# Problem D. Dark LaTeX vs. Light LaTeX

| | |
|---|---|
| Input file: | `standard input` |
| Output file: | `standard output` |
| Time limit: | 2 seconds |
| Memory limit: | 512 megabytes |

In the not-so-distant future, LaTeX, the venerable typesetting system that had been a staple of academia and publishing for decades, found itself evolving into a couple of derivatives — "Dark LaTeX" and "Light LaTeX". These derivatives primarily optimized the appearance from different angles to adapt to screenless display technology.

For compatibility trial, the LaTeX lab has obtained two non-empty strings containing only lowercase English letters through analysis — the Dark LaTeX string $S = s_1 s_2 \cdots s_{|S|}$ and the Light LaTeX string $T = t_1 t_2 \cdots t_{|T|}$, where $|S|$ denotes the length of $S$, and $|T|$ denotes the length of $T$. An integer quadruple $(p, q, u, v)$ is considered *transferrable* if and only if $1 \le p \le q \le |S|$, $1 \le u \le v \le |T|$, and $s_p s_{p+1} \cdots s_q t_u t_{u+1} \cdots t_v$ is a square string.

Your task is to help the lab find out the number of transferrable quadruples.

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.

## Input

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

It is guaranteed that both $S$ and $T$ consist only of lowercase English letters and their lengths do not exceed 5 000.

## Output

Output an integer in one line, indicating the number of transferrable quadruples.

## Examples

| standard input | standard output |
|---|---|
| abab<br>ab | 8 |
| abab<br>abaaab | 29 |

## Note

In the first sample case, the transferrable quadruples are $(1, 1, 1, 1)$, $(1, 2, 1, 2)$, $(1, 3, 2, 2)$, $(2, 2, 2, 2)$, $(2, 4, 1, 1)$, $(3, 3, 1, 1)$, $(3, 4, 1, 2)$, $(4, 4, 2, 2)$.