Problem G. 3/2 Square Strings

Input file:	`standard input`
Output file:	`standard output`
Time limit:	4 seconds
Memory limit:	1024 megabytes

Given two strings $S = s_1 s_2 \cdots s_{|S|}$ and $T = t_1 t_2 \cdots t_{|T|}$, where $|S|$ denotes the length of S, and $|T|$ denotes the length of T, you need to count the number of quadruples (p, q, u, v), such that $1 \le p \le q \le |S|$, $1 \le u \le v \le |T|$, and $t_u t_{u+1} \cdots t_v$ is a square string where the first half is identical to $s_p s_{p+1} \cdots s_q$.

Recall that a square string is a string of even length in which the first half is identical to the second half. For example, "`aaaa`" and "`abcabc`" are square strings, while "`aaa`" and "`abcabd`" are not.

Since the answer may be very large, output it modulo 998 244 353.

Input

The input consists of two lines, where the first line contains the string S, and the second line contains the string T.

It is guaranteed that both S and T consist only of lowercase English letters and their lengths do not exceed 2×10^5.

Output

Output a line containing an integer, denoting the answer.

Examples

standard input	standard output
ababab ababaa	8
aaaaaaaa aaaaaaaa	114

Note

For the first sample case, the 8 quadruples are $(1, 1, 5, 6)$, $(1, 2, 1, 4)$, $(2, 3, 2, 5)$, $(3, 3, 5, 6)$, $(3, 4, 1, 4)$, $(4, 5, 2, 5)$, $(5, 5, 5, 6)$, and $(5, 6, 1, 4)$.