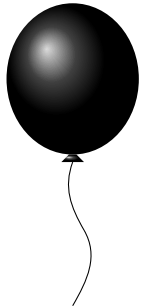




J Palindrome Free Numbers

TIME LIMIT: 1.0s
MEMORY LIMIT: 256MB



One day Shah Abbas the Great was obsessed with numbers that can be read the same backwards.

A string is a palindrome if it remains the same when it is read backwards. A number is palindrome-free if it does not contain a palindrome with a length greater than 1 as a substring. He wants to know the total number of palindrome-free numbers between l and r . But he is not good at math, so he asked Omar Khayyam to calculate this.

Omar is busy working on the classification and solution of cubic equations, so he asked you to do this.

Let $s = s_1s_2 \dots s_n$ be a string of length n , where s_i represents the characters of s . A substring of s is any string t that can be obtained by deleting some (or no) characters from the beginning and some (or no) characters from the end of s , but maintaining the order of the remaining characters.

Formally, for any $(1 \leq i \leq j \leq n)$, the substring of s starting at position i and ending at position j is given by:

$$t = s_i s_{i+1} \dots s_j$$

where t is a substring of s .

INPUT

The input contains two integers, l and r ($1 \leq l \leq r \leq 10^{18}$).

OUTPUT

Print the total number of palindrome-free numbers in the range l, \dots, r (including l and r).

SAMPLES

Sample input 1	Sample output 1
2 101	89

Sample input 2	Sample output 2
407 417	9

