 1 <= arr.length <= 10^5
- 0 <= arr[i] <= 10^9

Question 2: The string "PAYPALISHIRING" is written in a zigzag pattern on a given number of rows like this: (you may want to display this pattern in a fixed font for better legibility)

P.....A.....H.....N
..A..P....L....S....I...I....G
....Y.....I.....R

And then read line by line: PAHNAPLSIIGYIR
Write the code that will take a string and make this conversion given a number of rows:
string convert(string text, int nRows);
convert("PAYPALISHIRING", 3) should return "PAHNAPLSIIGYIR"

Example 2 :
ABCD, 2 can be written as
A....C

...B....D

Question 3: Given a string s consists of upper/lower-case alphabets and empty space characters ' ', return the length of the last word in the string.
If the last word does not exist, return 0.
Note: A word is defined as a character sequence consisting of non-space characters only.
Example:
Given s = "Hello World",
return 5 as length("World") = 5.