Questions 1:

Given a number N, the program must print if N is a special number or not. (A special number is a number which has a digit which is either 1 more or 1 less than the previous and next digit)

Test Case 1:
Input:
1212343

Output:
yes

Test Case 2:
Input:
342345

Output:
no

Test Case 3:
Input:
98765432123456789

Output:
yes

Question 2:

Given an array of N elements, replace every element in the array with the greatest element on its right side. Replace an element with zero if no element is present on its right side.

Test Case 1:
Input:
10
7 5 8 9 6 8 5 7 4 6

Output:
9 9 9 8 8 7 7 6 6 0

Test Case 2:
Input:
10
-2 -5 9 -1 0 7 2 3 5 1

Output:
9 9 7 7 7 5 5 5 1 0

Test Case 3:
Input:
9
-2 1 2 100 -1 -2 0 -3 -4

Output:
100 100 100 0 0 0 -3 -4 0

Question 3:

Get 2 string values from the user S1 and S2 as the input. The string S1 contains only alphabets and the string S2 contains only non-zero digits. The program must print the output based on the following conditions.
For each digit D in S2, the program must print the first P alphabets of the first string D times, where P represents the position of the digit D in S2.
Note : Both S1 and S2 have the same length.

Test case 1:
Input:
asdf
9521

Output:
aaaaaaaaa
asasasasas
asdasd
asdf

Test Case 2:
Input:
ab
22
Output:
aa
abab

Test case 3:
Input:
zyx
534

Output:

zzzzz

zyzyzy

zyxzyxzyxzyx

Question 4:
Given an array of integers, find the length of the **smallest subarray** in it with **SUM more than or equal to K.**

Input :
Array = [1 , 2, 3, 4, 5] , k = 6
Output = 2

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Explanation : 3 + 4 or 4 + 5
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Input :

Array = [1 , 2, 3, 4, 5, 6] , k = 6
Output = 1

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Explanation : 6
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Input :
Array = [1 , 2, 3, 4, 5, 8] , k = 6
Output = 1

```
Explanation : 8
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Question 5:

Given the arrival and departure times of all aircraft that reach an aircraft carrier, the task is to find the minimum number of carriers required so that no aircraft crashes.
We are given two arrays that represent the arrival and departure times of aircraft that stop.

Test Case 1:
Input: arr[] = {9:00, 9:40, 9:50, 11:00, 15:00, 18:00}
dep[] = {9:10, 12:00, 11:20, 11:30, 19:00, 20:00}
Output: 3
Explanation: There are at-most three aircraft at a time (time between 11:00 to 11:20)

Test Case 2:
Input: arr[] = {9:00, 9:40}
dep[] = {9:10, 12:00}
Output: 1
Explanation: Only one carrier is needed.

Test Case 3:
Input: arr[] = {9:50, 11:00, 15:00, 18:00}
dep[] = {11:20, 11:30, 19:00, 20:00}
Output: 2
Explanation: There are at-most two aircraft at a time (time between 11:00 to 11:20 and 18:00 to 19:00)