## CS 3133 Foundations of Computer Science C term 2018

## Homework 4, due Monday, February 19

READING: Chapters 6, 7.

- 1. Use the technique from Section 6.1 in the book (i.e. constructing an NFA- $\lambda$  for a given regular set by following the recursive definition of the regular set) to build the state diagram of an NFA- $\lambda$  that accepts the language  $b(ab)^*b$ . (20 points)
- 2. Exercise 3 on page 217. (There is an error in the book, it should say: The language of the DFA M in Example 5.3.7 consists of...) (20 points)
- 3. Exercise 4 on page 217. (20 points)
- 4. Exercise 14.b. on page 218. (20 points)
- 5. Exercise 1 on page 247. (20 points)