Verbum Profundum

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On a regular day, Emre and Alp are walking around the Golet (one of the greatest beauties of ITU) as Emre talks about his super power to Alp: his word memory. He knows more words than average. But how he can do that? With a simple technique, he can memorize words much easier than usual: If the reverse of the first half (including median at words with odd length) of any word can be found as a suffix of any word in his memory, then he can remember a whole set of words much more easly.

Emre defines the number of words that hold this property as **Verbum Profundum**. After this conversation Alp gets curious about his own **Verbum Profundum** and he tries calculating it as he continues his morning walk. Can you help him find his **Verbum Profundum**?

Input Format

First line consists of one integer n which is the number of words Alp knows.

Next n lines consist of one string each, s, which consists of lowercase English letters.

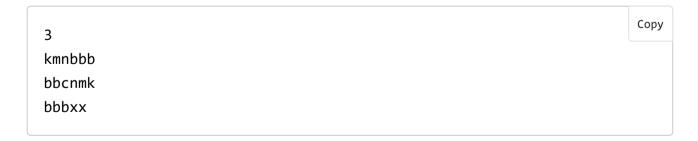
Constraints

 $1 \le n$, (length of s) (max length of s) * $n \le 10^6$

Output Format

Print one integer denoting the Verbum Profundum of Alp.

Sample Input



Sample Output

2 Copy

Sample Explanation

kmnbbb and bbbxx satisfy the rule.

Submit Solution

✓ Points: 1

② Time limit: 2.0s

Java: 4.0s Java 8: 4.0s Javascript v8: 6.0s Mono C#: 4.0s Python: 6.0s

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