

THE ACM-ICPC 2017

VIETNAM SOUTHERN PROGRAMMING CONTEST Host: University of Science, VNU-HCM

October 29, 2017



Problem JTreasure Box

Time Limit: 1 second

You find a treasure box in an ancient temple. From a secret book, you know how to unlock this precious box.

The key to unlock this box is the maximum distance between any two numbers X and Y satisfying $L \le X \le Y \le R$.

The distance between two numbers X and Y is the number of decimal places where X and Y are different. If the two numbers have different length, the shorter number is pre-padded with leading zeroes.



Input

The first line contains an integer L, and the second line contains an integer R.

$$(1 \le L \le R \le 10^{1000000}).$$

Output

Display the value of the key to unlock the treasure box: the maximum distance between any two numbers X and Y in [L, R].

Sample Input

Sample Output

10	2	
29		
10	4	
2017		

Explanation: In the first example, you can choose X = 18 and Y = 29 to get the maximum distance of 2. In the second example, you can choose X = 1120 and Y = 2017.