Brain Power

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	1024 megabytes

You are given a string s consisting of lowercase English letters. Your task is to split s into a sequence of non-empty **substrings** such that no two adjacent substrings in the sequence are **anagrams** of each other. (Two strings are considered anagrams if they contain the same characters with the same frequencies.) Among all such valid splits, you must maximize the number of substrings.

Input

The first line of the input contains a single integer T, the number of test cases.

The following T lines each describe a test case. Each line contains a single string s consisting of lowercase English letters.

Output

For each test case, print a single integer on a new line: the maximum possible number of substrings in a valid split.

Scoring

- $1 \leq T \leq 10^5$
- $1 \leq |s| \leq 10^5$ for each test case.
- The total length of all strings s over all test cases does not exceed 10^5.

Examples

standard input	standard output
5 kaist rrunnn iiccppcc mooockk connttest	5 4 6 5 8
8 a bb ccc dddd eeeee ffffff ggggggg hhhhhhhh	1 1 2 3 3 4 5 5
4 brainpowerletthebasskick oooooooooooaaaaeaaiau jooooooooooooaaeoaauua eeeeeeeeeaaaaeaeiea	22 15 17 15