apl. Prof. Dr. Thomas Noll

Friedrich Gretz, Souymodip Chakraborty

## Remarks:

- Note that you have two weeks for this exercise!
- Also, there is nothing to be written on paper this time. Simply upload your code to L2P.

Exercise 1 (Parser): (10 Points)

This task concludes our parser implementation. Previously you have shown that our WHILE grammar is not an LR(0) grammar. However if we make our parser slightly more powerful, we are able to parse it. In this task we take the steps necessary to build an SLR(1) parser.

- a) An SLR(1) parser takes advantage of lookahead information. Therefore, as a first step, implement the *first* and *follow set* computation for every non-terminal of a grammar. You will find the corresponding stubs in parser. Grammar. java.
- **b)** Implement parser.Parser.parseSLR1(List<Symbol>). You can reuse the code from the LR(0) parser and adapt it.

Make sure you write test cases and check whether your parser behaves as expected.