1: bcaba bccac

$L = \{ w \in \{a,b,c\}^* \quad w = 2a \times c$

$(c \cdot |c|) \quad (|c| \cdot a.2)$

$|c| : "c" + 2 \cdot |c| : "a"$

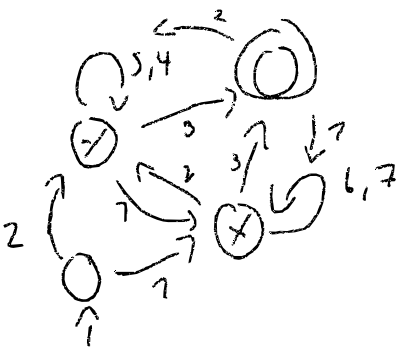
1 $C ; \perp \mid XX$ 6 $a ; X \mid XXX$

2 $a . \perp \mid Y$ 7 $C , X \mid \varepsilon$

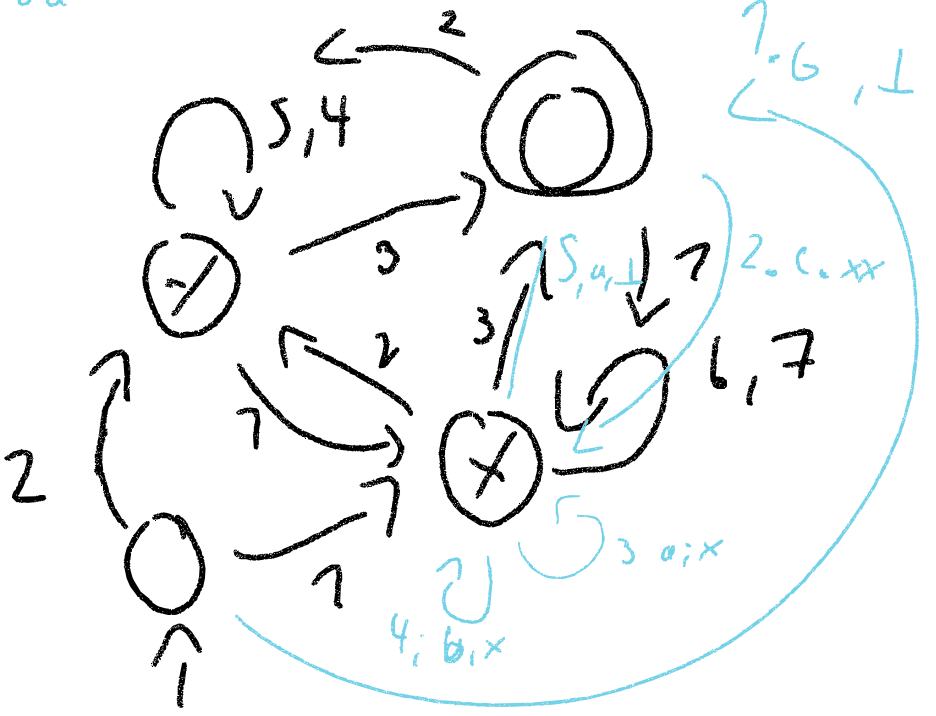
3 $\varepsilon ; \perp \mid \varepsilon$

4 $C \; Y \mid X$

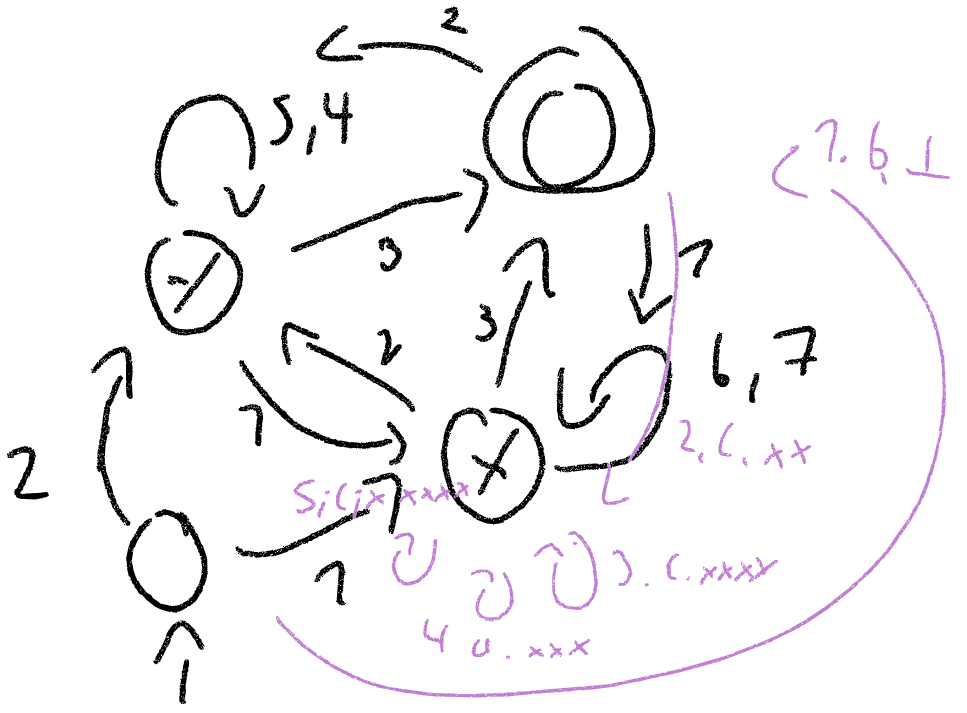
5 $a \cdot Y \mid YY$



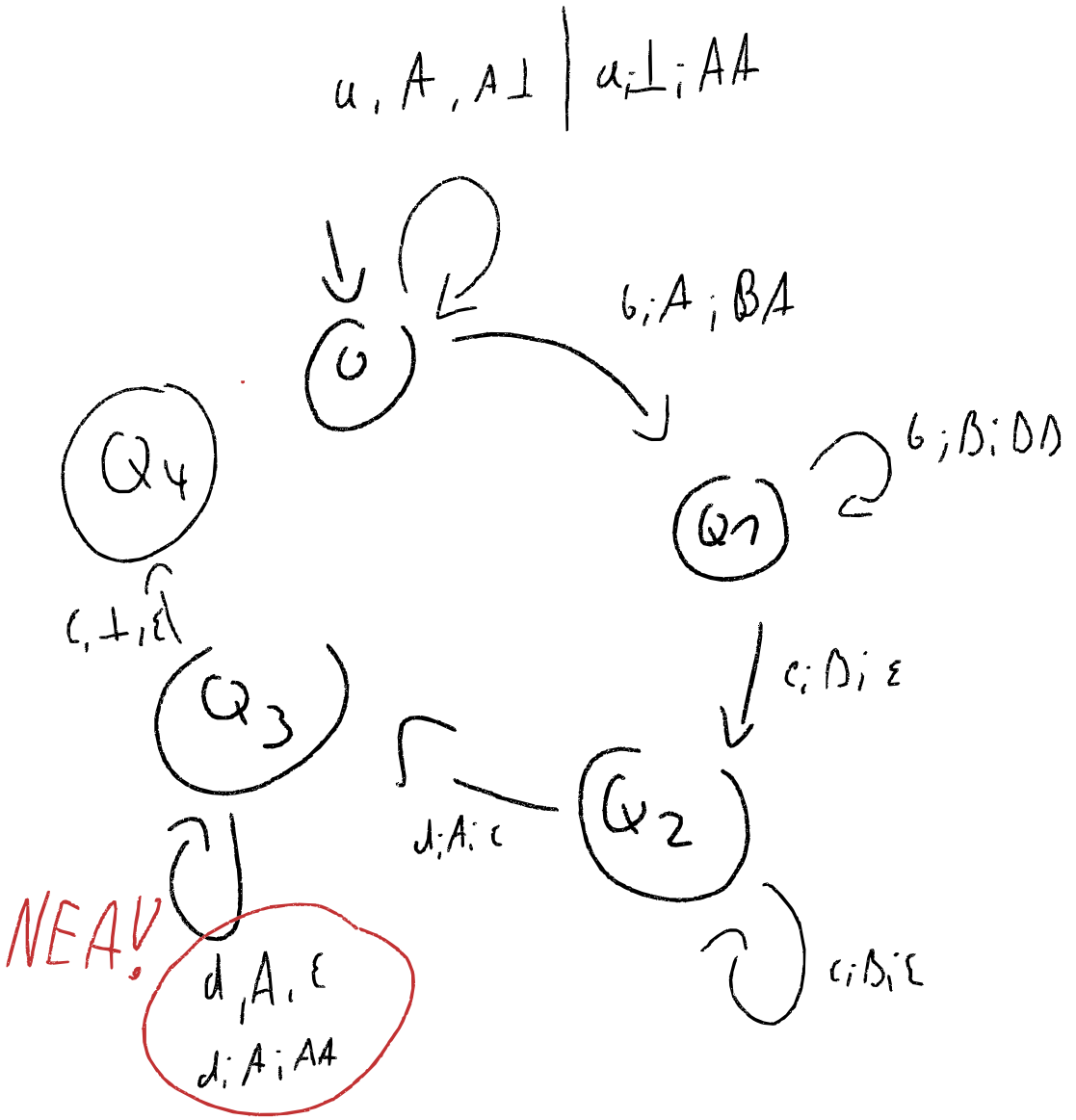
bcaba


2
5,4
3
5,a,⊥
2.c.xx
3
2
7
6,7
2
7
3 a,x
7
4, b, x
7.b,⊥

bccac


2
5,4
3
3
2
7
6,7
2
7
2,c,xx
5,c,xxxx
3.c.xxxx
4 a. xxx
7.b,⊥

2: $L = \{ |b| = |c| \quad |a| \leq |d| \}$



Q $\{q_0 ; q_1 ; q_2 ; q_3 ; q_4\}$ $\{q \in Q \quad q_0\}$

Σ $\{ a ; b ; \varepsilon ; c \}$ $\{z_0 = \bot\}$

Γ $\{ A ; B ; \bot \}$

δ { Aufgabe } F $\{q_4\}$

$G = (V, \Sigma, P, S)$

V: Nichtterminal

Σ: Terminalsymbole

P: Produktionsregel

S: Startsymbol

):

$G(\{Statement, Condition, \dots\}, \{"if", "else", \dots\}, P,$

$Statement)$

$P = \{$ Statement $\rightarrow$ "if" Condition Statement | "if"

Condition Statement "else" Statement

Condition $\rightarrow \dots$

$L(G) = \{ ("if" \; c \; S ("else" \; S)?)^+$

("if" ... (S) | "if" ... "else" ... (S))

Mehrdeutig, da $L = P$ ist, da S nicht

eindeutig bevorzugt, S bleibt immer

(Mehrdeutig ist der Zustand)

if (if) else 2x Lösung 2x Wege

if (if else)

4:

$$L = \{ a^i b^j c^k \mid i = j \vee j = k \}$$

oder

Mehrdeutig

$S = A\ bBc \mid aCbD$

$A = a \mid Aa \mid \varepsilon$

$B = bc \mid bBc \mid \varepsilon$

$C = aCb \mid ab \mid \varepsilon$

$D = Dc \mid \varepsilon$

$AbDc$ $\qquad$ $aCbD$