## COSC 341 - Tutorial 5

- 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.

## Homework

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

$$\overset{b}{\searrow} \xrightarrow{b} \mathbf{0}$$

Construct a DFA that is equivalent to M.

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



Construct a DFA that is equivalent to M.