

Homework – Topic 8 – Word Count:

Write a program that reads in and prints a text, line by line, and calls a series of methods as needed. The object of the program is to parse a sentence in order to figure out all the different words that are in the sentence and how many times each word occurs. Use two parallel arrays, one to store the different words (e.g., `String[] word`) and one to store the appearance count for each word (e.g., `int[] wordCount`). At the end, print the list of different words and their counts. (Extra Credit: print the list of words and their counts in alphabetical order.) You have to decide which methods to implement.

For example, suppose the text is this:

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

The output would produce this list:

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

Hint: Think Bank Accounts! (Use what you learned in the Bank Accounts program.)

Required Submission:

1. The Java source code file (e.g., `HW8.java`)
2. The data input file containing the sentence to be parsed (e.g., `input.txt`)
3. The program generated output file (e.g., `output.txt`)