Problem 2566: Maximum Difference by Remapping a Digit

Problem Information

Difficulty: Easy
Acceptance Rate: 76.10%
Paid Only: No
Tags: Math, Greedy

Problem Description

You are given an integer `num`. You know that Bob will sneakily **remap** one of the `10` possible digits (`0` to `9`) to another digit.

Return _the difference between the maximum and minimum values Bob can make by remapping **exactly** **one** digit in _`num`.

Notes:

* When Bob remaps a digit d1 to another digit d2, Bob replaces all occurrences of `d1` in `num` with `d2`. * Bob can remap a digit to itself, in which case `num` does not change. * Bob can remap different digits for obtaining minimum and maximum values respectively. * The resulting number after remapping can contain leading zeroes.

Example 1:

Input: num = 11891 **Output:** 99009 **Explanation:** To achieve the maximum value, Bob can remap the digit 1 to the digit 9 to yield 99899. To achieve the minimum value, Bob can remap the digit 1 to the digit 0, yielding 890. The difference between these two numbers is 99009.

Example 2:

Input: num = 90 **Output:** 99 **Explanation:** The maximum value that can be returned by the function is 99 (if 0 is replaced by 9) and the minimum value that can be returned by the function is 0 (if 9 is replaced by 0). Thus, we return 99.

Constraints:

* `1 <= num <= 108`

Code Snippets

C++:

```
class Solution {
public:
int minMaxDifference(int num) {

}
};
```

Java:

```
class Solution {
public int minMaxDifference(int num) {

}
}
```

Python3:

```
class Solution:
def minMaxDifference(self, num: int) -> int:
```