

COMP251 –Lab4

Goal: This lab will give you practice with recursive thinking.

Getting Started

This is an individual work. You can read the lectures to answer the question.

We want to write a java program, `langValidator.java` that reads a string and determine whether this string belong to the following language or not.

$L = \{w\$w' \mid w \text{ is possibly an empty string of characters except } \$, \text{ and } w' = \text{reverse}(w)\}$

These are some examples:

a\$a belongs to L

\$ belongs to L

\$\$\$ does not belong to L (w should not contain '\$')

abab\$abab does not belong to L (abab is not the reverse of abab)

Download the `langValidator.java` (you can find it in the lab directory). This file reads strings from a file (one string per line) and pass the string to a method `isValidString()`. You need to implement this method using recursion (your method should be **recursive!**)

Submission

In addition to submission of the files, you need to record a video and explain your answer.

Submit the link to your video clip (roughly about 3min, not more than 5min) that **explains clearly your approach, run your code, and demonstrate your solution.** You could provide the link to your video (on Youtube/Vimeo/...) in the body of your submission.