

Lab Two

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1 Lab 2

1.1 *Crafting a Compiler*

1. 3.3

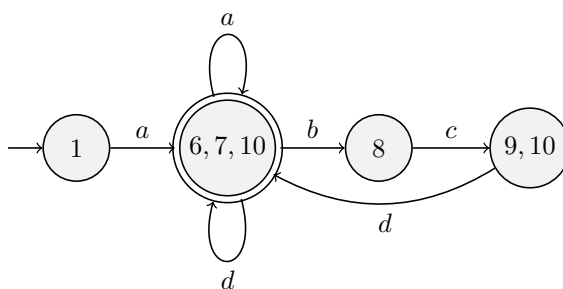
(a) $(ab^*a) \mid (ba^*b)$

(b) $a+(d(c \mid bc))^*$

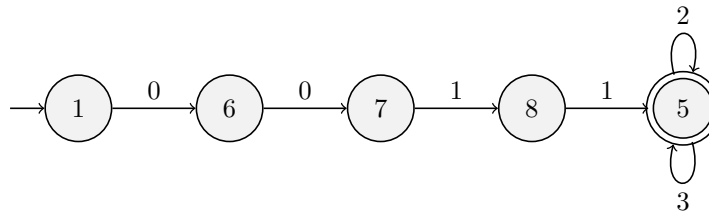
(c) $\mid ab^*c$

2. 3.4 - Regex and DFAs

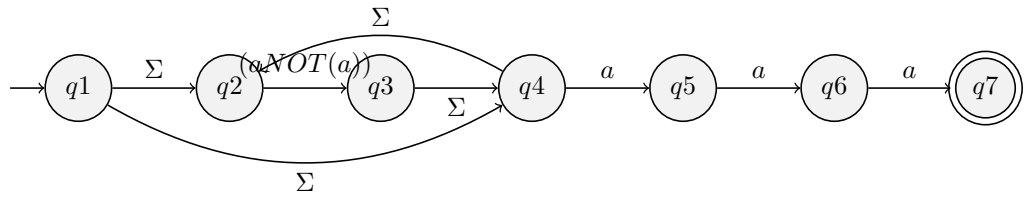
(a) $(a \mid (bc)^*d)^+$



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



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



1.2 *Dragon*

1. 3.3.4

To write the regex for a keyword in a case insensitive language, you need to include both the lower and uppercase characters for any character used in a keyword. As an example, I have written how Select would look in a case insensitive language: $[sS][eE][lL][eE][cC][tT]$.