

Petrotranz – Interview Programming Test

Use any language that you feel comfortable with, but C# is preferred. The results can be dumped to a log file or output to the console.

Please use the included file “A Tale of Two Cities - Charles Dickens.txt” file to complete this exercise.

Create a Method for performing the following functions:

1. Return a distinct list of all the characters in the file along with their counts. The results should be sorted by character.
2. Return a distinct list of all punctuation in the file along with their counts. The results should be sorted based on punctuation occurrence from most frequent to least frequent.
3. Return a list of distinct words and their respective counts ordered alphabetically.
4. Return a list of matches with the matching line number based on a given “search request”. The “search request” could be a single word, multiple words, or a phrase.
5. Return top "X" used words (with an option to include or exclude conjunctions) and their counts where "X" is a passed in parameter.

Please also list any tools you used to create your solution.