

Bashiru Ahmad

17/SCI01/020

CSE304

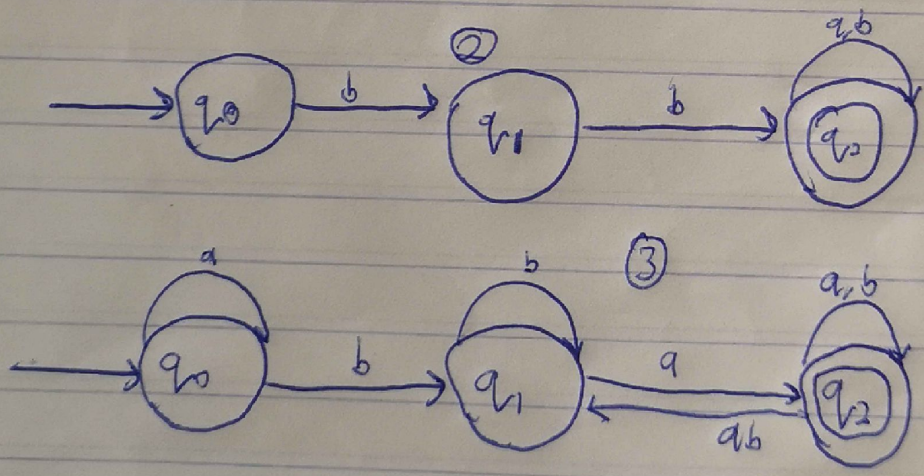
Finite Automata

①

Finite automata is a simple idealized machine used to recognize patterns within input taken from some character set (or alphabet) Σ .

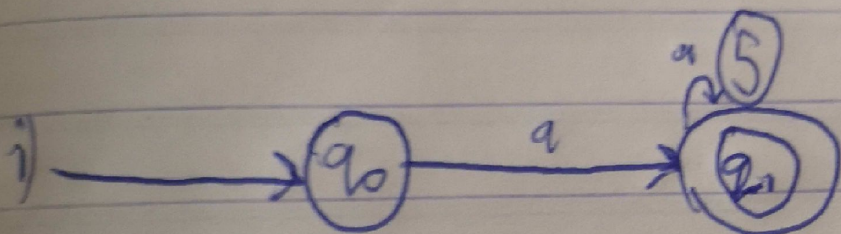
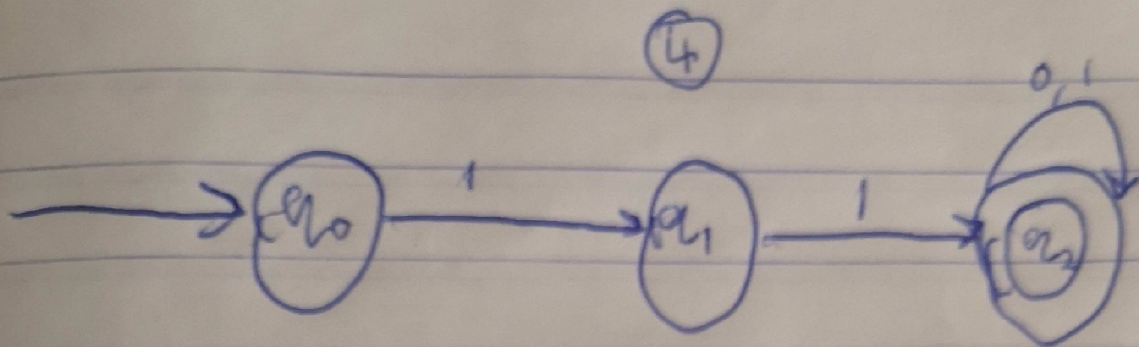
Finite automata can be represented by input tape and finite control.

- i) **Input tape** :- it is a linear tape having some number of cells. Each input symbol is placed in each cell.
- ii) **Finite control** :- it decides the next state on receiving particular input from input tape.



The transition table:

	a	b
q_0	q_0	q_1
q_1	q_2	q_1
q_2	q_2	q_2



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

