

## Chaos Software Homework Assignment – Sort Application using Golang

1. Implement a console application which sorts large (> 16GB) text files. The approach is entirely up to the candidate but must not use any third-party libraries or tools (like databases).

Each line of the file is considered a word; i.e. the application must sort the file line-by-line, e.g. like a list of people's names.

The console application must verify that the output file has been sorted correctly.

2. (Bonus task) Generate sample text data with a given size, in megabytes, and use this to test the application implemented in 1.

The task will be judged in terms of:

- Coverage of the functional requirements – does it implement what was asked for?
- Code quality – does the code share a common style? Is it well documented? Is the functionality broken down into readable/manageable chunks? Etc.
- Performance – does the code perform its tasks in the most efficient way?
- Architecture – how did the author approach the given problem set? What choices of algorithms and data structures were made? How is the code structured logically?

Expected time to complete the assignment is 1 week after acknowledging that it has been received.