



STUDENT REPORT

DETAILS

Name

P MOHAMMED SUFIYAN WASI

Roll Number

KUB23CSE100

EXPERIMENT

Title

BEST GRADE

Description

Andrew has a string N consisting of lowercase English letters representing respective grades of N students in his class. His grade is at Pth index. He can swap any two adjacent grades.

Your task is to help Andrew find and return a string value, representing maximized grade by bringing lexicographically smallest character on the Pth index after doing at most K swaps

Note: use 1 based indexing.

Input format:

- (i) The first line contains the string s.
- (ii) The second line contains the integer P.
- (iii) The third line contains the integer K.

Sample Input:

abcdefg

3

2

Sample Output:

a

Source Code:

```
def bring_smallest_to_pth_index(s, P, K):
    P -= 1

    n = len(s)
    max_swaps_range = min(P + K + 1, n)

    min_char_index = P
    for i in range(P, max_swaps_range):
        if s[i] < s[min_char_index]:
            min_char_index = i

    s = list(s)

    for i in range(min_char_index, P, -1):
        s[i], s[i - 1] = s[i - 1], s[i]

    return ''.join(s)

s = input("Enter the string: ").strip()
P = int(input("Enter the position P: "))
K = int(input("Enter the number of swaps K: "))

result = bring_smallest_to_pth_index(s, P, K)
print(result)
```

RESULT

0 / 5 Test Cases Passed | 0 %