CSC236 – Tutorial 9: Languages and Regular Expressions

Exercise 1: Finite Kleene Star

Give an example of a language L that satisfies the following property: L^* is finite.

Exercise 2: Developing Regular Expressions

For each of the following languages, write a regular expression that matches the language.

1. $L_1 = \{w \in \{0,1\}^* \mid w \text{ represents a binary number divisible by 2}\}$

2. $L_2 = \{w \in \{0,1\}^* \mid w \text{ starts and ends with the same symbol}\}$

3. $L_3 = \{w \in \{0,1\}^* \mid w \text{ has a substring 010}\}$