A. Even Substrings

time limit per test
0.5 seconds
memory limit per test
256 megabytes
input
standard input
output
standard output

You are given a string $s=s_1s_2...s_n$ of length n, which only contains digits 1, 2, ..., 9.

A substring s[l...r] of s is a string s[s]+1s[+2...s]. A substring s[l...r] of s is called *even* if the number represented by it is even.

Find the number of even substrings of s. Note, that even if some substrings are equal as strings, but have different l and r, they are counted as **different** substrings.

Input

The first line contains an integer n ($1 \le n \le 65000$) — the length of the string s.

The second line contains a string s of length n. The string s consists only of digits 1, 2, ..., 9.

Output

Print the number of even substrings of s.

Examples

input

Copy

4

1234

output

Copy

6

input

Copy

4

2244

output

Copy

10

Note

In the first example, the $\left[l,r\right]$ pairs corresponding to even substrings are:

- s[1...2]
- s[2...2]
- s[1...4]
- s[2...4]
- s[3...4]

• s[4...4]

In the second example, all 10 substrings of s are even substrings. Note, that while substrings s[1...1] and s[2...2] both define the substring "2", they are still counted as different substrings.