Boolean Parenthesization

Question

1. You are given a boolean expression with symbols T,F, and operators &,|,^ , where  
 T represents True  
 F represents False  
 & represents boolean AND  
 | represents boolean OR  
 ^ represents boolean XOR.  
2. You have to find the number of ways in which the expression can be parenthesized so that the value of expression evaluates to true.

Input Format

Two strings s1 and s2

Output Format

Check the sample output and question video.

Constraints

2 <= length of s1 <= 100  
1 <= length of s2 <= 99

Sample Input

TFT  
^&

Sample Output

2