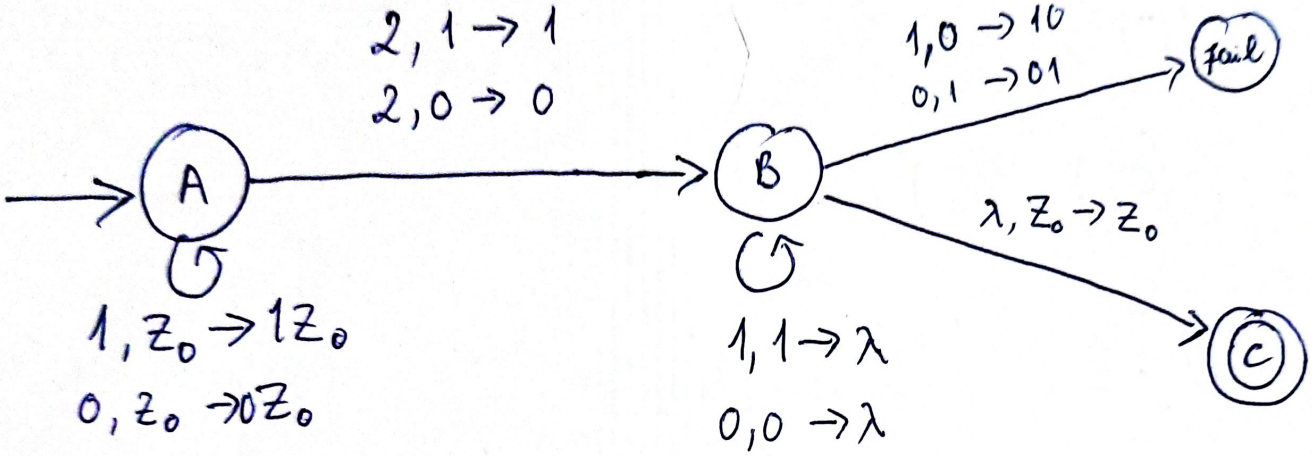
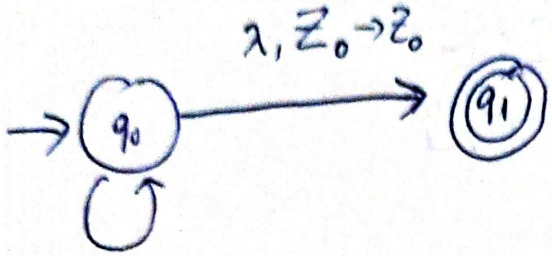


$$L_1 = \{ w 2 w^R \mid w \in \{0,1\}^* \}$$

$$P = \Big(\{A, B, C\} ; \{0,1\} ; \{Z_0, 0, 1\} ; \delta ; \{A\} ; \{Z_0\} ; \{C\} \Big)$$

$$L_3 = \{ w \mid w \in \{0,1\}^* \ \& \ |w|_0 = |w|_1 \}$$



$1, Z_0 \to 1 Z_0$

$0, Z_0 \to 0 Z_0$

$1, 1 \to 11$

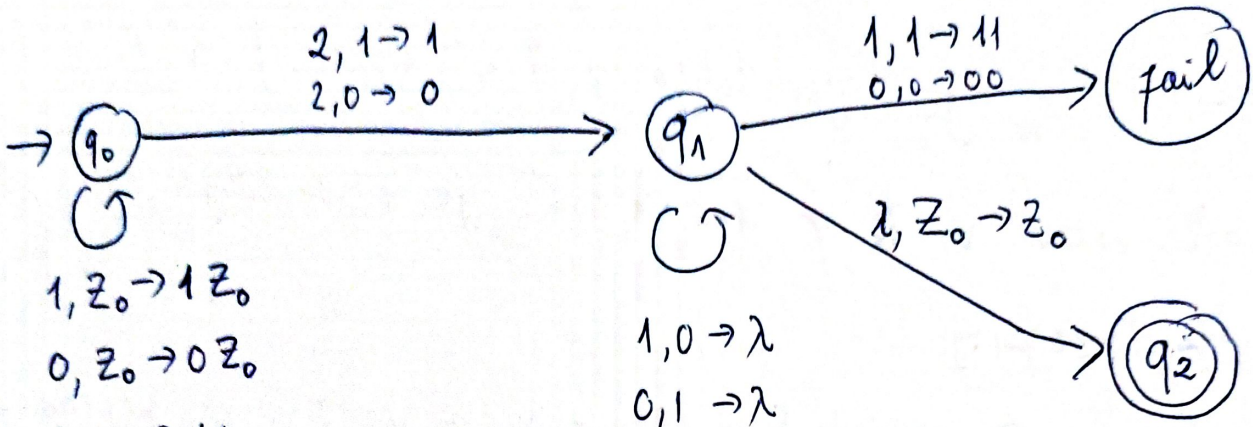
$0, 0 \to 00$

$1, 0 \to \lambda$

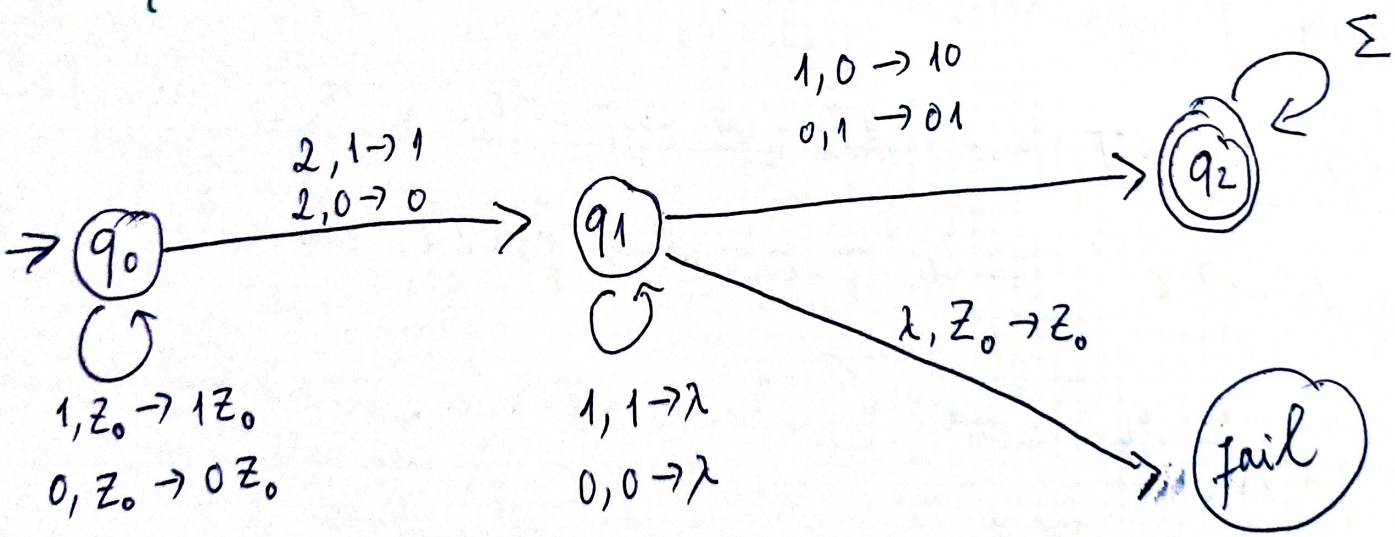
$0, 1 \to \lambda$

$P = (\{q_0, q_1\}; \{0,1\}; \{Z_0, 0, 1\}; \delta; q_0; Z_0; \{q_1\})$

$$L_i = \{ u 2 v \mid u, v \in \{0,1\}^* \ \& \ u[i] \neq v[i] \}$$



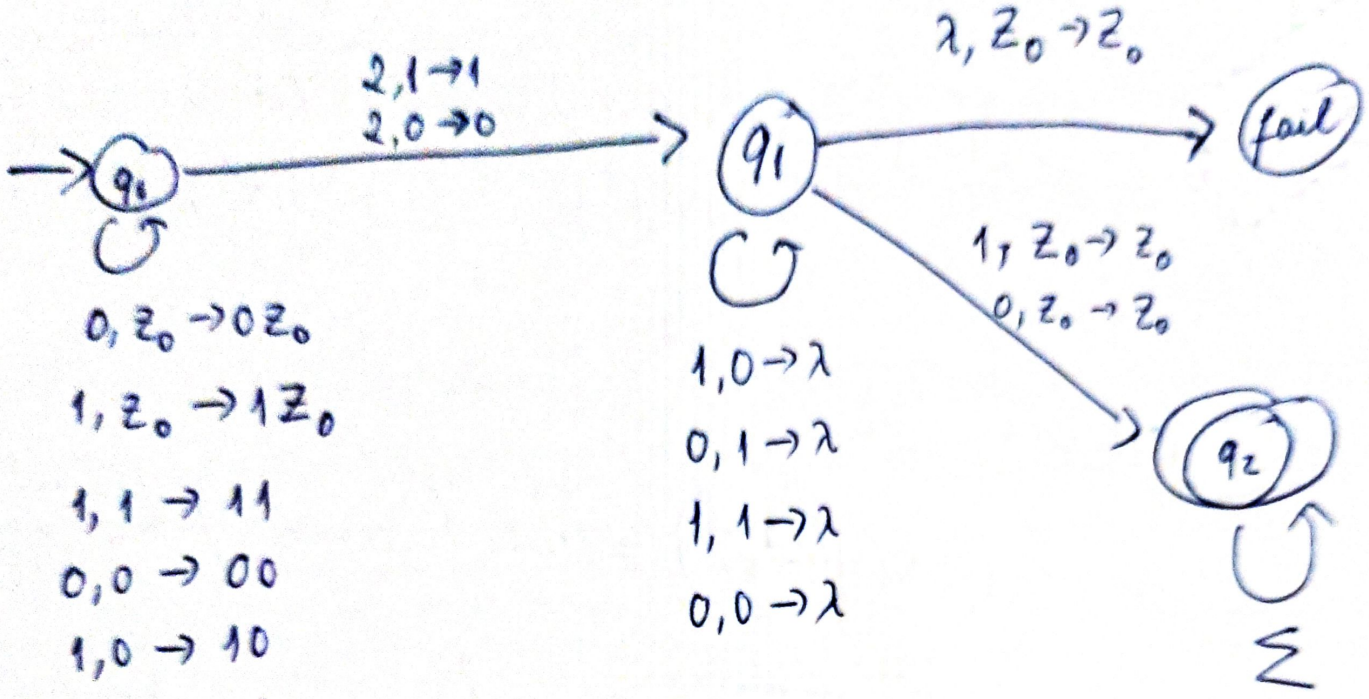
$$L_5 = \{ u 2 v^R \mid u, v \in \{0,1\}^* \ \& \ u \neq v \}$$

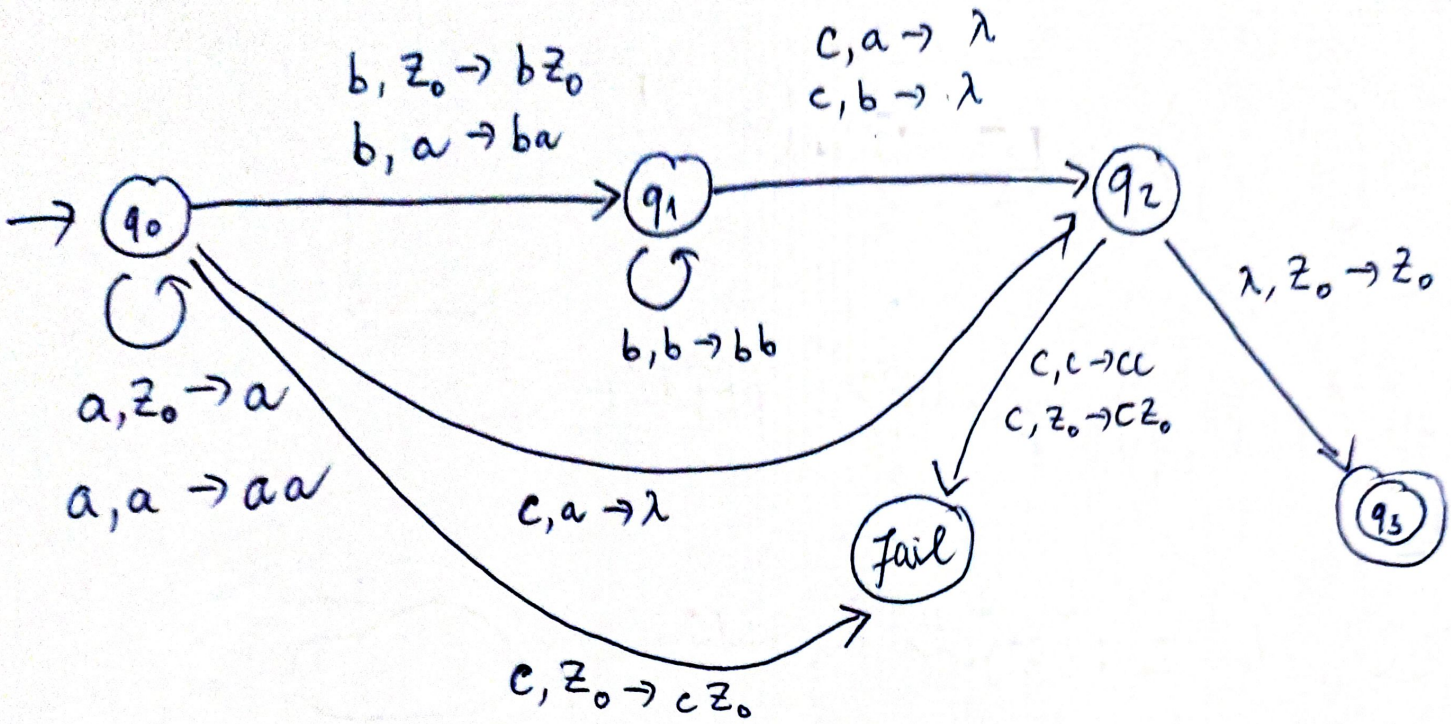


Tady když je $u 2 v^R$ nebo $u 2 v$ tak je to jedno ne?

Podle mě je stačí aby $u \neq v$

$L_4 = \{ u 2 v \mid u, v \in \{0,1\}^* \ \& \ |u| \neq |v| \}$





$$L_6 = \{ a^i b^j c^{i+j} \mid i, j \in \mathbb{N}_0 \}$$

$$L_7 = \{ a^i b^j c^{i*j} \mid i, j = 0, 1, 2 \dots \}$$

$$a^n b^n c^{n^2} \in L_7$$

Rozdělím slovo na $uxyzv$

Postupně budu rozebírat:

$xz =$
- $a^k a^l$
- $a^k b^l$
- $b^k b^l$
- $b^k c^l$
- $c^k c^l$

$k + l \leqslant n$