Problem A. Avoid Anagrams

Input file:	*standard input*
Output file:	*standard output*
Time limit:	1 second
Memory limit:	64 mebibytes

A pair of strings form an *anagram* if the first of them can be transformed into the second by a permutation of letters. For example, "`listen`" and "`silent`" form an anagram, but "`master`" and "`nearest`" do not.

A subsequence of string $s = s_1 s_2 \dots s_n$ is a string $s_{a_1} s_{a_2} \dots s_{a_k}$, where $1 \le a_1 < a_2 < \dots < a_k \le n$.

Given string s, determine the maximal number of its subsequences which can be written down such that no pair of strings in the resulting list does form an anagram.

Input

A single line containing string s of at most 60 small latin letters.

Output

Print one number — the answer.

Examples

standard input	standard output
jojo	8
uralchampionship	20735

Note

In the first sample the resulting list of strings may be: "`j`", "`o`", "`jj`", "`jo`", "`oo`", "`jjo`", "`joo`", "`jojo`".