H   **PRACTICE**   **COMPETE**   **JOBS**   **LEADERBOARD**   🔍 Search   💬   🔔⁸   H **SaibaJouchiro** ⌄

All Contests › Code-It-On › Branding Agency

Branding Agency   🔒 locked

Problem	Submissions	Leaderboard	Discussions

X started a branding agency and helps companies create logos and slogans. X works in a weird way in which the company slogan has to be a non empty substring of its name. For example, if the company's name is "NIEIEEECOMPUTERSOCIETY" then "NIE" and "EEECOM" can be slogans but "NIEEE" cannot. Sometimes, rebranding occurs and the slogan of a company can change. Slogan A is considered cooler than Slogan B if B appears in A atleast twice(the occurences can overlap). For example, "IEEE" is cooler then "EE" but "NIEIEEE" is not cooler than "IEEE" You are given the company name w and your task is to help X determine the length of the longest sequence of slogans s1, s2, ..., sk, such that any slogan in the sequence is cooler than the previous one.

Input Format

The first line of the input contains a single integer n (1 ≤ n ≤ 200 000) — the length of the company name that asks X to help. The second line contains the string w of length n, that consists of lowercase English letters.

Constraints

No constraints

Output Format

Print a single integer — the maximum possible length of the sequence of slogans of the company named w, such that any slogan in the sequence (except the first one) is cooler than the previous

Sample Input 0

```
3
abc
```

Sample Output 0

```
1
```

Explanation 0

There can be 6 slogans a b c ab bc abc Since none of the above have substrings that occur at least twice, only one set of slogans is possible

Sample Input 1

```
5
ddddd
```

Sample Output 1

```
5
```

Explanation 1

The sequence is:

d

dd

ddd

dddd

ddddd

Therefore the output is 5

Sample Input 2

```
11
abracadabra
```

Sample Output 2

```
3
```

Explanation 2

The sequence is:

a

abra

abracadabra

Therefore the output is 3

f   ✗   in

Submissions: 14
Max Score: 200
Difficulty: Hard

Rate This Challenge:

☆ ☆ ☆ ☆ ☆

More

Current Buffer (saved locally, editable) ⑂ ↺

Java 8 ⌄   ⤢   ⚙

```java
1  import java.io.*;
2  import java.util.*;
3
4  public class Solution {
5
6      public static void main(String[] args) {
7          /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be
   named Solution. */
8      }
9  }
```

Line: 1 Col: 1

⬆ Upload Code as File   ☐ Test against custom input

Run Code   Submit Code

Contest Calendar | Interview Prep | Blog | Scoring | Environment | FAQ | About Us | Support | Careers | Terms Of Service | Privacy Policy | Request a Feature