

# Schwarz IT- Interview Exercise

## List all anagrams of words contained within a file

Two words are defined as anagrams if they do share the same letters, but are in a different order (i.e. the English words *race* and *care* are anagrams).

Given an input file which contains one word per line, as an output construct a list of all anagrams from that input file. Print those words to the console, where all words that are an anagram should each other should be on the same line.

As an example, given the input file:

```
act
cat
tree
race
care
acre
bee
```

the output should be:

```
act cat
acre care race
```

## Tasks

- 1) Write a Java program that solves the above task and verify this using the attached sample.txt. Do not worry about extensive error handling, but focus on readability.
- 2) Attach a README documenting the necessary steps to build and run your program.
- 3) Attach a document explaining any design decisions you have made. Consider aspects such as Maintainability, Scalability, Performance, etc. If you decide to use external libraries, make sure to justify why you picked them.
- 4) How will your application cope with larger datasets, say 10 Million Words, and 100 Billion Words? If you wanted to cover these cases, how would you scale your application?

## Notes

There is no strict deadline for this assignment. However, please note that we will not be able to proceed with your application until you have completed this task. Please send your completed solution in an arbitrary but appropriate form.