

To convert a Moore machine into an equivalent Mealy machine, we need to modify the transition function so that it takes an input symbol and produces an output symbol.

The output symbol will depend on the current state of the machine and the input symbol.

Algorithm to convert a Moore machine into a Mealy machine:

- For each state Q in the Moore machine, create a corresponding state in the Mealy machine.
- For each transition from state Q to state Q' in the Moore machine, create a corresponding transition from state Q to state Q' in the Mealy machine.
- For each transition from state Q to state Q' in the Moore machine, set the output symbol for that transition to the output symbol for state Q' in the Moore machine.

Convert the following Moore machine to Mealy machine.

Present State	Next State		Output
	$a = 0$	$a = 1$	
q0	q1	q2	1
q1	q3	q2	0
q2	q2	q1	1
q3	q0	q3	1

In Moore machine, each input symbol, have the pair of next state and the output.

For q0 output is 1, for q1 output is 0, for q2 output is 1, for q3 output is 1.

So corresponding Mealy machine is as follows,

Present State	Next State			
	a = 0		a = 1	
	Next State	Output	Next State	Output
q0	q1	0	q2	1
q1	q3	1	q2	1
q2	q2	1	q1	0
q3	q0	1	q3	1

Moore to Mealy Conversion Hindi Video

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