Problem H
Hamming Distance

Time limit: 2 seconds
Memory limit: 512 Mb

When Phuong is not busy with writing long problem statements he enjoys playing with numbers. He picks two integers l and r and tries to find integers a and b such that $l \leq a \leq b \leq r$ and the Hamming distance between a and b is maximum possible.

The Hamming distance between two integers x and y is defined as the number of decimal places at which they are different. If these integers are of different length, the shorter one is prepended with leading zeroes.

Input

The first line of the input contains a single integer l and the second line contains a single integer $(1 \leq l \leq r \leq 10^{1000000})$.

Output

Print the maximum possible Hamming distance between a pair of integers in range from l to r.

Sample Input 1	Sample Output 1
11 17	1

Sample Input 2	Sample Output 2
1 11	2