

Homework 8
Due April 15th,
11:59pm 100 points
CS 2235
Data Structures and
Algorithms

1. Create a program to count and store the word frequency in a document.
 - a. Ignore punctuation and case. Hyphenated words count separately.
 - b. Use a `java.util.HashMap` to store the frequency (values) for each word (keys).
2. Use your program to print out the word frequency in the excerpt provided, attached in the file `Jobs.txt`. (Hint: use the scanner class to bring in the file).
 - a. Do not hard-code the excerpt into your program.
 - b. Print the contents of your `HashMap` in the format
`<word1>: <count1>`
`<word2>:`
`<count2> etc...`

This may be written without creating additional classes, if you so choose.

Demonstrate that your program works. Submit your source code and output screenshots.

Extra Credit (10 points to homework score):

Print the word frequency from most-common word to least-common word. Your implementation should not destroy (ie. remove all elements of) the `HashMap` (you are welcome to destroy a copy of it or store and sort it into another data structure etc.).

Scoring:

20% - Text file read into the program.

20% - Punctuation and case ignored in word count.

20% - Hash Table used to store words and word frequencies.

30% - Correct word count in output.

10% - Proper header and meaningful comments.