Problem Instructions:

1. This is a timed exercise; however, it is on the honor system. We expect you to spend no more than two hours total over the next 48 hours to complete it. No need to rush. We don't consider how long it takes you to complete the problem so please take the time to check your work thoroughly before submission.

2. If you do not finish within the time allotted, please submit what you have completed and provide an explanation in your email of what work remains to be done. If you have problems with your development environment, please notify us immediately via email by responding to this message.

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3. We will accept solutions in Java, Python, C++ or C. Please use only standard libraries and write your code to be portable. You are free to use your favorite IDE, editor, and reference documentation.

4. Your solution will be judged primarily for its correctness. However, we also place significant emphasis on code clarity, design and efficiency.

5. If you have questions about the problem, please use your best judgment and carefully document your assumptions in the code.

6. When you have your final solution, please reply to this email with your solution as a .zip, .tar, or .tar.gz attachment. Do not include any binaries, only source code.

Problem Title: Word Count

John is writing a small software for counting words in a string. He becomes bored after finishing the software very fast. He now wants to find the number of words P in the longest consecutive sequence of words of the same length.

Given a string containing only characters a...z and spaces, a word is defined to be the longest sequence of non-space characters. Your task is to write a program to help John find the number P.

Input

The input file consists of several data sets. The first line of the input file contains the number of data sets which is a positive integer and is not bigger than 20. The following lines describe the data sets.

For each data test, there is one single line containing the string to count words. There are less than 1000 words in the string. The length of each word does not exceed 20 characters.

Output

For each data test, write in one line the number P John wants to find.

Example

Input:

2

a aa bb cc def ghi

a a a a a bb bb bb bb c c

Output:

3

5