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**
$1 \leq |t| \leq 10^5$
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.