

## 5773. Maximum Value after Insertion

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You are given a very large integer  $n$ , represented as a string, and an integer digit  $x$ . The digits in  $n$  and the digit  $x$  are in the **inclusive** range  $[1, 9]$ , and  $n$  may represent a **negative** number.

You want to **maximize**  $n$ 's **numerical value** by inserting  $x$  anywhere in the decimal representation of  $n$ . You **cannot** insert  $x$  to the left of the negative sign.

- For example, if  $n = 73$  and  $x = 6$ , it would be best to insert it between  $7$  and  $3$ , making  $n = 763$ .
- If  $n = -55$  and  $x = 2$ , it would be best to insert it before the first  $5$ , making  $n = -255$ .

Return a string representing the **maximum** value of  $n$  after the insertion.

|                    |        |
|--------------------|--------|
| User Accepted:     | 0      |
| User Tried:        | 0      |
| Total Accepted:    | 0      |
| Total Submissions: | 0      |
| Difficulty:        | Medium |

## Example 1:

**Input:**  $n = "99"$ ,  $x = 9$

**Output:**  $"999"$

**Explanation:** The result is the same regardless of where you insert  $9$ .

## Example 2:

**Input:**  $n = "-13"$ ,  $x = 2$

**Output:**  $"-123"$

**Explanation:** You can make  $n$  one of  $\{-213, -123, -132\}$ , and the largest of those three is  $-123$ .

## Constraints:

- $1 \leq n.length \leq 10^5$
- $1 \leq x \leq 9$
- The digits in  $n$  are in the range  $[1, 9]$ .
- $n$  is a valid representation of an integer.
- In the case of a negative  $n$ , it will begin with  $'-'$ .

Java



```

1 class Solution {
2     public String maxValue(String n, int x) {
3
4     }
5 }
```