Given a text file (wordlist.txt) containing English words, find out how many times each word appears in the document. The text file is stored in assignment_data.zip for better distributing it, so please unzip it, before using it!

Output should be sorted by the word frequency and the word counts are case insensitive, like this:

Input: truck TRUCk BANANA The banana BaNaNa BANAna

Output:

banana 4 truck 2 the 1

Feel free to use the console or a file as an output endpoint.

NOTES:

- 1. alphabetical order does not need to be considered
- 2. all words in the sample text files are space-separated

Your solution to the assignment should be implemented in C++, preferably in C++ 17 or at least C++ 14, and demonstrate a multi-threaded approach(optional for Junior level engineers!), but beyond this you are free to use whatever libraries and tools you feel will best help you solve the problem.

We will primarily be looking at how you approach a solution, so there is no definitive right or wrong answer, but you should consider structure, correctness, clarity, readability and optimal performance.

This assignment should be achievable within a ~4-hour period of time depending on your approach, incomplete solutions within the anticipated time frame are also accepted! Please do not feel pressured to restrict yourself to this if you feel you can provide a more complete or optimal solution with a bit more time.

Please send your solution as a zip archive containing all source files and associated build artifacts (for example Visual Studio solution, XCode project, Makefiles, etc.), along with any accompanying material, at most 24 hours after starting the assignment.

The assignment submission should include the source files with build scripts and instructions on how to run your program.