**The Crosswords – 3 Letter Words**

DATA :

The associated files 3LetterWords.\* are identical in content. They do only vary in their format.

The files contains a lot of “words” of 3 letters. It is upper- as well as lower-case letters and special characters.

EXERCISE :

I : Design and implement a Java program, which can :

1. read in these words
2. filter them to a standard (f.ex. no special chars, all lowercase, …)
3. write to new file so they are unique and easy to search in.

You are welcome to include further information.

II : Design and implement a Java program, which use the result file from I: to find 3 letters cross word puzzles, where each letter is unique.

The implementation can make the most use of Java different datastructures f.ex. from the Collection classes.

III : Repeat II : but this time, with class(es) made by you through inheritance.

That is - rethink your solution from II : and extract which services YOU want from this new class(es).

IV : How many different crosswords are your program capable of ?

How much time does it take ?