738. Monotone Increasing Digits

DescriptionHintsSubmissionsDiscussSolution

Given a non-negative integer `N`, find the largest number that is less than or equal to `N` with monotone increasing digits.

(Recall that an integer has *monotone increasing digits* if and only if each pair of adjacent digits `x` and `y` satisfy `x <= y`.)

Example 1:

```
Input: N = 10
Output: 9
```

Example 2:

```
Input: N = 1234
Output: 1234
```

Example 3:

```
Input: N = 332
Output: 299
```

Note: `N` is an integer in the range `[0, 10^9]`.

Seen this question in a real interview before?

```
class Solution {
public:
    int monotoneIncreasingDigits(int N) {
        string n_str = to_string(N);

        int marker = n_str.size();
        for(int i = n_str.size()-1; i > 0; i --) {
            if(n_str[i] < n_str[i-1]) {
                marker = i;
                n_str[i-1] = n_str[i-1]-1;
            }
        }

        for(int i = marker; i < n_str.size(); i ++) n_str[i] = '9';

        return stoi(n_str);
    }
};
```