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Badge Progress (Details)

Points: 126 Rank: 270086

String Function Calculation 🔖

by amititkgp

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Jane loves strings more than anything. She has a string t with her, and value of string s over function f can be calculated as given below:

$$f(s) = |s| \times \text{Number of times } s \text{ occurs in } t$$

Jane wants to know the maximum value of $f(s)$ among all the substrings (s) of string t. Can you help her?

Input Format
A single line containing string t .

Output Format
Print the maximum value of $f(s)$ among all the substrings (s) of string t.

Constraints
$1 \le |t| \le 10^5$
The string consists of lowercase English alphabets.

Sample Input 0

```
aaaaaa
```

Sample Output 0

```
12
```

Explanation 0

```
f('a') = 6
f('aa') = 10
f('aaa') = 12
f('aaaa') = 12
f('aaaaa') = 10
f('aaaaaa') = 6
```

Sample Input 1

```
abcabcddd
```

Sample Output 1

```
9
```

Explanation 1

f values of few of the substrings are shown below:

```
f("a") = 2
f("b") = 2
f("c") = 2
f("ab") = 4
f("bc") = 4
f("ddd") = 3
f("abc") = 6
f("abcabcddd") = 9
```

Among the function values **9** is the maximum one.

f ✕ in

Submissions: 1777

Max Score: 80
Difficulty: Advanced

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☆ ☆ ☆ ☆ ☆

Need Help?

Suffix Array

LCP Array

Two Pointer Technique

More

Current Buffer (saved locally, editable)   ⑂ ⟳   Java 7 ⌄   ⤢ ⚙

```java
 1  import java.io.*;
 2  import java.util.*;
 3  import java.text.*;
 4  import java.math.*;
 5  import java.util.regex.*;
 6
 7  public class Solution {
 8
 9      static int maxValue(String t) {
10          // Complete this function
11      }
12
13      public static void main(String[] args) {
14          Scanner in = new Scanner(System.in);
15          String t = in.next();
16          int result = maxValue(t);
17          System.out.println(result);
18          in.close();
19      }
20  }
21
```

Line: 1 Col: 1

⬆ Upload Code as File   ☐ Test against custom input   Run Code   Submit Code

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