

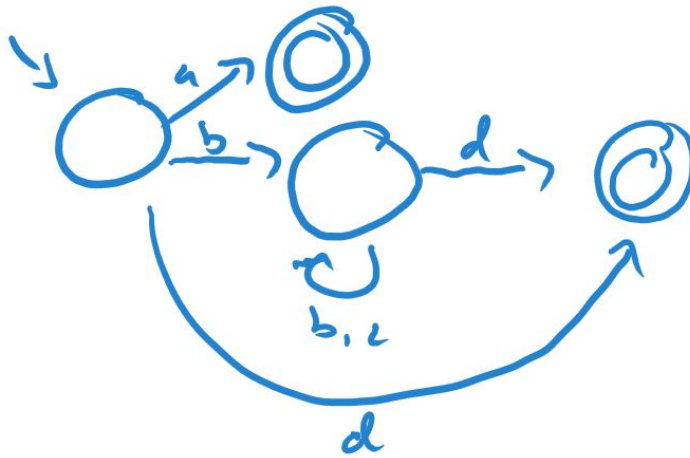
# Crafting a Compiler

## 3.3

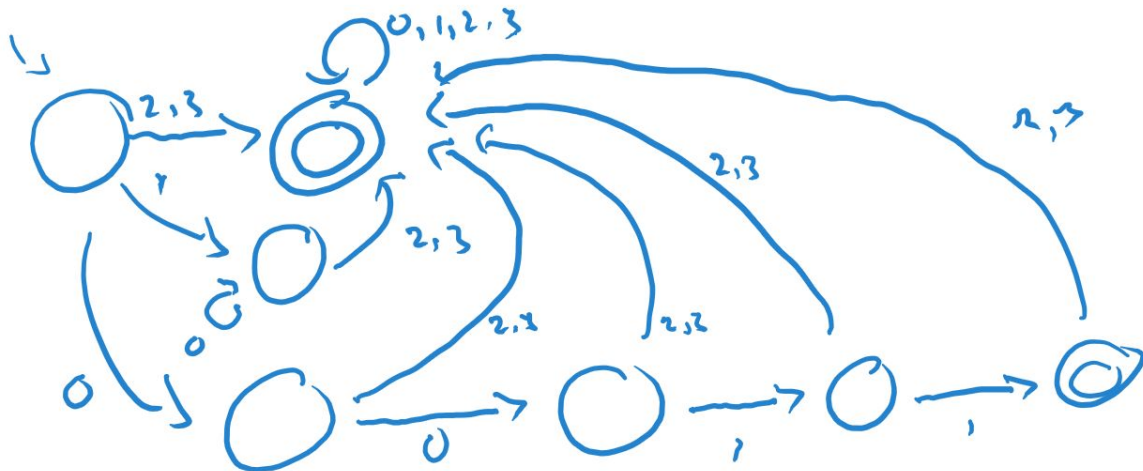
1.  $ab^*a \mid ba^*b$
2.  $a(b^?cda)^*$
3.  $\epsilon \mid ab^+c$

## 3.4

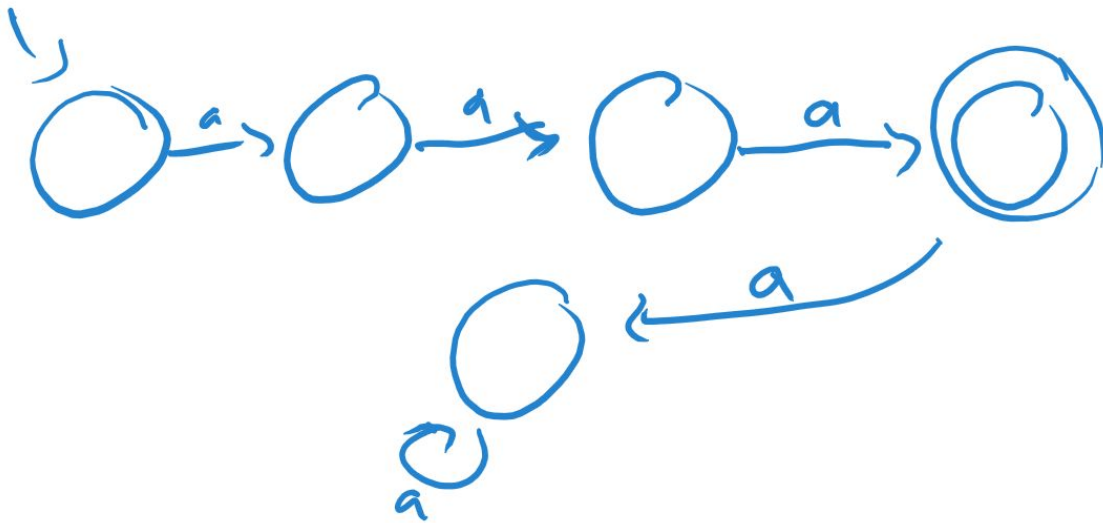
- a.  $(a \mid (bc)^*d)^+$



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



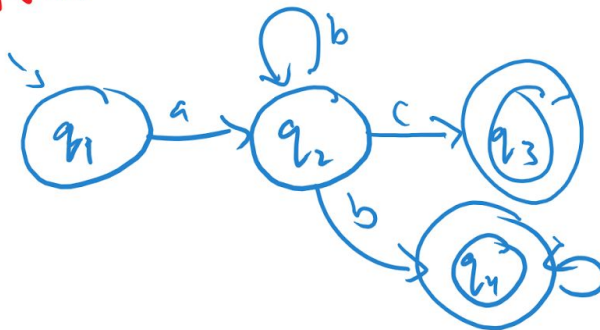
- c.  $(a^?a)^*aaa$



3.15

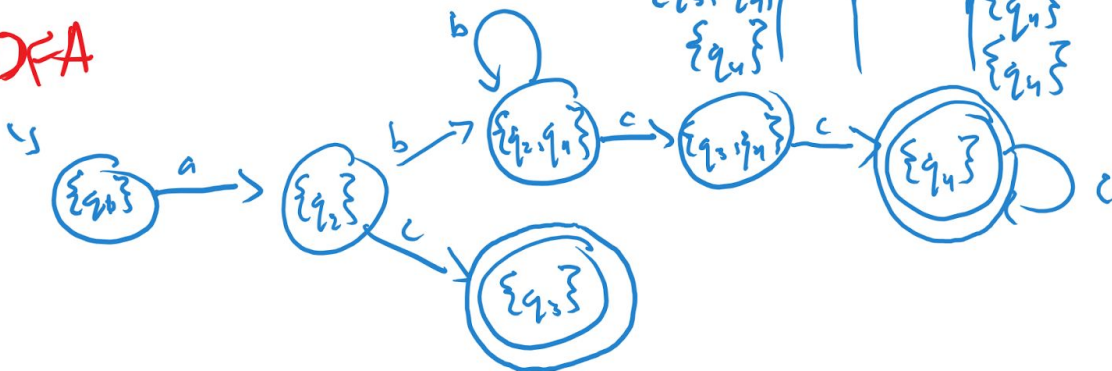
$(ab^*c) \mid (abc^*)$

NFA



	a	b	c
$\{q_1\}$	$\{q_2\}$		
$\{q_2\}$		$\{q_2, q_4\}$	$\{q_3\}$
$\{q_3\}$			
$\{q_2, q_4\}$		$\{q_2, q_4\}$	$\{q_3, q_4\}$
$\{q_3, q_4\}$			$\{q_4\}$
$\{q_4\}$			$\{q_4\}$

DFA



Dragon

### 3.3.4

“select” in SQL: [sS][eE][lL][eE][cC][tT]