



Problem Statement:

Build an application to read the novel “War and Peace” written by Leo Tolstoy and produce a ranking of the count of the number of times each word is used in the entire book.

Download the books copy: [War and Peace by graf Leo Tolstoy - Free Ebook \(gutenberg.org\)](http://www.gutenberg.org/files/27654/27654-h/27654-h.htm)

1. Sort the list in descending order of word count and supply the top 50 words by count
2. Supply the top 50 words by count where the word length is longer than 6 characters.
3. The application should record and display the duration it takes to execute.
4. Structure your solution to be as generic as possible and describe what aspects make it generic and flexible.
5. Comment on how the application could be improved, and possibly made more efficient.
6. Comment on what testing could be done to validate the accuracy of your solution.
7. Comment on how you would improve the performance (speed) of the application?
8. Describe how the application could be turned into a cloud-based service.
9. Supply all your source code, together with your written responses to the above

General Questions:

1. Describe what you enjoy about programming? Give examples.
2. Describe the process you follow when writing code from requirements to delivery.
3. Describe why you believe you are the best candidate for the role at us? Also list the skills and attributes that you believe make you the best candidate

Instructions and Notes:

1. Please read the assignment instructions carefully and complete your answers thoroughly.
2. We expect that the assignment should not take more than four hours to complete. We do understand that this time may be a slight inconvenience, however, we place a good degree of emphasis on this assignment during the recruiting process.
3. The assignment consists of a core problem statement, and we expect your response to be thorough and accurate in the way you solve the problem and your results.
4. We also place a great deal of emphasis on the structure / architecture of your solution and encourage you to give sufficient thought to this aspect.
5. We also encourage you to give some thought to the presentation layer of your solution and feel that it is an opportunity to showcase your overall solution.
6. Flexibility and adaptability of your solution will also be assessed.
7. The use and adherence of conventions and standards will be assessed too.

You are expected to submit the assignment in PDF format in below format:

- Programming Language details
- Online compiler or local compiler used for code execution
- Logical explanation/description of the code executed
- Any other additional comments
- The running code/Program must be copy pasted in the word doc

"We would need an output file (sample attached) along with the code file, the output file is based on any sample input of M & N you seem suitable. (Here N is top N words having length of words greater than M characters)"