## Worksheet 1: DFAs and Regular Languages

Computer Science 311, Spring 2016

## 1 Drawing DFAs

Draw a DFA that decides the following language  $L = \{s \in \{a, b\}^* \mid s \text{ starts and ends with the same letter}\}.$ 

## 2 Formal DFAs

Provide a formal description of the DFA that decides binary multiples of three.

## 3 Proof by Construction

Prove that the regular languages are closed under complement.