# A. LLPS

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

This problem's actual name, "Lexicographically Largest Palindromic Subsequence" is too long to fit into the page headline.

You are given string $s$ consisting of lowercase English letters only. Find its lexicographically largest palindromic subsequence.

We'll call a non-empty string $s[p_1p_2\ldots p_k] = s_{p_1}s_{p_2}\ldots s_{p_k}$ $(1 \le p_1 < p_2 < \ldots < p_k \le |s|)$ a subsequence of string $s = s_1s_2\ldots s_{|s|}$, where $|s|$ is the length of string $s$. For example, strings "abcb", "b" and "abacaba" are subsequences of string "abacaba".

String $x = x_1x_2\ldots x_{|x|}$ is lexicographically larger than string $y = y_1y_2\ldots y_{|y|}$ if either $|x| > |y|$ and $x_1 = y_1, x_2 = y_2, \ldots, x_{|y|} = y_{|y|}$, or there exists such number $r$ $(r < |x|, r < |y|)$ that $x_1 = y_1, x_2 = y_2, \ldots, x_r = y_r$ and $x_{r+1} > y_{r+1}$. Characters in the strings are compared according to their ASCII codes. For example, string "ranger" is lexicographically larger than string "racecar" and string "poster" is lexicographically larger than string "post".

String $s = s_1s_2\ldots s_{|s|}$ is a palindrome if it matches string $rev(s) = s_{|s|}s_{|s|-1}\ldots s_1$. In other words, a string is a palindrome if it reads the same way from left to right and from right to left. For example, palindromic strings are "racecar", "refer" and "z".

## Input

The only input line contains a non-empty string $s$ consisting of lowercase English letters only. Its length does not exceed $10$.

## Output

Print the lexicographically largest palindromic subsequence of string $s$.

### Examples

| input | Copy |
|---|---|
| radar | |
| **output** | **Copy** |
| rr | |

| input | Copy |
|---|---|
| bowwowwow | |
| **output** | **Copy** |
| wwwww | |

| input | Copy |
|---|---|
| codeforces | |
| **output** | **Copy** |
| s | |

| input | Copy |
|---|---|
| mississipp | |
| **output** | **Copy** |
| ssss | |

## Note

Among all distinct subsequences of string "radar" the following ones are palindromes: "a", "d", "r", "aa", "rr", "ada", "rar", "rdr", "raar" and "radar". The lexicographically largest of them is "rr".