

Exercise sheet 3

Predicate Logic

This exercise sheet is about predicate logic, you'll have to extend / adapt the object model from the last exercise sheet.

You may solve the exercises in groups up to the size of two people; everybody must however be able to explain all parts of the implementation. You may use the programming language of your choice, please refrain from very esoteric languages. If you are not able to solve an exercise (X) which is needed as basis for another exercise (Y), you are allowed to take exercise X from somebody else to solve exercise Y, but you will not get points for exercise X in that case.

Exercise 1 (Syntax) (10 points)

Extend the object model from the previous exercise sheet to capture the syntax of predicate logic. Again, you do not need to implement a parser (the object model can be created programmatically), but the object model must be serializable (you can use textual representation, i.e. "and" representing \wedge).

Test your implementation by representing a formula containing at least one function symbol and one quantification.