

Formal Languages and Automata Theory, SS 2018. Homework 1 (due Week 14)

The **objective** is to implement an algorithm for the evaluation of an arithmetic expression. As **input**, we have a string of characters representing an arithmetic expression. As **output**, we want the result of evaluating the expression. For example:

- input data: file `eval.in` contains on its first line a string of characters composed by numbers ('0', '1', ..., '9'), operators ('+', '-', '*', '/') and parentheses ('(', ')').
- output data: file `eval.out` contains a number representing the value obtained by evaluating the expression from the input file.
- **Example:** `eval.in`: $(1 + 1) * 13 + 10/2$, `eval.out`: 31.

Methods:

1. Polish notation
2. Binary trees