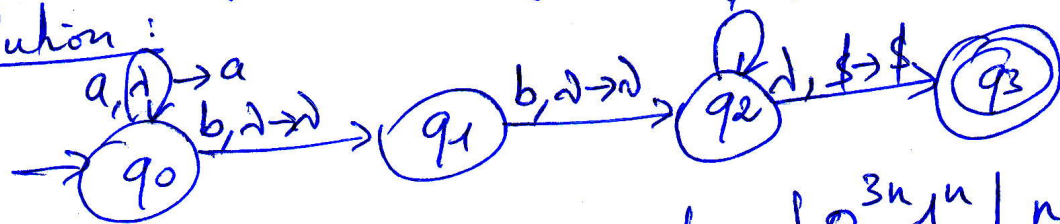


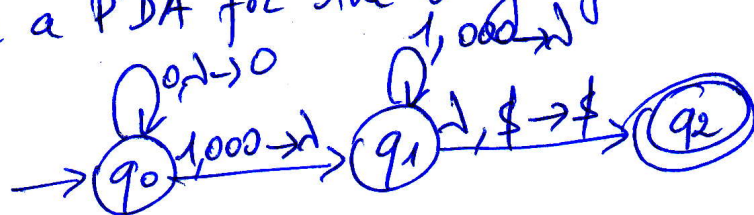
Tutorial 6: Pushdown Automata

- 1) Give a PDA for the language $L_1 = \{a^n b b a^n \mid n \geq 0\}$

Solution:



- 2) Give a PDA for the language $L_2 = \{0^{3n} 1^n \mid n \geq 0\}$



- 3) Give a PDA for the language $L_3 = \{w \mid w = u \# v \mid u, v \in \{a, b\}^+ \text{ and } |u| = |v|\}$

