

Exercises for FLL, Fall 2018, sheet 5

Return Thursday Oct 18, in class

Exercise 1. Give a CFG for all words over the terminal alphabet $T = \{a, b, +, *, (,), \epsilon, \emptyset\}$ that are regular expressions over $\Sigma = \{a, b\}$. Adhere to the strict syntax of regular expressions that was given in Definition 3.13 in the lecture notes.

Exercise 2. Give a CFG for the language of the regular expression $(0^*10)^*$, where your grammar uses at most two variables.

Exercise 3. Give a *right-linear* CFG for the language of the regular expression $(0^*10)^*$.