

# Word counts

## Problem ID: a14p05wordcounts

Write a program that reads a text file, keeps a count of the individual words in the file using a dictionary and then groups the words by how often they appear, and prints the words of each count, most frequent first. The main program is given in the starter code, do not change it. Implement the remaining given functions.

Note that the counts are not case-sensitive, that is, 'Word' is the same as 'word' or 'wOrd'.

Also, note that your program should account for if a punctuation, like a comma, appears at the end of a word, meaning that words like “university” and “university,” are the same word.

### Input

A line in the input specifies the name of a file to be processed. There might be multiple lines, and some lines may contain invalid file names, but at least one of them will be valid.

Formally, the input consists of  $n$  lines,  $l_1, \dots, l_n$ , where  $1 \leq n$ , and at least one of them will contain the name of a file accessible to the program. Let us refer to the first such file as  $f$ .

The file  $f$  will consist of  $k$  lines, containing a total of  $m$  words,  $w_1, \dots, w_m$ , where  $1 \leq k$  and  $1 \leq m$ .

In the tests,  $n$ ,  $k$  and  $m$  will be restricted to  $n \leq 100$ ,  $k \leq 1\,000\,000$  and  $m \leq 1\,000\,000\,000$ .

### Output

The exact output specification is tedious to communicate, but it can be well understood by looking at the samples.

#### Sample Input 1

```
words.txt
```

#### Sample Output 1

```
There's only 1 word that appears 3 times:
the
There's only 1 word that appears 2 times:
that
There are 40 words that appear only once:
i, do, not, think, there, is, any, thrill, can, go, through, human, heart, like, felt, by
```

#### Sample Input 2

```
words2.txt
```

#### Sample Output 2

```
There's only 1 word that appears 10 times:
the
There's only 1 word that appears 8 times:
a
There's only 1 word that appears 7 times:
of
There's only 1 word that appears 6 times:
in
There are 2 words that appear 4 times:
is, and
There are 3 words that appear 3 times:
seats, for, wave
There are 12 words that appear 2 times:
with, to, his, political, mid-term, us, one, party, house, representatives, republican, a
There are 80 words that appear only once:
republicans, currently, holding, control, both, chambers, congress, question, whether, de
```