

The **distance** between two integers is defined as the **sum of the absolute result of subtracting** their digits. For example, the distance between the numbers 4561 and 3278 is  $|4 - 3| + |5 - 2| + |6 - 7| + |1 - 8| = 12$ . If one of the numbers consists of fewer digits than the other, we fill it with leading zeroes. Therefore, the distance between the numbers 32 and 5678 is  $|0 - 5| + |0 - 6| + |3 - 7| + |2 - 8| = 21$ .

You are given two integers **A** and **B**. Calculate the sum of distances between each pair of numbers belonging in the interval **[A, B]**!

### INPUT

The first and only line of input contains integers **A, B** ( $1 \leq A \leq B \leq 10^{50000}$ ).

### OUTPUT

The first and only line of output must contain the required number from the text. Given that the number could be extremely large, output answer **modulo** 1 000 000 007.

### SCORING

In test cases worth 20% of total points, **A** and **B** will not exceed 10000.

In test cases worth 40% of total points, **A** and **B** will not exceed  $10^{100}$ .

### SAMPLE TESTS

<b>input</b> 1 5	<b>input</b> 288 291	<b>input</b> 1000000 10000000
<b>output</b> 40	<b>output</b> 76	<b>output</b> 581093400

**Clarification of the second example:** The distances are, respectively,  $(288, 289) = 1$ ,  $(288, 290) = 9$ ,  $(288, 291) = 8$ ,  $(289, 290) = 10$ ,  $(289, 291) = 9$ ,  $(290, 291) = 1$ . Each of them counts twice, which is in total  $2 * (1 + 9 + 8 + 10 + 9 + 1) = 76$ .