

Exercise Sheet 4

Due: 08.01.2023

Please include the names of all group members on your hand-in.

Exercise 1 A Modal Reasoner

(20 Points)

1. Implement the tableau algorithm for K in a programming language of your choice. You will need a parser for formulae in a suitable input syntax.
2. Test and evaluate your implementation, using the series of satisfiable formulae from exercise 2 on sheet 3 and two further series of formulae, at least one of which should consist of unsatisfiable formulae. Of course, your algorithm should answer correctly, but we are also interested in run times. Measure these and depict them graphically.