

abcfinalab – Interview exercise

- 1) Imagine you have a file containing words of the English alphabet. Write a program that takes this file as an input and writes all words from within the file that are anagrams of each other to the console, with those words that are anagrams grouped together.

Two words are anagrams of each other if they share the same letters, but in a different order (e.g. the words *race*, *care*).

Example:

Lets assume we have a file containing the words

Tree
Race
Bee
Care
Acre
Mine

The output would be one line with

Tree Care Acre

Please include build & run instructions and a design rationale for your solution. You can use *words.txt* from <https://github.com/dwyl/english-words> as testdata.

- 2) How do you verify your solution?
- 3) How complex is your program? How will it perform on large datasets?
- 4) Imagine you have a large input file (e.g. multiple gigabytes) and only limited memory (100MB). How would your program perform? Please outline if and how you would change your solution (*no need to implement this*)

Please submit your solution as a zip-file to the recruiter.

Best of luck!