

Problem 2259: Remove Digit From Number to Maximize Result

Problem Information

Difficulty: Easy

Acceptance Rate: 47.86%

Paid Only: No

Tags: String, Greedy, Enumeration

Problem Description

You are given a string `number` representing a **positive integer** and a character `digit`.

Return the resulting string after removing **exactly one occurrence** of `digit` from `number` such that the value of the resulting string in **decimal** form is **maximized**. The test cases are generated such that `digit` occurs at least once in `number`.

Example 1:

Input: `number = "123", digit = "3"` **Output:** `"12"` **Explanation:** There is only one '3' in "123". After removing '3', the result is "12".

Example 2:

Input: `number = "1231", digit = "1"` **Output:** `"231"` **Explanation:** We can remove the first '1' to get "231" or remove the second '1' to get "123". Since $231 > 123$, we return "231".

Example 3:

Input: `number = "551", digit = "5"` **Output:** `"51"` **Explanation:** We can remove either the first or second '5' from "551". Both result in the string "51".

Constraints:

* `2 <= number.length <= 100` * `number` consists of digits from `1` to `9`. * `digit` is a digit from `1` to `9`. * `digit` occurs at least once in `number`.

Code Snippets

C++:

```
class Solution {  
public:  
    string removeDigit(string number, char digit) {  
  
    }  
};
```

Java:

```
class Solution {  
    public String removeDigit(String number, char digit) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def removeDigit(self, number: str, digit: str) -> str:
```