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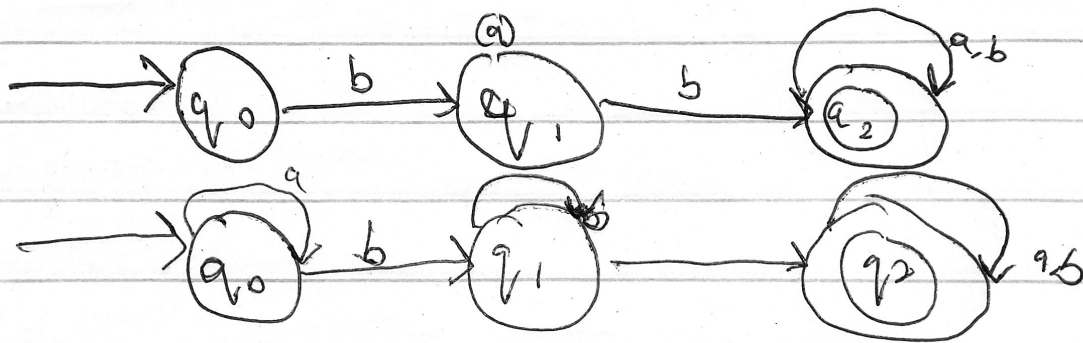
Finite Automata

This is a simple idealized machine used to recognize patterns within input taken from some character set (or alphabets).

Finite automata can be represented by input tape and finite control.

Input Tape: It is a linear tape having some number cells. Each input symbol is placed in each cell.

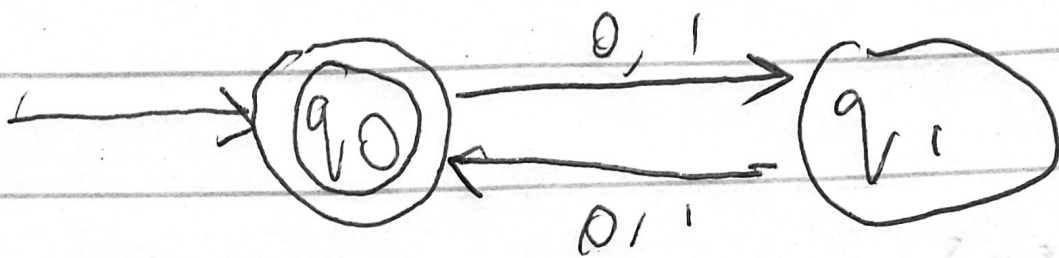
Finite Control: It decides the next state on receiving particular inputs from input tape.



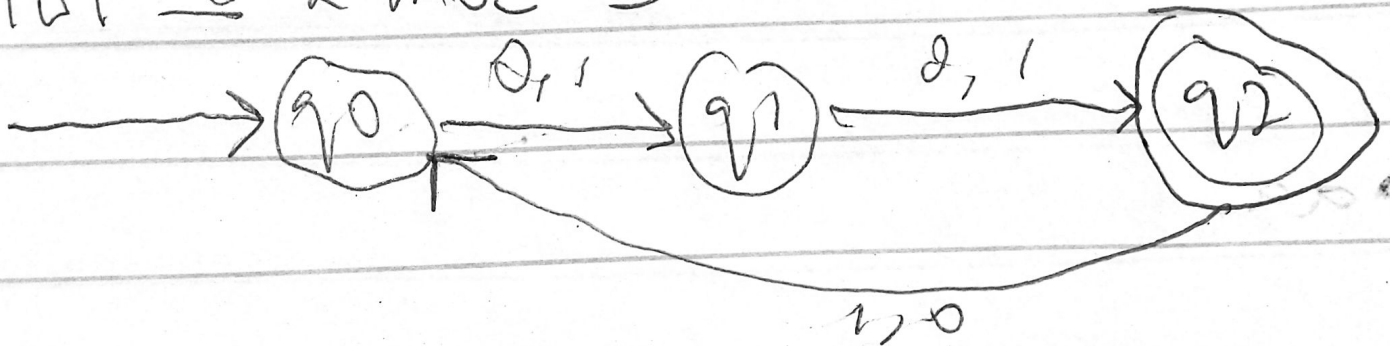
Transition table

	a	b
q ₀	q ₀	q ₁
q ₁	q ₂	q ₁
q ₂	q ₂	q ₂

ii) $|w| \equiv 0 \pmod 2$



iii) $|w| \equiv 2 \pmod 3$



iv) At most 3 ie $\{0, 1, 2, 3\}$

