

## Problem Statement (STable)

You are given two Strings **s** and **t**. All characters of **s** and **t** are distinct. No character of **s** is present in **t** and no character of **t** is present in **s**.

Let **N** be the length of **s**, and **M** be the length of **t**. Define a 2-dimensional string array "table" as follows:

- $\text{table}[i][0] = \text{s}[i-1] \ (1 \leq i \leq N)$
- $\text{table}[0][j] = \text{t}[j-1] \ (1 \leq j \leq M)$
- $\text{table}[i][j] = \min(\text{table}[i-1][j], \text{table}[i][j-1]) + \max(\text{table}[i-1][j], \text{table}[i][j-1]) \ (1 \leq i \leq N, 1 \leq j \leq M)$

Note that min and max are defined by the lexicographical order of strings (see Notes for a more formal definition), and **A+B** means the concatenation of strings **A** and **B**.

Your task is to find a substring of **table[N][M]**. Let **L** be the length of **table[N][M]**. Return the substring of **table[N][M]** whose start position (0-indexed) is **pos** and length is  $\min(50, L-\text{pos})$ .

## Definition

Class: STable  
Method: getString  
Parameters: String, String, long  
Returns: String  
Method signature: String getString(String s, String t, long pos)  
(be sure your method is public)

## Notes

- A string **X** is defined as smaller than a string **Y** if and only if **X** is a prefix of **Y** or **X** has a smaller character than **Y** at the first position where they differ.
- The order of characters is defined by their ASCII codes: '0'<...<'9'<'A'<...<'Z'<'a'<...<'z'.

## Constraints

- **s** and **t** will each contain between 1 and 30 characters, inclusive.
- All characters of **s** and **t** will be distinct.-No character of **s** will be present in **t**.
- No character of **t** will be present in **s**.-**s** and **t** will contain only letters ('A'-'Z', 'a'-'z') and digits ('0'-'9').
- **pos** will be between 0 and **L**-1, inclusive, where **L** is the length of **table[N][M]** as defined in the statement.

Examples

0)

"ad"

"cb"

0

Returns: "acbacd"

In this case, the array "table" is as follows.

		c		b	
a	ac		acb		
d	acd		acbacd		

1)

"fox"

"cat"

0

Returns: "acfcfoacftacfcfocfox"

2)

"Ra6b1t"

"W0lf"

66

Returns: "RWab0RWRWa0RWl0RWRWa6RWa0RWRWa6RWa6RWab0RWRWa6RWa6"

In this case, return 50 characters.