**Unique Substrings**

Given a string, how many unique substrings can be made without switching the order of the characters?

**Input:** There are two lines of input. The first line contains **N**, length of the string. The second line contains a string of **N** length. The characters are ***a-z*** in lowercase.

**Output:** The number of unique substrings.

**Example Input:**

11

mississippi

**Example Output:**

53