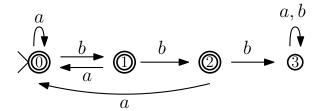
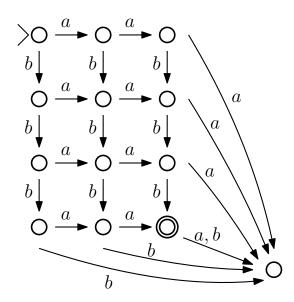
COSC 341 – Tutorial 5 (Solution)

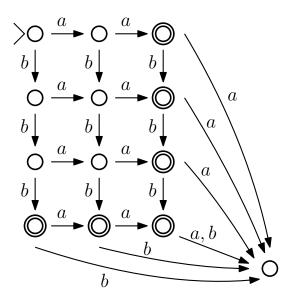
- 1. Design a DFA on the alphabet $\{a,b\}$ that accepts:
 - (a) the language of all words not containing the substring bbb



(b) the language of all words with exactly two a's and three b's

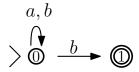


(c) the language of all words with exactly two a's or exactly three b's

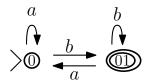


2. Design an NFA on the alphabet $\{a,b\}$ that accepts the language of words that end with b. Construct a DFA that is equivalent to this NFA.

NFA:

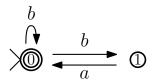


DFA:



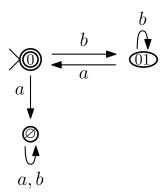
Homework

1. Let M be following NFA on the alphabet $\{a, b\}$:

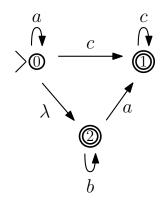


Construct a DFA that is equivalent to M.

DFA:



2. Let M be following NFA on the alphabet $\{a, b, c\}$:



Construct a DFA that is equivalent to M. DFA:

