A. Matrix

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

You have a string of decimal digits s. Let's define $b_{ij} = s_i \cdot s_j$. Find in matrix b the number of such rectangles that the sum b_{ij} for all cells (i, j) that are the elements of the rectangle equals a in each rectangle.

A rectangle in a matrix is a group of four integers (x, y, z, t) $(x \le y, z \le t)$. The elements of the rectangle are all cells (i, j) such that $x \le i \le y, z \le j \le t$.

Input

The first line contains integer a ($0 \le a \le 10^9$), the second line contains a string of decimal integers s ($1 \le |s| \le 4000$).

Output

Print a single integer — the answer to a problem.

Please, do not write the `%lld` specifier to read or write 64-bit integers in C++. It is preferred to use the `cin`, `cout` streams or the `%I64d` specifier.

Examples

input
10 12345

output
6

input
16 439873893693495623498263984765

output
40