CSE 311 Quiz Section: November 8, 2012 (Solutions)

1   Problem 1 from Midterm; Problems 3,4,5 from HW 6

2   Regular Expressions

Express each of these sets using a regular expression:

a) The set of strings of one or more 0s followed by a 1
   Solution: 00*1
b) The set of strings of odd length
   Solution: $(0 \cup 1) [(0 \cup 1)(0 \cup 1)]^*$
c) The set of strings ending in 1 and not containing 000
   Solution: $(1 \cup 01 \cup 001)(1 \cup 01 \cup 001)^*$
d) The set of strings containing a string of 1s such that the number of 1s is equivalent to 2 mod 3, followed by an even number of 0s.
   Solution: 11(111)*(00)*