L-17 Conversion of Mealy Machine to Moore Machine (Using Transition Table)-1

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

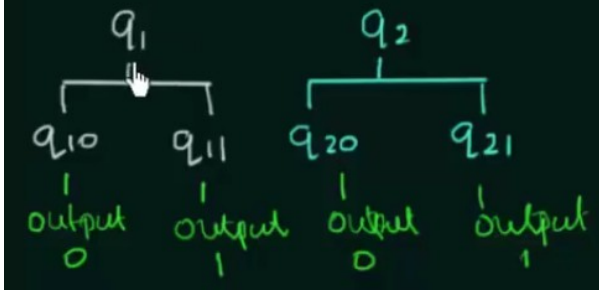
State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



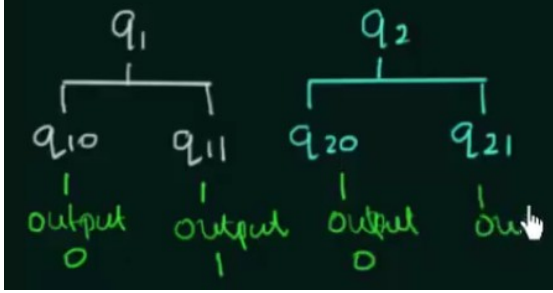
State	a	b	Output
$\rightarrow q_0$			

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$

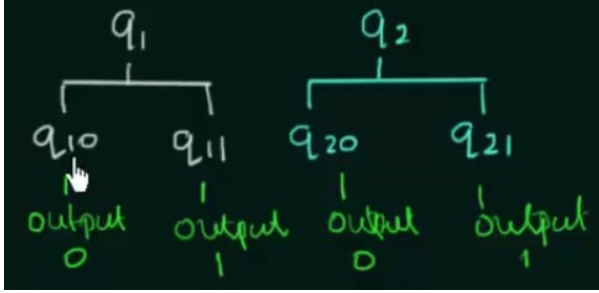


Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



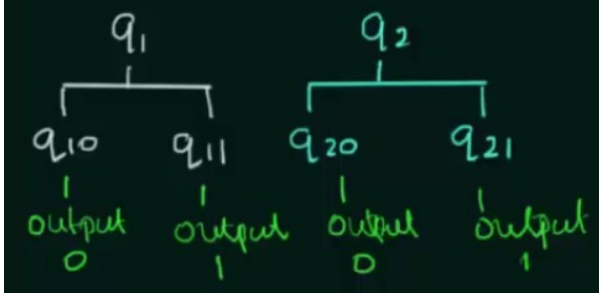
State	a	b	Output
$\rightarrow q_0$			

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



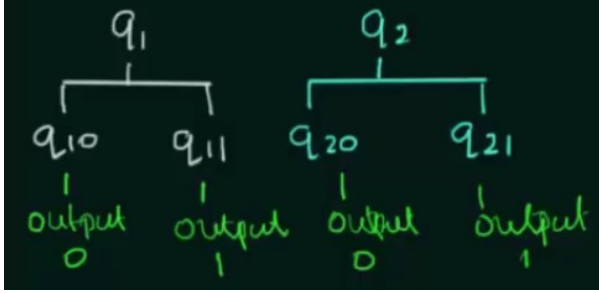
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$		
q_{10}			
q_{11}			
q_{20}			
q_{21}			
q_3			

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



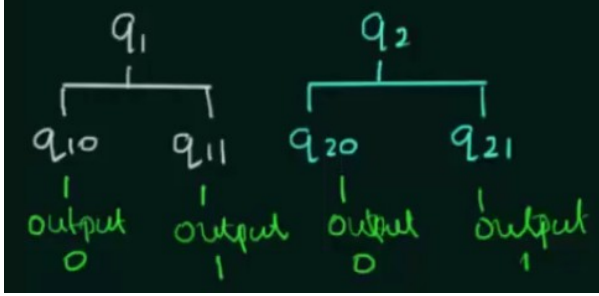
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$	$q_{11}, 1$	
q_{10}			
q_{11}			
q_{20}			
q_{21}			
q_3			

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



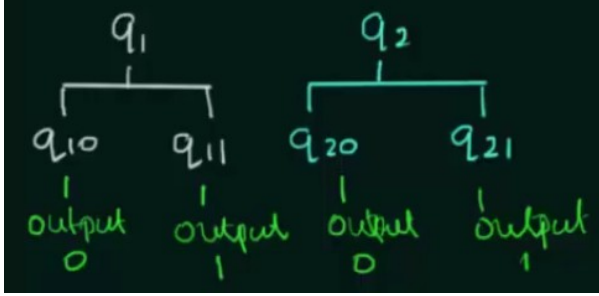
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$	$q_{11}, 1$	
q_{10}	$q_0, 1$	$q_3, 0$	
q_{11}			
q_{20}			
q_{21}			
q_3			

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



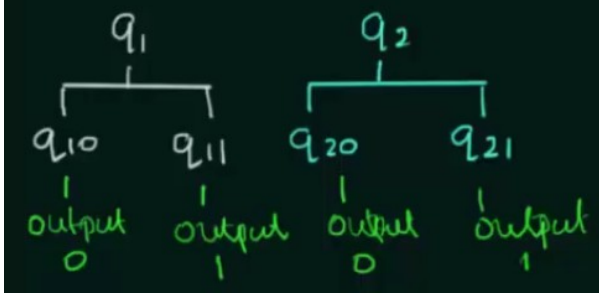
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$	$q_{11}, 1$	
q_{10}	$q_0, 1$	$q_3, 0$	
q_{11}	$q_0, 1$	$q_3, 0$	
q_{20}			
q_{21}			
q_3			

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



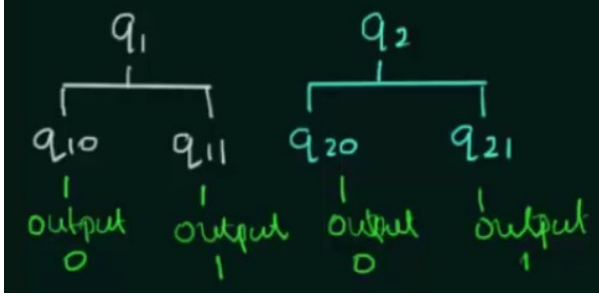
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$	$q_{11}, 1$	
q_{10}	$q_0, 1$	$q_3, 0$	
q_{11}	$q_0, 1$	$q_3, 0$	
q_{20}	$q_{21}, 1$	$q_{20}, 0$	
q_{21}			
q_3			

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



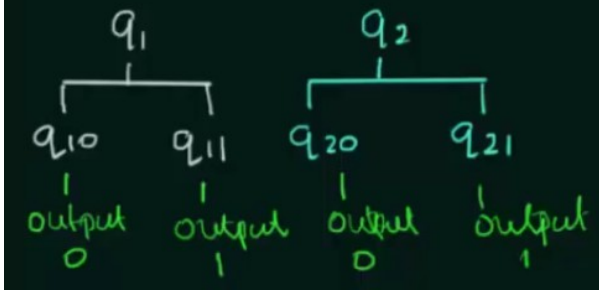
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$	$q_{11}, 1$	
q_{10}	$q_0, 1$	$q_3, 0$	
q_{11}	$q_0, 1$	$q_3, 0$	
q_{20}	$q_{21}, 1$	$q_{20}, 0$	
q_{21}	$q_{21}, 1$	$q_{20}, 0$	
q_3			

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



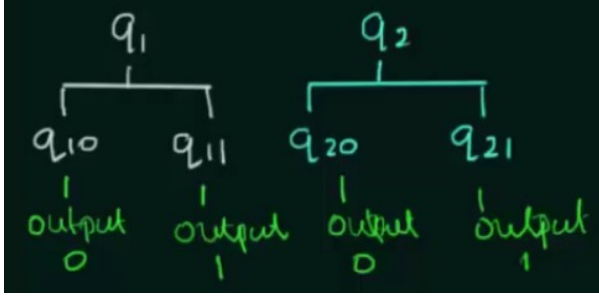
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$	$q_{11}, 1$	
q_{10}	$q_0, 1$	$q_3, 0$	
q_{11}	$q_0, 1$	$q_3, 0$	
q_{20}	$q_{21}, 1$	$q_{20}, 0$	
q_{21}	$q_{21}, 1$	$q_{20}, 0$	
q_3	$q_{10}, 0$	$q_0, 1$	

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



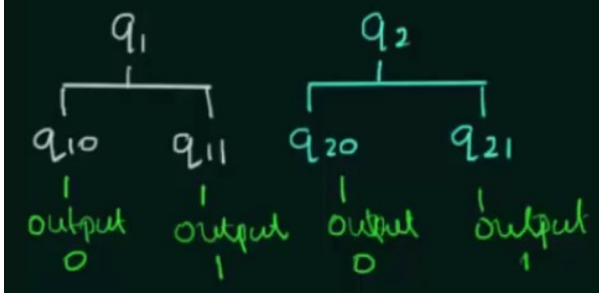
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$	$q_{11}, 1$	1
q_{10}	$q_0, 1$	$q_3, 0$	
q_{11}	$q_0, 1$	$q_3, 0$	
q_{20}	$q_{21}, 1$	$q_{20}, 0$	
q_{21}	$q_{21}, 1$	$q_{20}, 0$	
q_3	$q_{10}, 0$	$q_0, 1$	

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



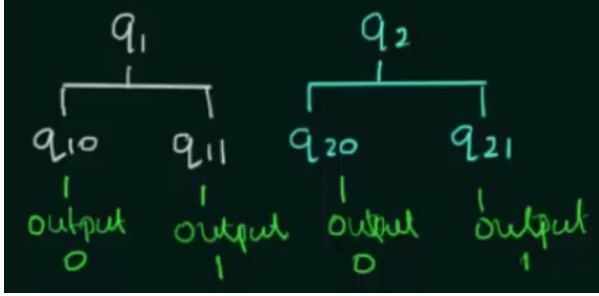
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$	$q_{11}, 1$	1
q_{10}	$q_0, 1$	$q_3, 0$	
q_{11}	$q_0, 1$	$q_3, 0$	
q_{20}	$q_{21}, 1$	$q_{20}, 0$	
q_{21}	$q_{21}, 1$	$q_{20}, 0$	
q_3	$q_{10}, 0$	$q_0, 1$	

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



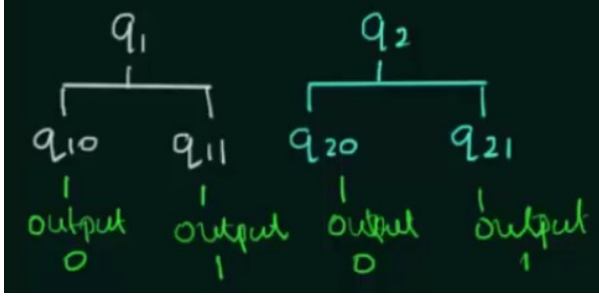
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$	$q_{11}, 1$	1
q_{10}	$q_0, 1$	$q_3, 0$	0
q_{11}	$q_0, 1$	$q_3, 0$	1
q_{20}	$q_{21}, 1$	$q_{20}, 0$	0
q_{21}	$q_{21}, 1$	$q_{20}, 0$	
q_3	$q_{10}, 0$	$q_0, 1$	

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



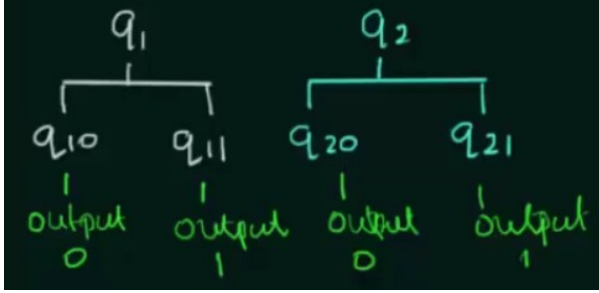
State	a	b	Output
$\rightarrow q_0$	$q_3, 0$	$q_{11}, 1$	1
q_{10}	$q_0, 1$	$q_3, 0$	0
q_{11}	$q_0, 1$	$q_3, 0$	1
q_{20}	$q_{21}, 1$	$q_{20}, 0$	0
q_{21}	$q_{21}, 1$	$q_{20}, 0$	1
q_3	$q_{10}, 0$	$q_0, 1$	0

Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$



State	a	b	Output
$\rightarrow q_0$	q_3	q_{11}	1
q_{10}	q_0	q_3	0
q_{11}	q_0	q_3	1
q_{20}	q_{21}	q_{20}	0
q_{21}	q_{21}	q_{20}	1
q_3	q_{10}	q_0	0

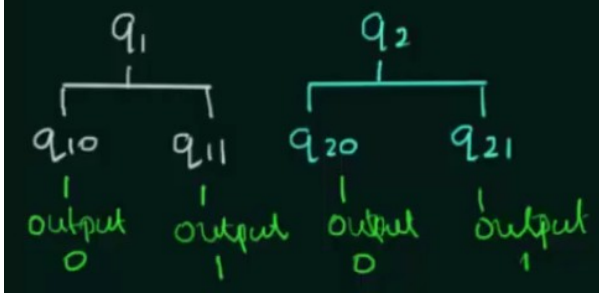
Conversion of Mealy Machine to Moore Machine -Examples (Part-3)

Using Transition Table

Convert the given Mealy Machine to its equivalent Moore Machine

State	a	b
$\rightarrow q_0$	$q_3, 0$	$q_1, 1$
q_1	$q_0, 1$	$q_3, 0$
q_2	$q_2, 1$	$q_2, 0$
q_3	$q_1, 0$	$q_0, 1$

Moore



State	a	b	Output
$\rightarrow q_0$	q_3	q_{11}	1
q_{10}	q_0	q_3	0
q_{11}	q_0	q_3	1
q_{20}	q_{21}	q_{20}	0
q_{21}	q_{21}	q_{20}	1
q_3	q_{10}	q_0	0

- **Questions????**