

## Problem J

# Not a Classic String Problem

Time Limit: 3 Second

Memory Limit: 512 megabytes

There is a classic string problem: You are given two strings  $A$  and  $B$ , and your task is to find the number of appearances of string  $A$  in string  $B$ .

Dr. Hung does not want the problem to be that easy, so he gives you two strings  $S$ ,  $T$ , and  $q$  queries. Each query has two pairs of indices  $(i, j)$  and  $(u, v)$ . For each query, Dr. Hung asks you to find the number of appearances of string  $X = S_i S_{i+1} \dots S_j$  in string  $Y = T_u T_{u+1} \dots T_v$ .

### Input

The first line contains string  $S$  ( $1 \leq |S| \leq 2 \times 10^5$ ).

The second line contains string  $T$  ( $1 \leq |T| \leq 2 \times 10^5$ ).

The third line contains  $q$  ( $1 \leq q \leq 5 \times 10^5$ ).

In the next  $q$  lines, each line contains four integers  $i, j$  and  $u, v$ .

### Output

The output has  $q$  lines, each line contains a single integer indicating the number of appearances.

#### Sample Input

#### Sample Output

abb	3
ababababb	1
5	2
1 2 1 7	1
2 3 2 9	4
3 3 4 7	
1 2 2 4	
1 1 1 9	