

Maximum Value Combination (MVC)

Time Limit: 1 s

Memory Limit: 256 MB

Difficulty: Easy

Description

You are given a number. Your task is to find the largest number combination with a certain number of digits from the given number. You are allowed to take certain digits from the number as long as the numbers taken are sequential digits. From the taken number, you can also change the position of each digit. You as a programmer, Write a program to solve this problem!

Input

- The first line is **NUM** which represents the number
- The second line is **DIGITS** which represents the number of digits you can get from **NUM**

Output

- Print the maximum number combination you can get from **NUM** with **DIGITS** digit.

Constraints

$0 \leq \text{NUM} \leq 18,446,744,073,709,551,615$

DIGITS is guaranteed **greater than** zero and **not greater** than the digits of **NUM**

Examples

#1

Input
1024 2
Output
42

#2

Input
19654 3
Output
965

#3

Input
211809341 5
Output
98430

Explanation

#1

From 1024, you can take a lot of combination of 2 digits number such as: 10, 20, 24, & 42. You have to take the largest number which is **42**

#2

From 19654, we get 3 digits number combination such as:

196, 169, 961, 965, 956, 569, 596, 654, etc...

From those combinations, we can take **965** as the largest 3 digits number

#3

From all combinations of 5 digits number in **NUM** we can take numbers at 211**809341** (**Bold**) which will be formed to be **98430** as the largest value