String Function Calculation

Jane loves strings more than anything. She made a function related to the string some days ago and forgot about it. She is now confused about calculating the value of this function. 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 in small letter('a' - 'z').

Output Format
An integer containing the value of output.

Constraints
$1 \leq |T| \leq 10^5$

Sample Input #00

```
aaaaaa
```

Sample Output #00

```
12
```

Explanation #00

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

Sample Input #01

```
abcabcddd
```

Sample Output #01

```
9
```

Explanation #01

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.