

C++ Fundamentals – Exam

The following tasks should be submitted to the SoftUni Judge system.

3. Punctuation

The young 24-year-old graduate Maria has just received her university degree. She wants to become a literature teacher. The girl was one of the few people that had NOT actually written “ece” in the comments section for that game several years ago. She managed to write the whole stuff.

Maria was chosen among a few to continue to the next round of the competition.

She was asked to make a statistic of the punctuation used in her essay. Help her out!

Your task is to write program, which reads a single string from the standard input (Maria’s essay).

Then counts how many punctuation signs each sentence has and groups the sentences by their punctuation count.

Sentences with the same number of characters should be grouped together (see Examples).

The punctuation occurrences should be **sorted in ascending order**.

The end of each sentence will be marked by the “|” character (without the quotes).

Important note: Do **NOT** count the separator symbol “|” as a punctuation sign.

Symbols `!"#$%&'()*+,-./:;<=>?@[]^_`{|}~` are considered as punctuation signs.

Hint: there is a build-in function in the C/C++ standard for this.

Input

Read a single **Line** of data that will hold the whole essay.

Restrictions

Time limit: 250ms (0.25s)

Memory limit: 16 MB

Examples

Input	Output
This is a test!	1 symbol sentences: 1
Is this seriously the second exam? This looks like a pice of cake! Yum, yum, yum.	1 symbol sentences: 2 3 symbol sentences: 1
Or is it??? What do you think?!?	3 symbol sentences: 2