

Homework – Chapter 8 – Word Count:

50. Write a program that reads in and prints a text, line by line, and calls a series of functions. The main program calls a function diffwords() to count the number of different words in the entire text (ignoring case). It also calls a function wordcount() to count the number of times each word appears in the text. Then it calls a function printcount() to print a list of all the words in the text, together with the count of the number of times they appear. For example, if a word occurs twice in the text, it appears only once on the list, with a count of 2. Print the list of words in alphabetical order. Use other functions wherever appropriate.

For example, suppose the text is this:

```
The elephant ate the banana and the giraffe ate the banana.
```

The function diffwords() produces a count of 6 ("the", "elephant", "ate", "banana", and "giraffe"); wordcount() produces this list:

```
and          1
ate          2
banana       2
elephant     1
giraffe      1
the          4
```