C. Simple Strings

time limit per test: 2 seconds memory limit per test: 256 megabytes

> input: standard input output: standard output

zscoder loves simple strings! A string t is called simple if every pair of adjacent characters are distinct. For example ab, aba, zscoder are simple whereas aa, add are not simple.

zscoder is given a string s. He wants to change a minimum number of characters so that the string s becomes simple. Help him with this task!

Input

The only line contains the string s ($1 \le |s| \le 2 \cdot 10^5$) — the string given to zscoder. The string s consists of only lowercase English letters.

Output

Print the simple string s' — the string s after the minimal number of changes. If there are multiple solutions, you may output any of them.

Note that the string s' should also consist of only lowercase English letters.

Examples

