

# Practical work of Compilation, no.2

## Computer science track - Specialization: Software

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### Lexical analysis with antlr

The goal of this practical work is to use `antlr` to generate lexers that produce an output.

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► **Exercise 1. *First antlr program***

1. Compile the `antlr` grammar in the `pw2_ex1.g4` file.
2. Extract 2 or 3 lines from `error.log` by the `head` command.
3. Test the lexer of 1.1 on the file of 1.2.

► **Exercise 2. *Testing the regular expressions of DC 1***

1. Test your regular expression of DC 1, ex. 1, in a lexer.
2. Test your regular expression of DC 1, ex. 2.
3. Test your regular expression of DC 1, ex. 3.

► **Exercise 3. *Producing output***

1. Edit the grammar of ex. 1 so that it displays each time detected in the input stream and the number of the line.
2. Edit so that whitespace is not displayed by `testRig`. Test on a few lines.
3. Edit so that the lexer computes the proportion of times between 3 and 4 a.m., and displays the result after each new time occurring in the input stream.