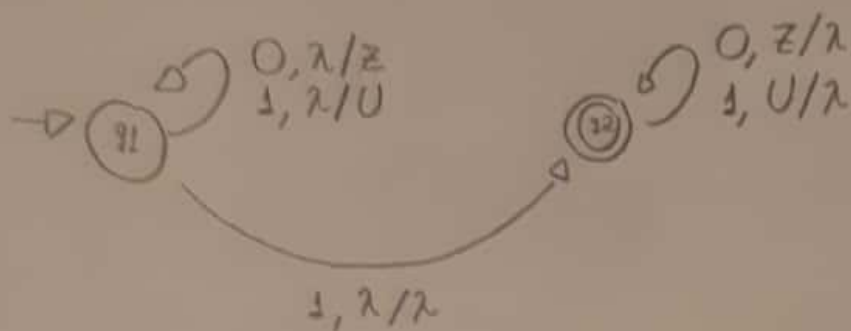
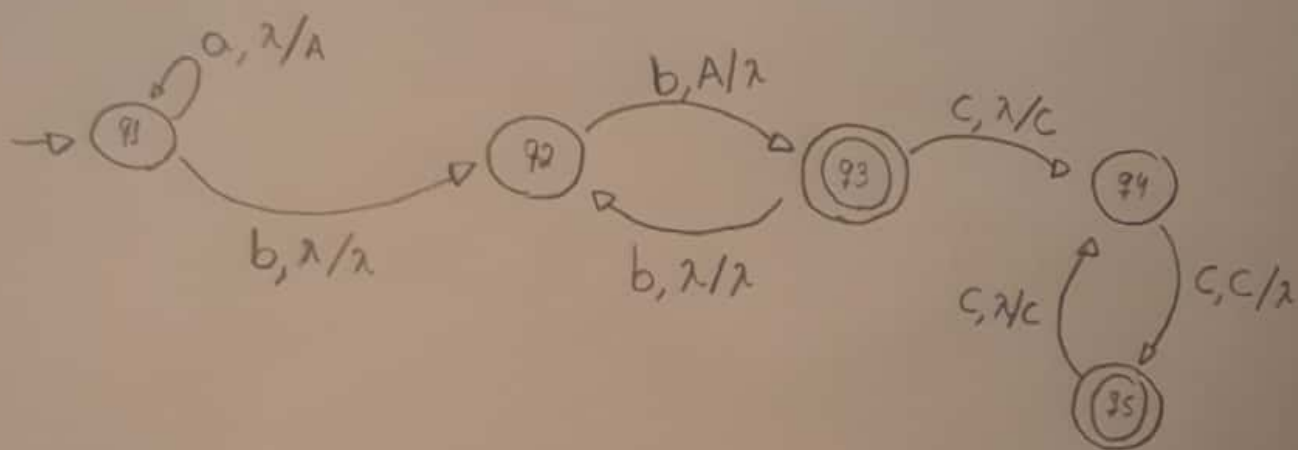


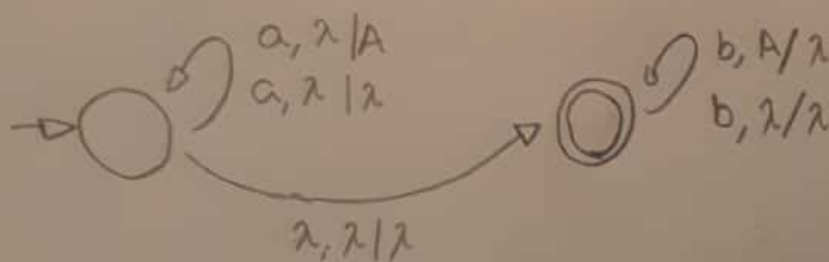
1) a)  $L = \{(01)^n \mid (10)^n \mid n \in \mathbb{N}\}$



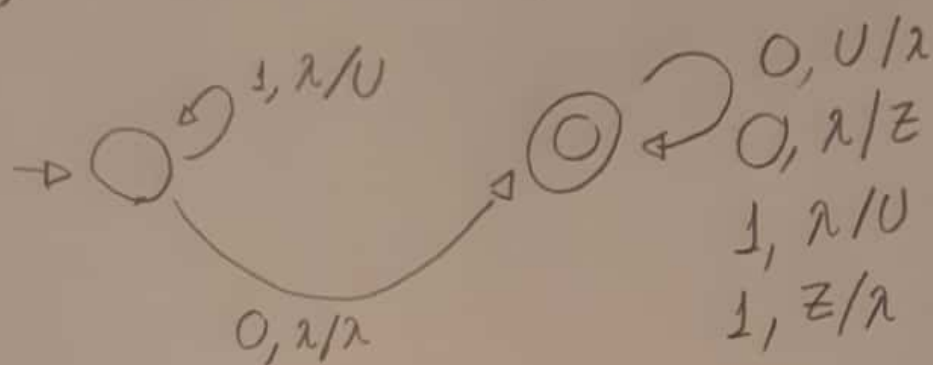
b)  $L = \{a^n b^{2n} c^{2k} \mid n, k \in \mathbb{N}\}$



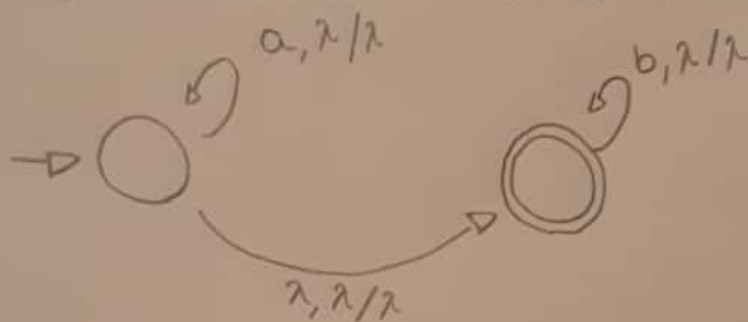
c)  $L = \{a^m b^n \mid m \neq n\}$



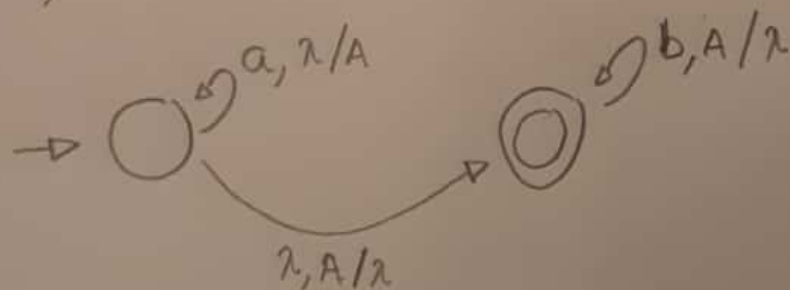
1) d)  $L = \{w = \{0,1\}^+ \mid \eta_1(w) = \eta_0(w) + 1\}$



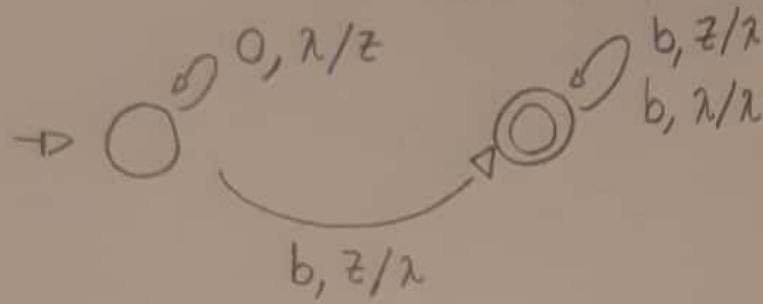
2) A)  $L = \{a^m b^n \mid m \neq n\}$  por estado final:



B)  $L = \{a^m b^n \mid m \geq n\}$  por estado final



3) A)  $L = \{0^n 1^n \mid n \geq 0\} \cup \{0^n 1^{2n} \mid n \geq 0\}$  com pilha vazia



B)  $L = \{0^n 1^k \mid 0 \leq k \leq 2n\}$  com pilha vazia

