

# Program Analysis and Verification

2014/15

Noam Rinetzky

## Home Work Assignment #1

Due: Lesson 4

In the following, we refer to the “Semantics with Application” book as “the book”.  
The book can be found here: [http://www.daimi.au.dk/~bra8130/Wiley\\_book/wiley.html](http://www.daimi.au.dk/~bra8130/Wiley_book/wiley.html).

1. Solve Ex 2.7 and 2.17 in the book.
2. In the previous question, you were asked to extend the `while` language with a new construct (a repeat loop). Extend the proof of theorem 2.26 in the book (semantic equivalence) to handle repeat commands.
3. Solve Ex 2.32, Ex 2.35, Ex 2.36 in the book.
4. Read Section 2.5 in the book and solve Ex 2.40.