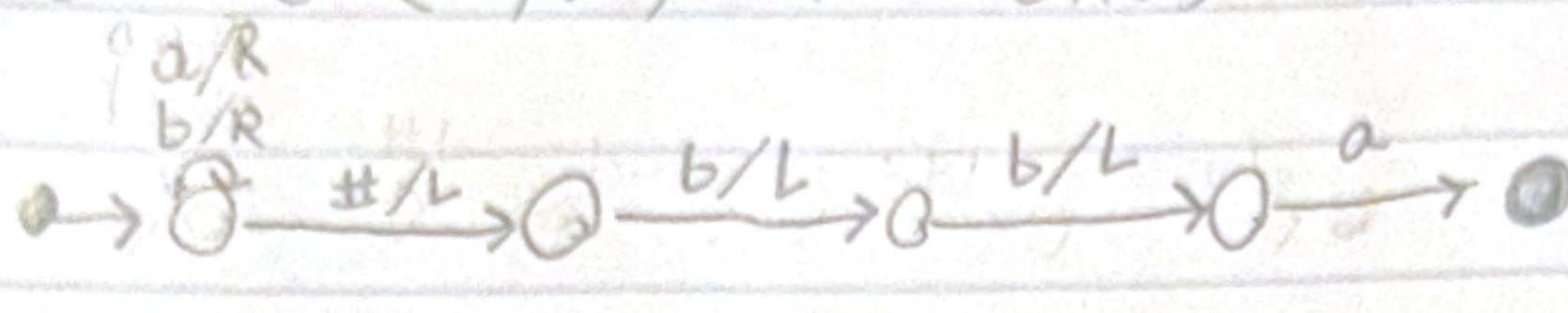
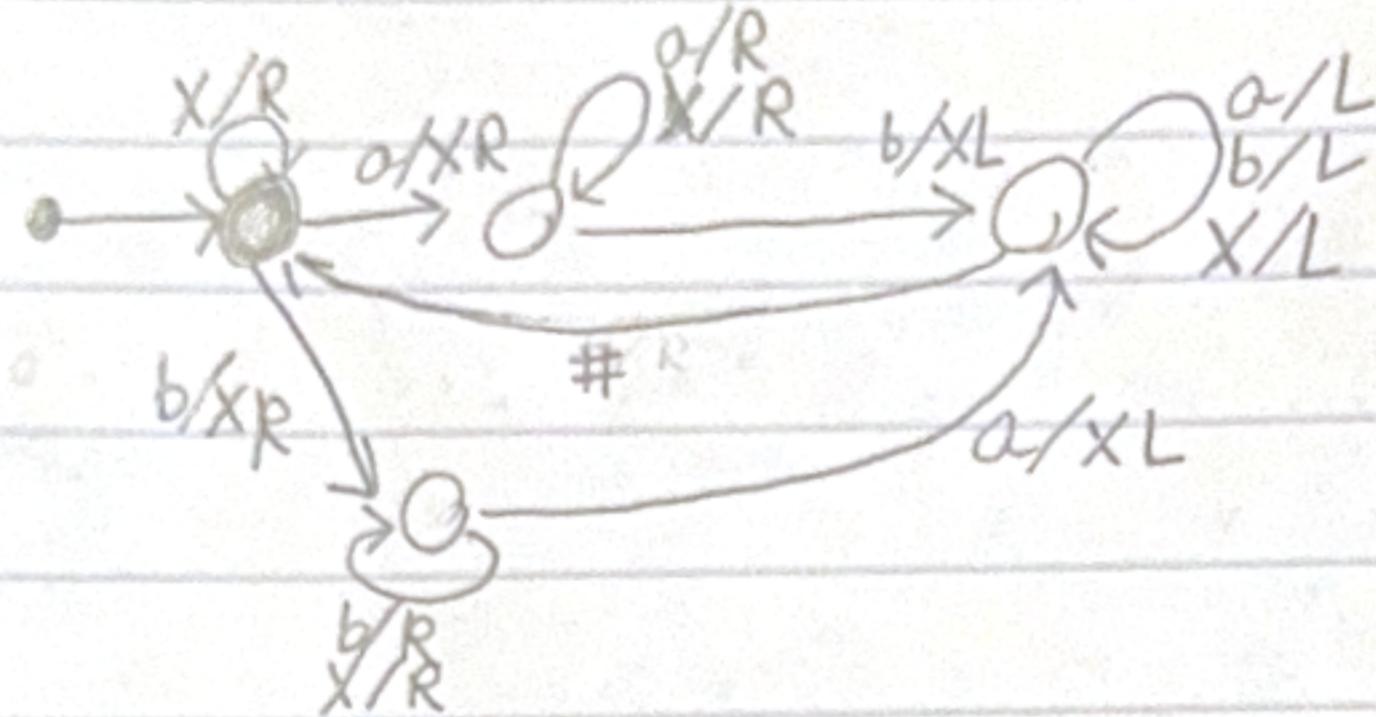


Homework 4 Turing Machines

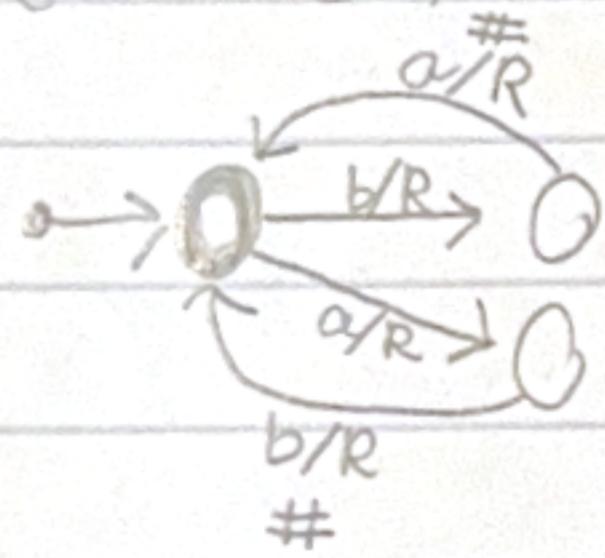
5a) $\{w \in \{a, b\}^* \mid w \text{ ends with } abb\}$



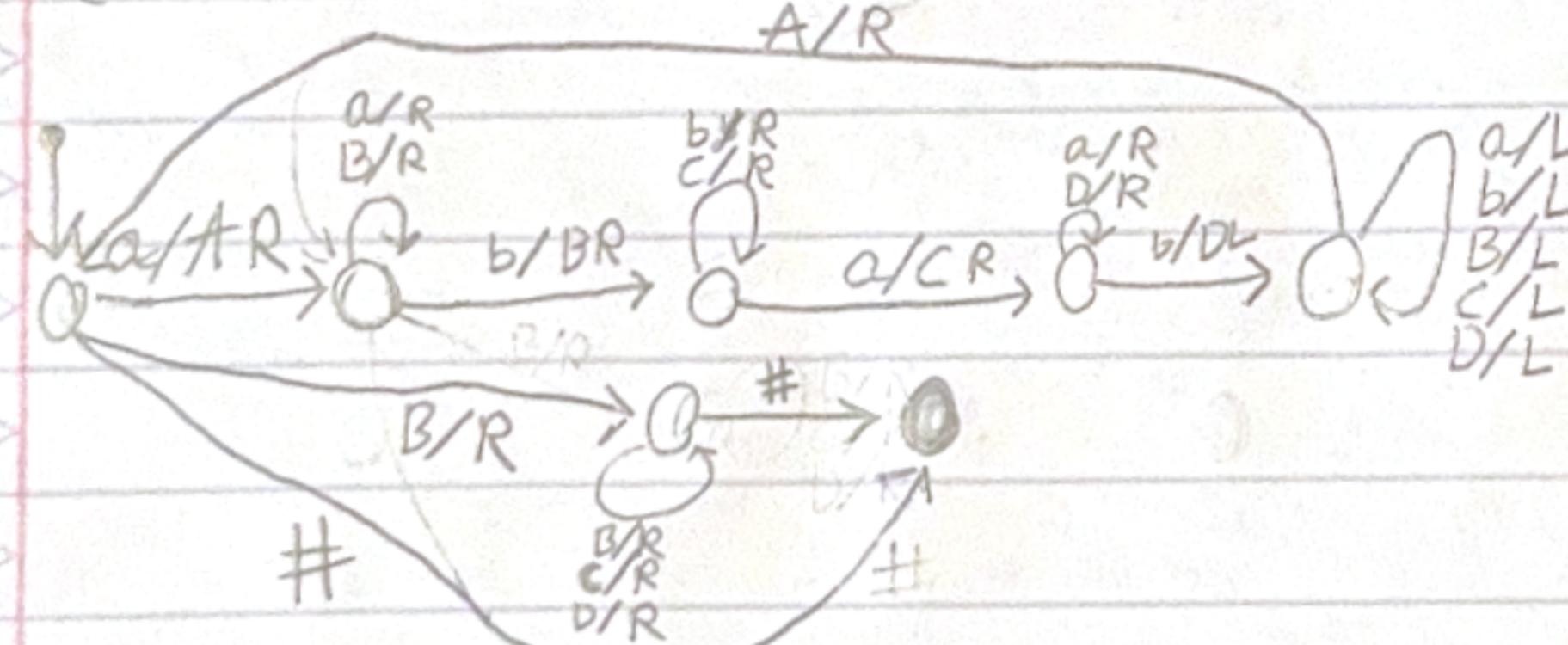
b) $\{w \in \{a, b\}^* \mid \#_a(w) = \#_b(w)\}$



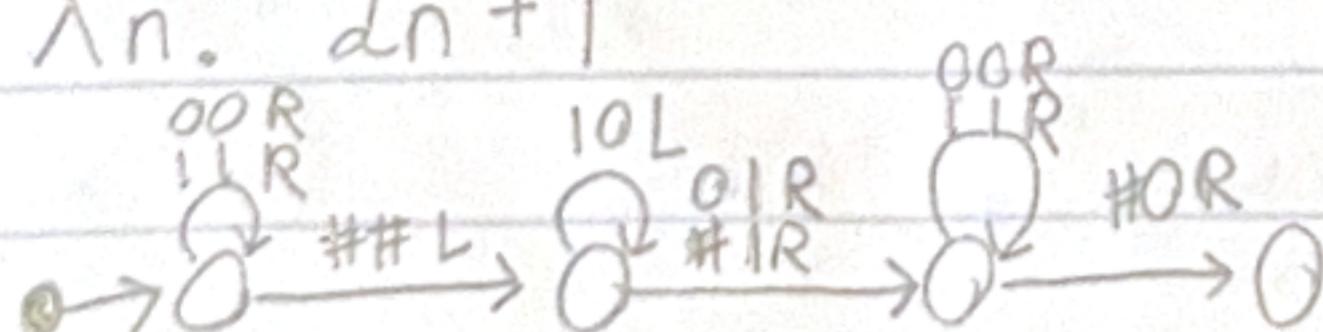
c) $\{w \in \{a, b\}^* \mid w \text{ alternates } a's \text{ and } b's\}$



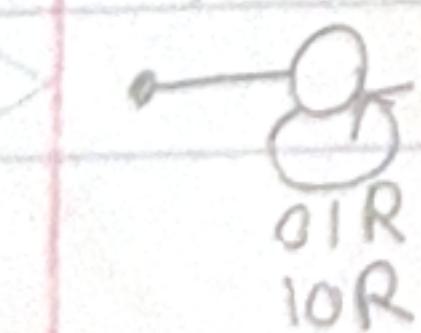
d) $\{a^n b^n a^n b^n \mid n \geq 0\}$



6a) $\lambda n. 2n + 1$



b) One's compliment



6c) Python $\lambda n: str(n)[1:-1]$

