Homework 4

Discrete Structures 2

Due Thursday, Feb 7, 2019, 12:00 pm

Instructions: You should submit your homework online on webcourse. Only 5 problems will be graded, each graded problem is worth 10 points. There will be 14 effort points in total for the ungraded problems, 2 for each problem. Hence the maximum score for this homework is **5 × 10 + 14= 64**. The graded problem will be selected randomly.

Part 1: From the textbook, 3ed,

1.46 (parts a, c): Just one part will be graded (10 points) and 2 effort points will be given for the other part.

**1.47**: It will not be graded, just 2 effort points will be given.

1.49: (10 points)

1.52 (parts a, b, c): It will not be graded, just 1 effort points will be given for each part. (The solution is available in the textbook.)
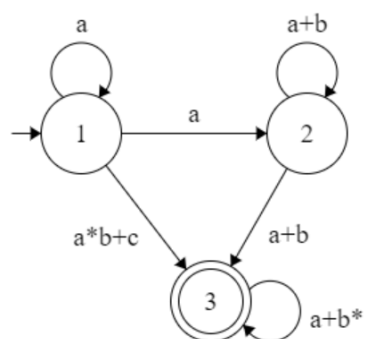
1.55 (parts e, h, j): Just one part will be graded (10 points) and 4 effort points in total will be given for the other parts.

Part2: For each problem only one part will be graded (10 points) and 2 effort points will be given for the other parts.

P2-1: Find regular expression for the language accepted by the following automata. (Show the steps.)
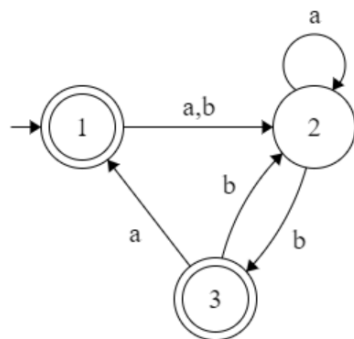
M1   M2

P2-2: Find an NFA that accepts the following language (show the steps.)

a) L(aa*(a+b))
b) L(ab*aa+bba*ab)