

CSE 351

Programming Languages

Homework Assignment #1

(Due: 28th of February @14:00)

1. Draw the transition diagram for the finite-state automaton for all strings over {A, C, Z, N} containing all letters in the alphabet at least once and the word CAN inside. Write down the corresponding regular expression.

2. Draw an NFA accepting the set of binary strings that contain even number of 1s .

3. Draw an NFA accepting the set of binary strings that contain even number of 1s and also contain 0s that are multiples of three.

4. Write down the regular expression for recognizing any date in the following example formats:

22nd of February 2020

1st of January 1923

12th of August 1430

23rd of December 98

13th of July 0

(Assume that maximum day in a month can be at most 31 regardless of the month).