We define the following terms:

• Lexicographical Order, also known as alphabetic or dictionary order, orders characters as follows:

$$\mathtt{A} < \mathtt{B} < \ldots < \mathtt{Y} < \mathtt{Z} < \mathtt{a} < \mathtt{b} < \ldots < \mathtt{y} < \mathtt{z}$$

For example, ball < cat, dog < dorm, Happy < happy, Zoo < ball.

• A substring of a string is a contiguous block of characters in the string. For example, the substrings of abc are a, b, c, ab, bc, and abc

Given a string, s, and an integer, k, complete the function so that it finds the lexicographically smallest and largest substrings of length k.

# **Function Description**

Complete the getSmallestAndLargest function in the editor below.

getSmallestAndLargest has the following parameters:

- · string s: a string
- int k: the length of the substrings to find

#### Returns

• string: the string ' + "\n" + ' where and are the two substrings

### **Input Format**

The first line contains a string denoting s.

The second line contains an integer denoting k.

#### Constraints

- $1 \le |s| \le 1000$
- s consists of English alphabetic letters only (i.e., [a-zA-Z]).

# Sample Input 0

welcometojava 3

### Sample Output 0

ava wel

# Explanation 0

String s= "welcometojava" has the following lexicographically-ordered substrings of length k=3:

We then return the first (lexicographically smallest) substring and the last (lexicographically largest) substring as two newline-separated values (i.e., ava\nwel).

The stub code in the editor then prints ava as our first line of output and wel as our second line of output.