

Joseph Schmidt

Lab2: More token making, now with Finite Automata

Crafting a Compiler Exercises:

3.3

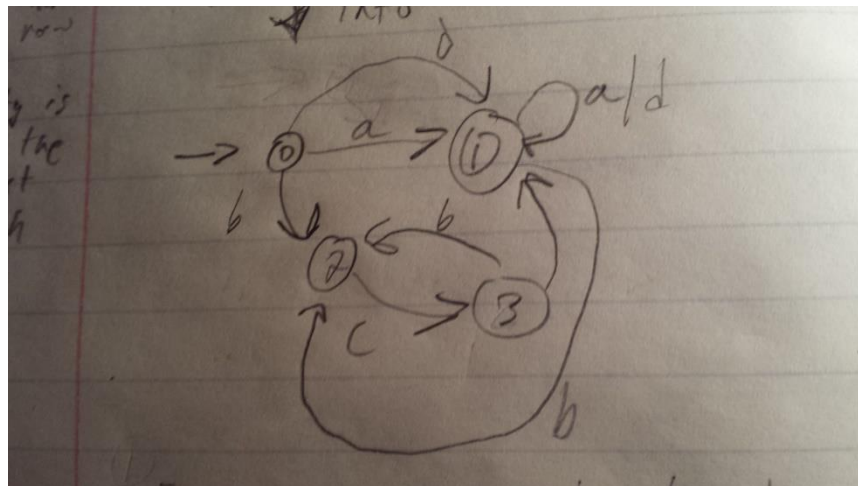
part1: $(ba+b)|(ab+a)$

part2: $a|(abcda)^+|(acda)^+$

part3: $\epsilon|ab^*c$

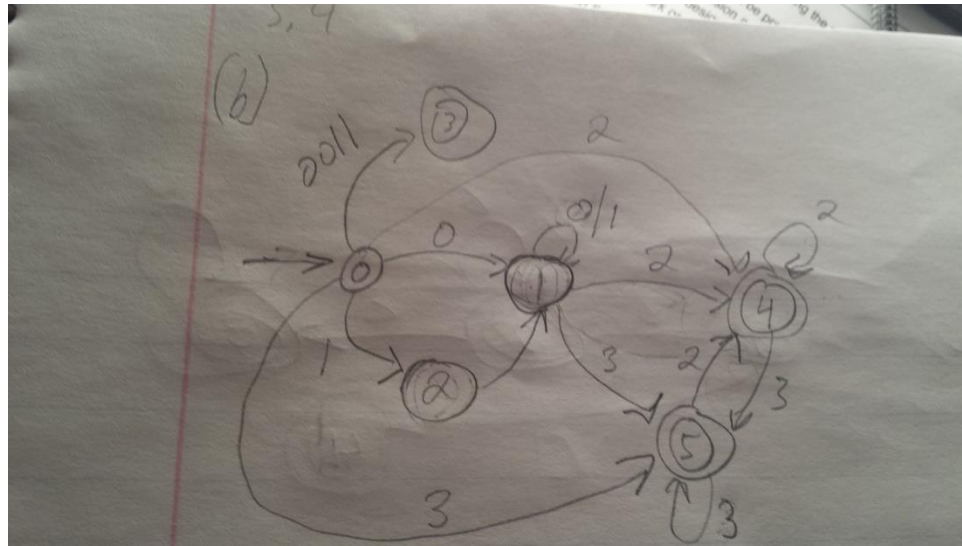
3.4

(a) $(a|(bc)^*d)^+$

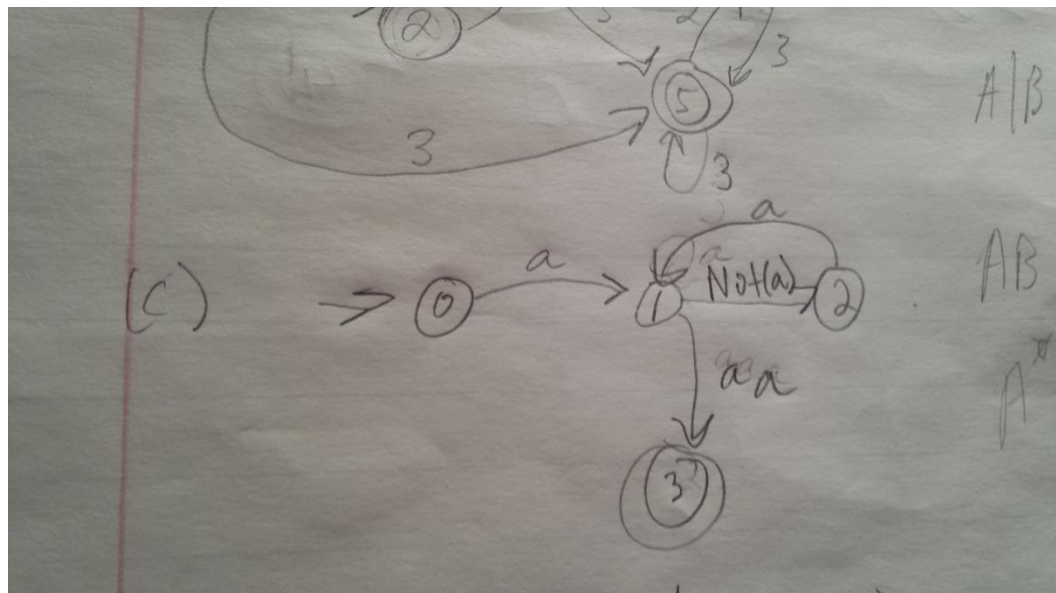


Correction: the transition from state 3 to 1 should be labelled "d".

(b) $((0|1)^*(2|3)^+)|0011$

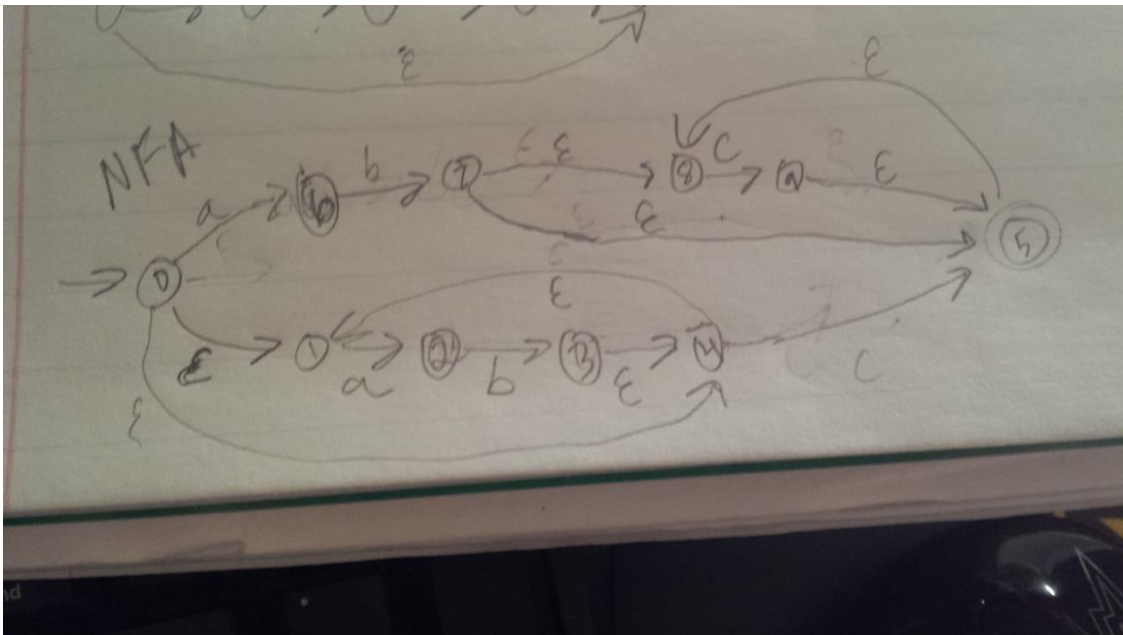


(c) $(a \text{ Not}(a))^*aaa$

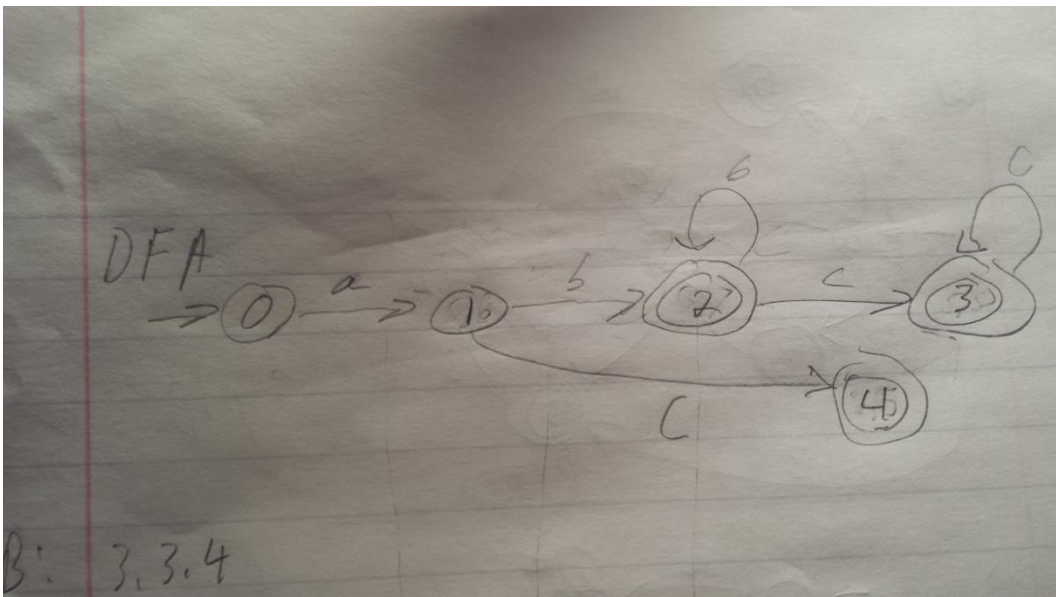


3.15

NFA



DFA



Correction: The "c" that goes to state 4 can just go straight to state 3, and 4 can be removed. State 4 is superfluous.

Dragon Bible:

3.3.4

(S|s)(E|e)(L|l)(E|e)(C|c)(T|t)