## Q08. Word Counting (15 marks):

Given a paragraph of text, we are concerned about the repeating words that appear at least N times, where  $N \ge 2$ . You are required to write a programme to count the total number of distinct words, and the number of words that appear at least N times in the text, regardless of letter cases.

For example, consider N=2 and the text is

"Baa, baa, black sheep. Have you any wool?".

There are 7 distinct words, out of which there is 1 repeating word.

**Note:** a word with hyphen(s) is considered as one word, for example, "up-to-date" is a single word.

#### Write a programme to

## Input, in sequence

- (1) A paragraph of text with not more than 50 words.
- (2) An integer, N, to specify the minimum number of repeating times that we are concerned about.

## Output, in sequence

- (1) The total number of distinct words in the paragraph.
- (2) The total number of distinct repeating words meeting the minimum requirement.

## 试题 8. 单词计数 (15分):

给定一个英文文本段落,我们关心出现至少N次的重复单词,其中 $N \ge 2$ 。您需要编写一个程式来计算文本中不同单词的总数,以及至少出现N次的单词数量,不考虑字母大小写。

例如,考虑 N=2 且文本为:

"Baa, baa, black sheep. Have you any wool?" 这里有 7 个不同的单词,其中有 1 个是重复的单词。 请注意,带有连字符(-)的单词被视为一个单词,例如,"up-to-date" 是一个单词。

# 试写一程式以

## 依序输入

- (1) 一段不超过 50 字的英文段落。
- (2) 一个整数, N, 用于指定我们关心的最小重复次数。

## 依序输出

- (1) 段落中不同单词的总数。
- (2) 满足最小要求的不同重复单词的总数。

# Example (例子)

| Input (输入)  | Output (输出) |
|---|-------------|
| I remember one Saturday night. We had fried fish and Johnny-cakes. I remember one Saturday night. We had fried fish and Johnny-cakes. 5 | 11 0        |
| Baa, baa, black sheep. Have you any wool?   | 7           |
| So high you cannot get over it, so low you cannot get under it, So wide you cannot get around it. You gotta go in at the door. 3        | 17<br>5     |