# 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 $5 \times 10^5$, 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 |
|---|---|
| 01122233334444455555566666667777777788888888899999999999 | 185 |

$S$ may begin with `0`.

**Sample 3**

| Input | Output |
| --- | --- |
| 3141592653589793238462643383279502884197169399375105820974944 | 9 |