

P2.E11.b

$$\begin{cases} L_0 = 1.L_0 \mid 0.L_1 \mid \lambda \\ L_1 = 1.L_1 \mid 0.L_0 \end{cases}$$

$$L_1 = \underbrace{1}_{\alpha} L_1 \mid \underbrace{0}_{\beta} L_0 \quad \xRightarrow{\text{ARDEN}} \quad L_1 = 1^* 0 L_0$$

$\lambda \notin L(\alpha)$

$$L_0 = 1 L_0 \mid 0 L_1 \mid \lambda = 1 L_0 \mid 0 1^* 0 L_0 \mid \lambda = \underbrace{(1 \mid 0 1^* 0)}_{\alpha} L_0 \mid \underbrace{\lambda}_{\beta}$$

$\lambda \notin L(\alpha)$

$$\xRightarrow{\text{ARDEN}} \quad L_0 = (1 \mid 0 1^* 0)^*$$

$$ER = (1 \mid 0 1^* 0)^*$$