

$$M = (Q, \Sigma, \delta, q_0, F) \quad Q = \{0, 1\} \quad \Sigma = \{a, b\} \quad q_1 = 0 \quad F = \{1\}$$

$$\delta = \begin{array}{cc} & a & b \\ 0 & 1 & 1 \\ 1 & 1 & 0 \end{array}$$

$$\begin{cases} L_0 = aL_1 \mid bL_1 \\ L_1 = aL_1 \mid bL_0 \mid \lambda \end{cases}$$

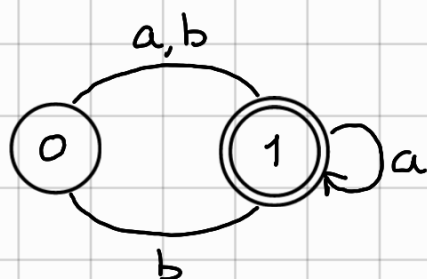
$$L_1 = \underbrace{aL_1}_{\alpha} \mid \underbrace{bL_0 \mid \lambda}_{\beta} \xrightarrow{\text{ARDEN}} L_1 = a^*(bL_0 \mid \lambda)$$

$\lambda \notin L(\alpha)$

$$\begin{aligned} L_0 &= aL_1 \mid bL_1 = (a \mid b)L_1 = (a \mid b)a^*(bL_0 \mid \lambda) \\ &= (a \mid b)(a^*bL_0 \mid a^*) = \underbrace{(a \mid b)a^*bL_0}_{\alpha} \mid \underbrace{(a \mid b)a^*}_{\beta} \end{aligned}$$

$\lambda \notin L(\alpha)$

$$\xrightarrow{\text{ARDEN}} L_0 = ((a \mid b)a^*b)^*(a \mid b)a^*$$



Acepta: a b aba abaaa abb ababb baa bbb bbaaba

Rechaza: bb ab aab abbab abaab