

* Mealy and Moore Machine:-

Moore Machine

@jnotes

A moore machine is a finite state machine, where output are determined by current state only.

→ The Moore machine associates an o/p symbol with each state and each time a state is entered, an o/p is obtained simultaneously.

formal definition

Moore machine is defined by 6-tuples:-

$Q \rightarrow$ finite set of states

$\Sigma \rightarrow$ " " " I/p symbols

$\Delta \rightarrow$ o/p symbol

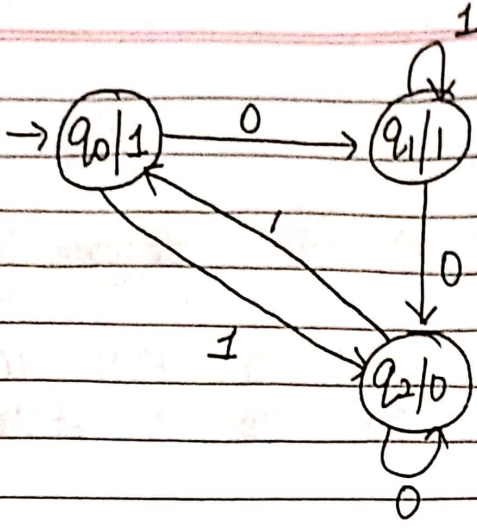
$\delta \rightarrow$ Transition function

$\lambda \rightarrow$ o/p function

$q_0 \rightarrow$ initial state

@jwebdevelopers

Example



Transition Table

Current State	Next State		Output(s)
	0	1	
q ₀	q ₁	q ₂	1
q ₁	q ₂	q ₁	1
q ₂	q ₂	q ₀	0

Input :- 010

(The o/p length for a moore machine is greater than input by 1)

$\delta(q_0, 0) \rightarrow \delta(q_1, 1) \rightarrow \delta(q_2, 0) \rightarrow q_2$

Output :- 1110
 ↑↑↑↑
 q₀ q₁ q₁ q₂

@jpwebdevelopers
 @jpnotes

Follow on Instagram! - @jpwebdevelopers