CS 381 Homework #3

Question 7

Allows for string to end with a difference between #1’s - #0’s of 0, 1 or 2

\[ \varepsilon + 1(01 + 10)^*(1 + 0 + \varepsilon) \]

All strings of non-zero length must begin with a 1

Question 8

All possible ways to start at state 0 and return to state 0

\[ [00 + 11 + (01 + 10)(00 + 11)^*(01 + 10)]*[1 + (01 + 10)(00 + 11)^*0] \]

All ways to start at state 0 and go to state 3