CS410 – Fall 2014

Homework I

Due: October 22, 2014 (submit to LMS)

Designing a Deterministic Finite Automaton (DFA)

1. Build a DFA that will accept any string from the language L1 and reject others. Make sure to indicate *start* and *final* states and include all *(state , input)* transitions.

L1 = {w | w is a binary string of 0s and 1such that the **4th symbol from its end is a 1**}

2. Build a DFA that will accept any string from the language L2 and reject others. Make sure to indicate *start* and *final* states and include all *(state , input)* transitions.

L2 = { w | w is a binary string that has **even** number of **1**s and **even** number of **0**s}