Problem E. Three Days Ago

Time limit 2000 ms
Mem limit 1048576 kB

Problem Statement

The string `20230322` can be rearranged into `02320232`, which is a repetition of `0232` twice.
Similarly, a string consisting of digits is said to be **happy** when it can be rearranged into (or already is) a repetition of some string twice.
You are given a string S consisting of digits. Find the number of pairs of integers (l, r) satisfying all of the following conditions.

- $1 \leq l \leq r \leq |S|$. ($|S|$ is the length of S.)
- The (contiguous) substring formed of the l-th through r-th characters of S is happy.

Constraints

- S is a string consisting of digits whose length is between 1 and 5×10^5, inclusive.

Input

The input is given from Standard Input in the following format:

```
S
```

Output

Print an integer representing the answer.

Sample 1

Input	Output
20230322	4

We have $S =$ `20230322`.

Here are the four pairs of integers (l, r) that satisfy the condition: $(1, 6)$, $(1, 8)$, $(2, 7)$, and $(7, 8)$.

Sample 2

Input	Output
0112223333444445555556666666777777778888888889999999999	185

S may begin with `0`.

Sample 3

Input	Output
3141592653589793238462643383279502884197169399375105820974944	9