Introduction to Program Synthesis - Exercise Sheet 4 Genetic Programming

Exercise 1: Subtree crossover and $(\mu + \lambda)$ Algorithm

Download the genetic programming example from the GitHub repository.

Implement the subtree crossover presented in Chapter 4.1 in the file `operators.py`. Use your implementation of the crossover then to implement the $(\mu + \lambda)$ evolutionary algorithm in file `algorithms.py`. For both implementations you can use the already implemented subtree mutation operator and $(1 + \lambda)$ algorithm as a template. Test your implementation on the provided benchmarks in the `examples` folder.