## ICPC Southeast USA Regional Contest

## Problem L Rainbow Numbers <br> Time Limit: 1

Define a rainbow number as an integer that, when represented in base 10 with no leading zeros, has no two adjacent digits the same.

Given lower and upper bounds, count the number of rainbow numbers between them (inclusive).

## Input

The first line of input contains a single integer $L\left(1 \leq L<10^{10^{5}}\right)$, which is the lower bound.
The second line of input contains a single integer $U\left(1 \leq U<10^{10^{5}}\right)$, which is the upper bound.
It is guaranteed that $L \leq U$. Note that the limits are not a misprint; $L$ and $U$ can be up to $10^{5}$ digits long.

## Output

Output a single integer, which is the number of rainbow numbers between $L$ and $U$ (inclusive). Because this number may be very large, output it modulo $998,244,353$.
Sample Input $1 \quad$ Sample Output 1

| 1 | 10 |
| :--- | :--- |
| 10 |  |

Sample Input 2
Sample Output 2
12345

35882
65432

