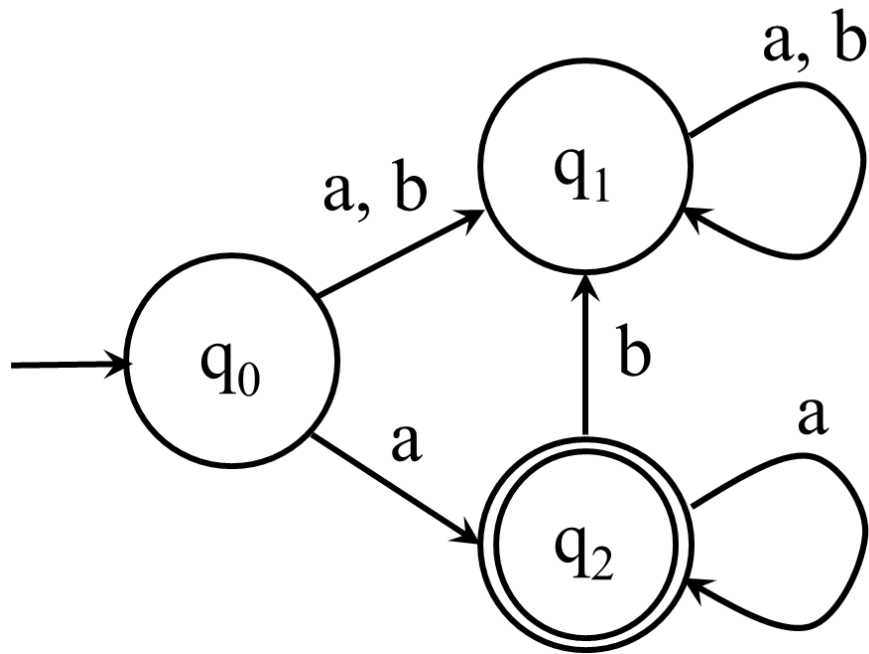


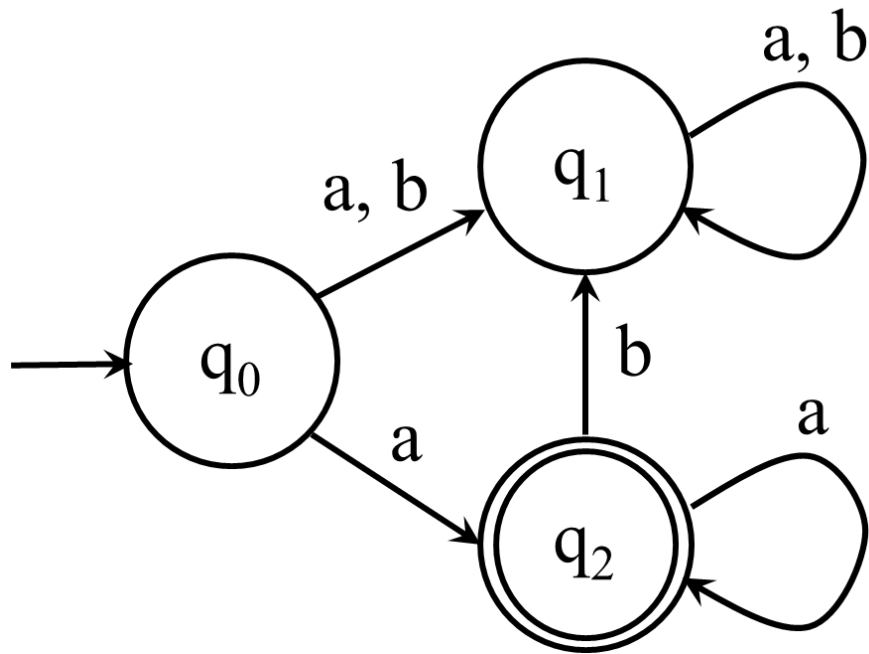
Conversion Example



	a	b
$\{q_0\}$		

- Step 1 – Create the transition table, starting with $\{q_0\}$, and keep generating subsets of reachable states for each character for each subset

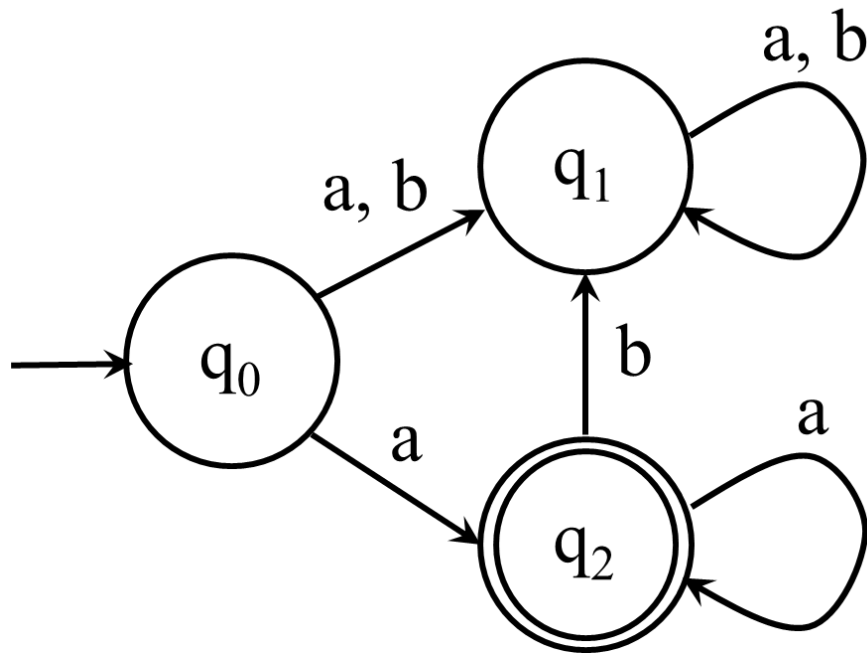
Conversion Example



	a	b
$\{q_0\}$	$\{q_1, q_2\}$	$\{q_1\}$

- Step I – Create the transition table, starting with $\{q_0\}$, and keep generating subsets of reachable states for each character for each subset

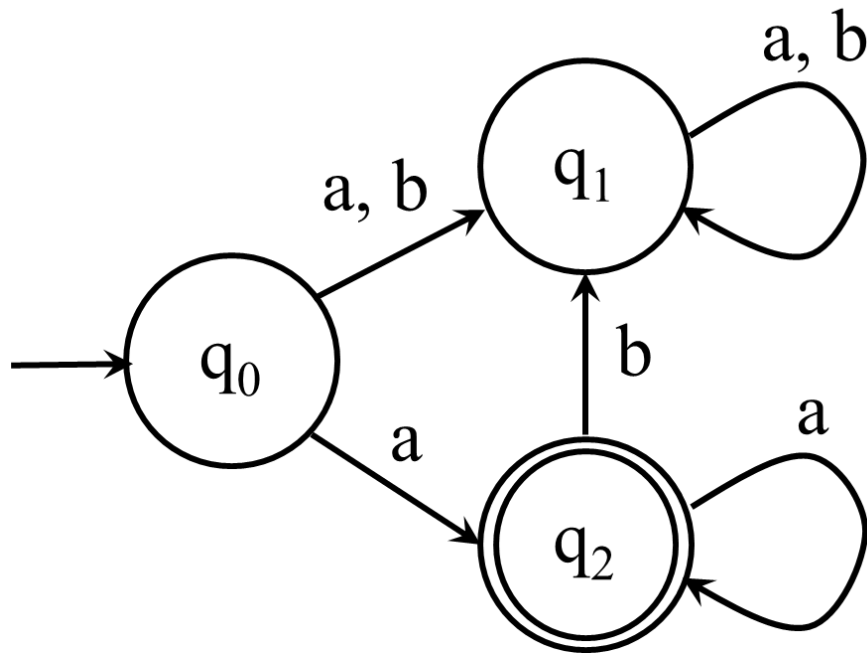
Conversion Example



	a	b
$\{q_0\}$	$\{q_1, q_2\}$	$\{q_1\}$
$\{q_1\}$		
$\{q_1, q_2\}$		

- Step 1 – Create the transition table, starting with $\{q_0\}$, and keep generating subsets of reachable states for each character for each subset

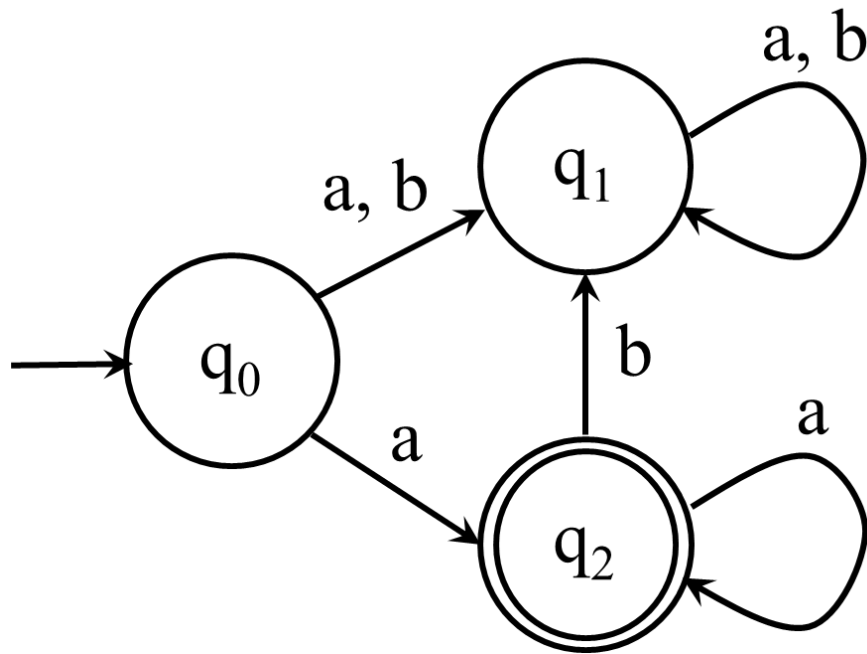
Conversion Example



	a	b
$\{q_0\}$	$\{q_1, q_2\}$	$\{q_1\}$
$\{q_1\}$	$\{q_1\}$	$\{q_1\}$
$\{q_1, q_2\}$		

- Step 1 – Create the transition table, starting with $\{q_0\}$, and keep generating subsets of reachable states for each character for each subset

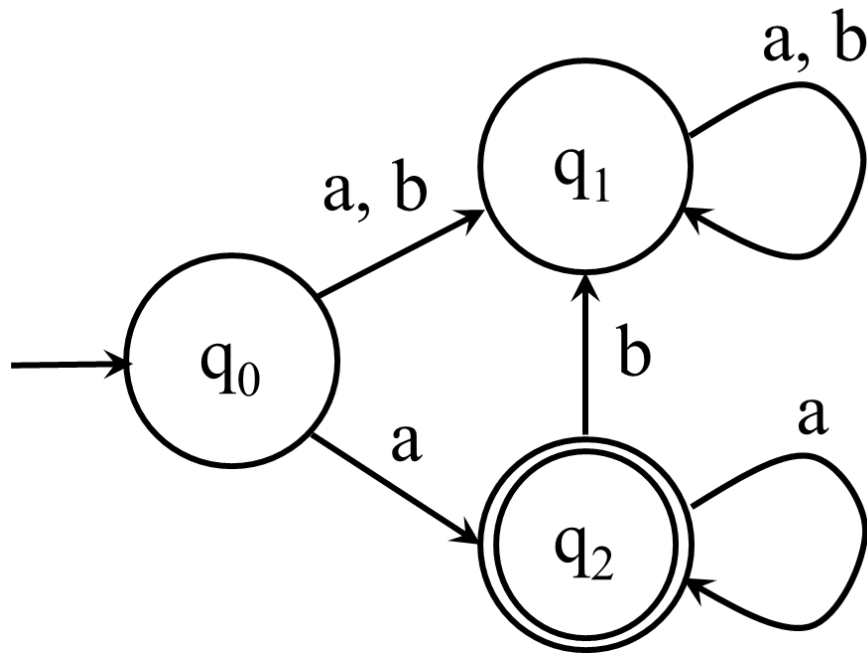
Conversion Example



	a	b
$\{q_0\}$	$\{q_1, q_2\}$	$\{q_1\}$
$\{q_1\}$	$\{q_1\}$	$\{q_1\}$
$\{q_1, q_2\}$	$\{q_1, q_2\}$	$\{q_1\}$

- Step 1 – Create the transition table, starting with $\{q_0\}$, and keep generating subsets of reachable states for each character for each subset

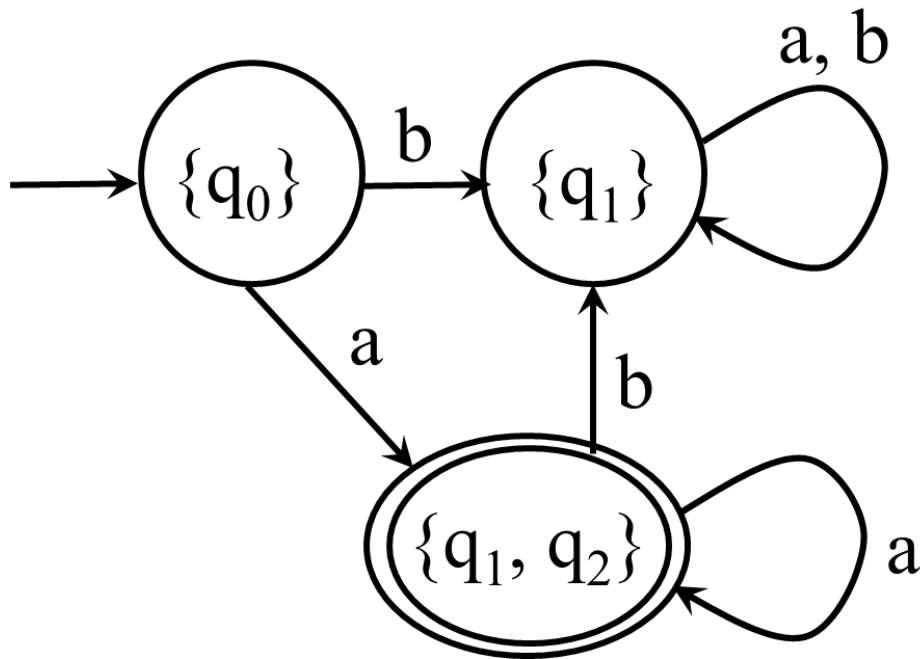
Conversion Example



	a	b
$\{q_0\}$	$\{q_1, q_2\}$	$\{q_1\}$
$\{q_1\}$	$\{q_1\}$	$\{q_1\}$
$\{q_1, q_2\}$	$\{q_1, q_2\}$	$\{q_1\}$

- Step 2 – Flag each subset that contains an accept state – these will represent our new accept states

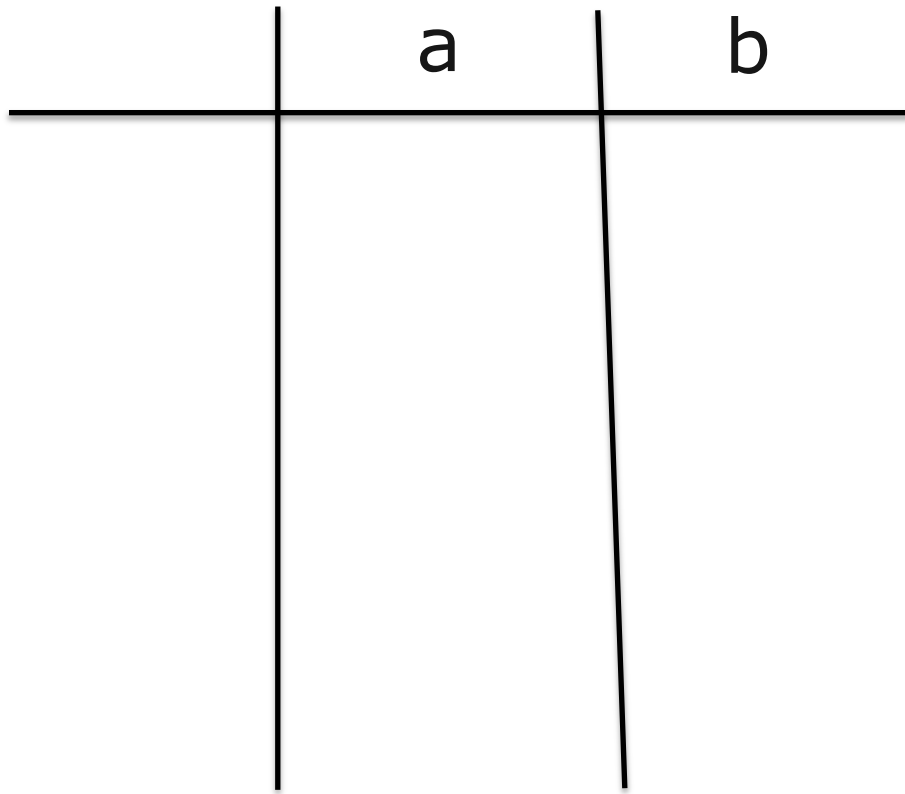
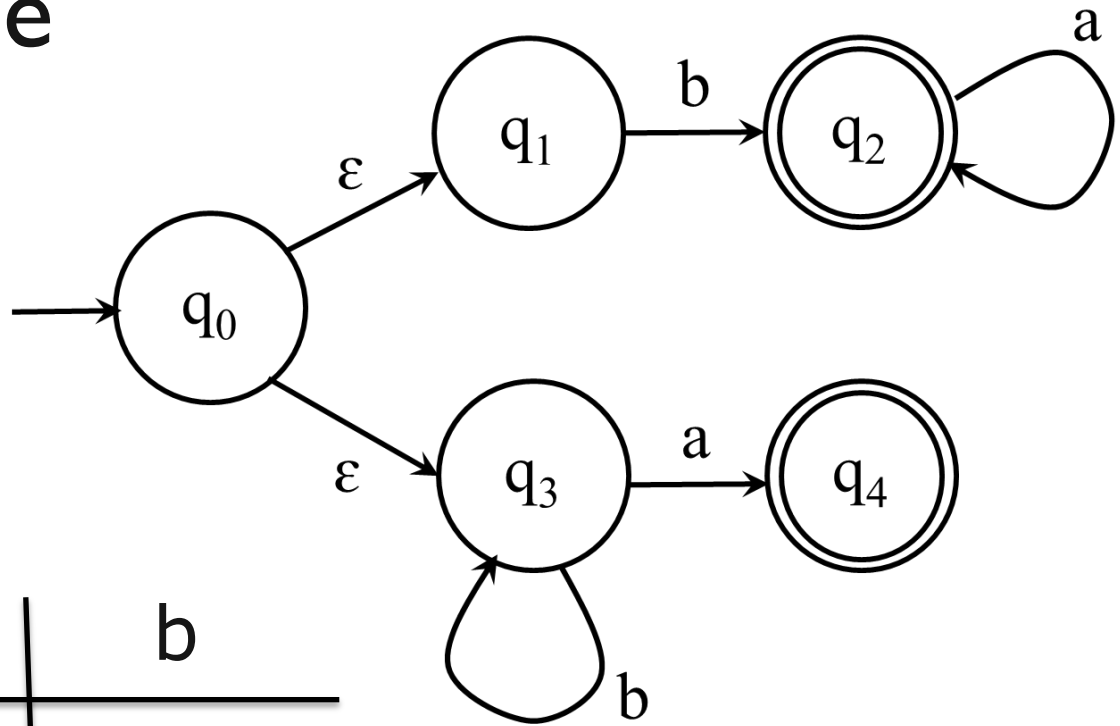
Conversion Example



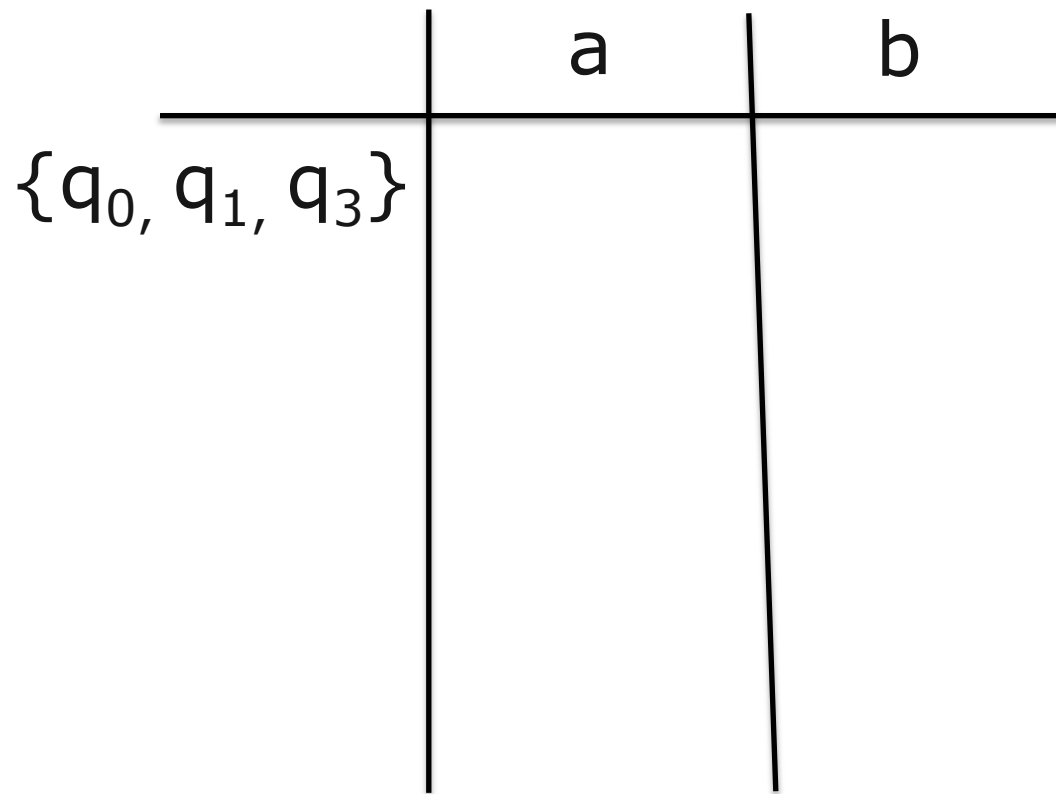
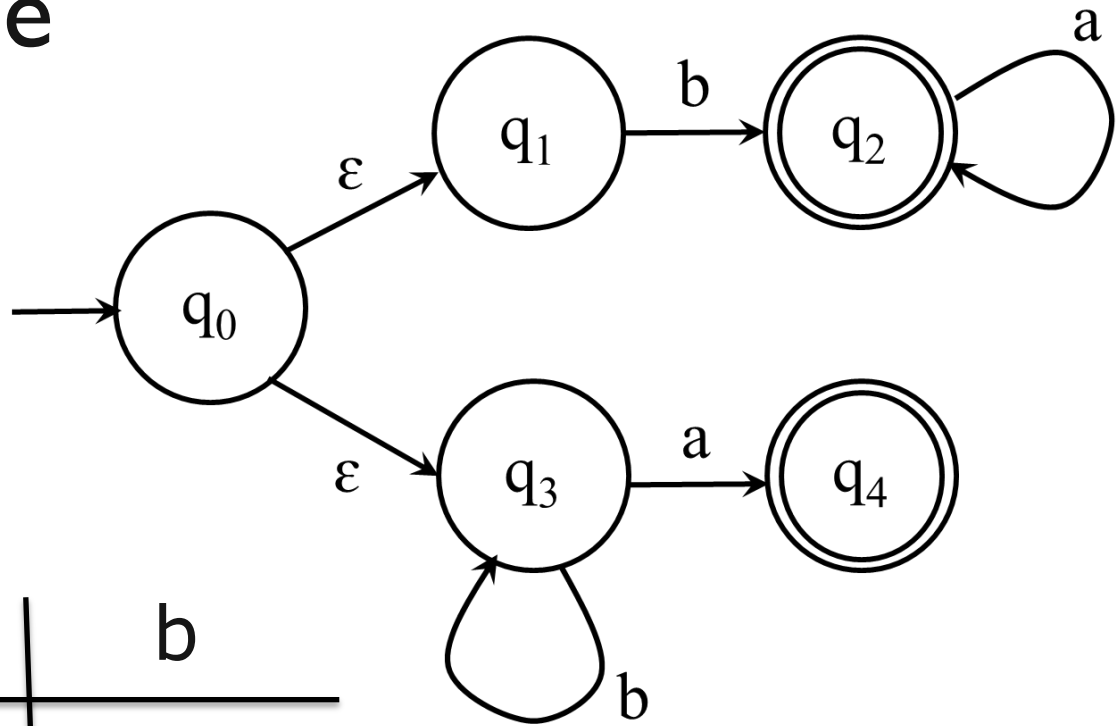
	a	b
$\{q_0\}$	$\{q_1, q_2\}$	$\{q_1\}$
$\{q_1\}$	$\{q_1\}$	$\{q_1\}$
$\{q_1, q_2\}$	$\{q_1, q_2\}$	$\{q_1\}$

- Step 3 – Use the table to create the new DFA

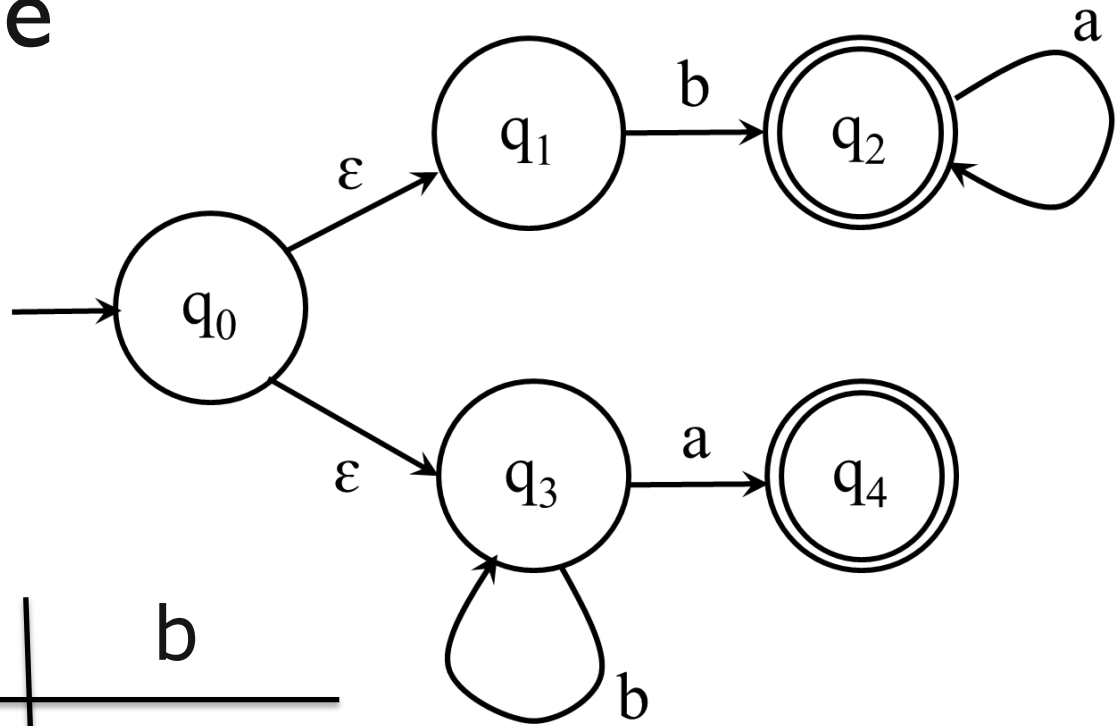
Another Example



Another Example

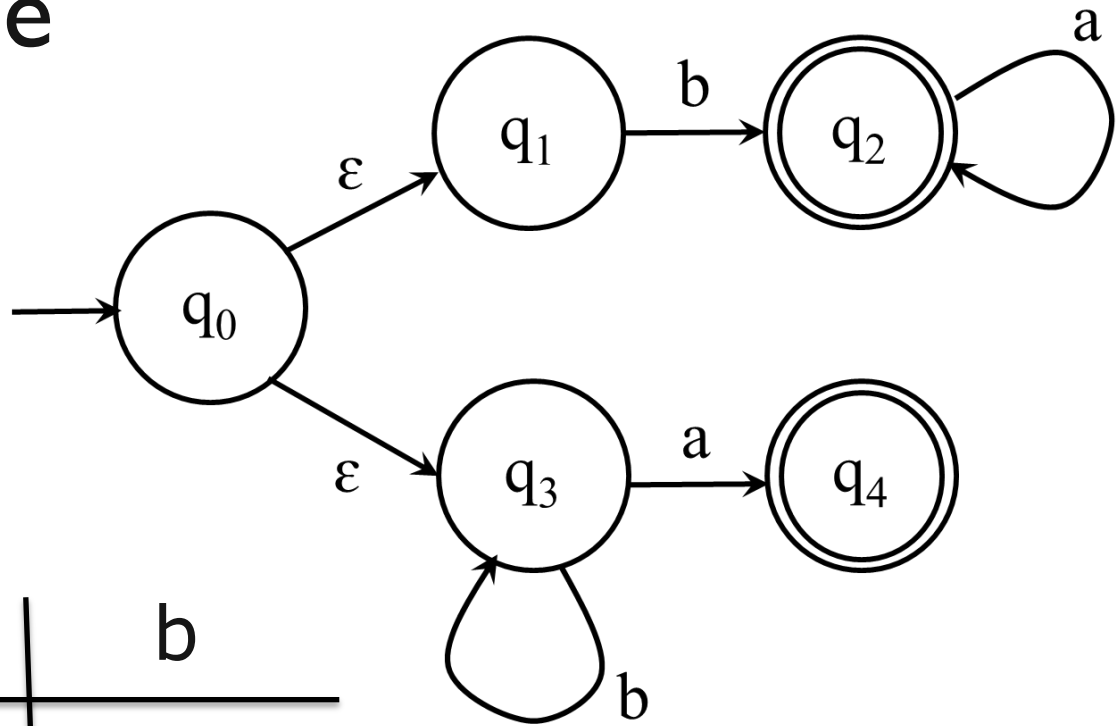


Another Example



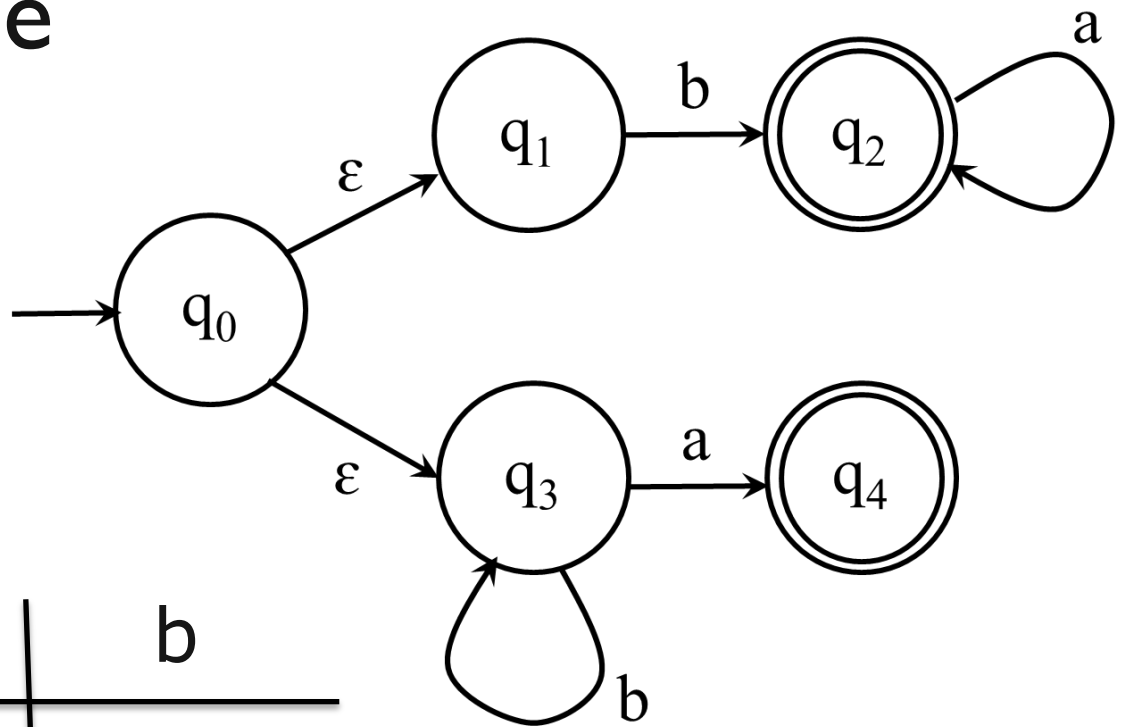
	a	b
$\{q_0, q_1, q_3\}$	$\{q_4\}$	$\{q_2, q_3\}$

Another Example



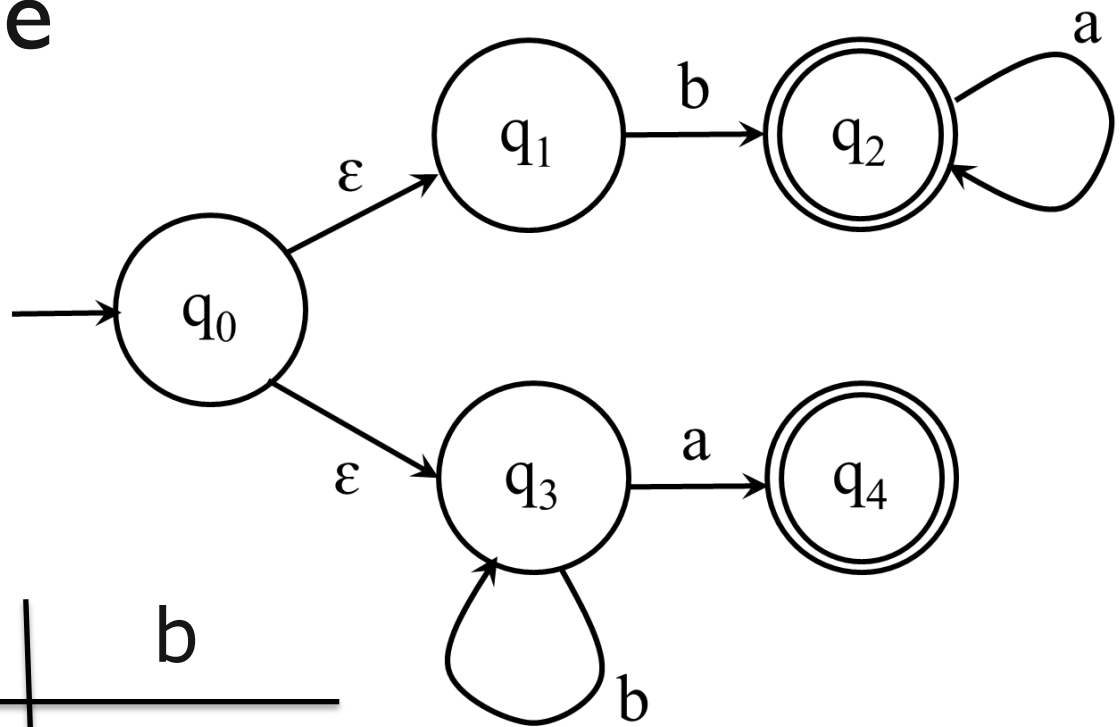
	a	b
$\{q_0, q_1, q_3\}$	$\{q_4\}$	$\{q_2, q_3\}$
$\{q_4\}$		
$\{q_2, q_3\}$		

Another Example



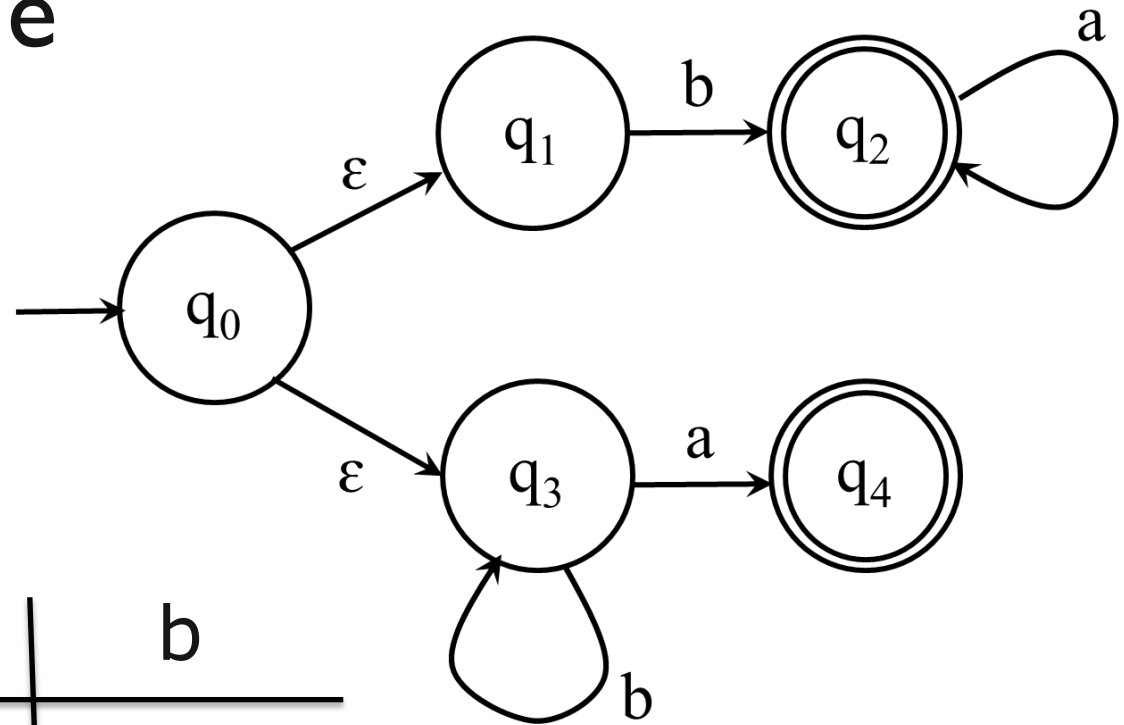
	a	b
$\{q_0, q_1, q_3\}$	$\{q_4\}$	$\{q_2, q_3\}$
$\{q_4\}$	$\{ \}$	$\{ \}$
$\{q_2, q_3\}$		

Another Example



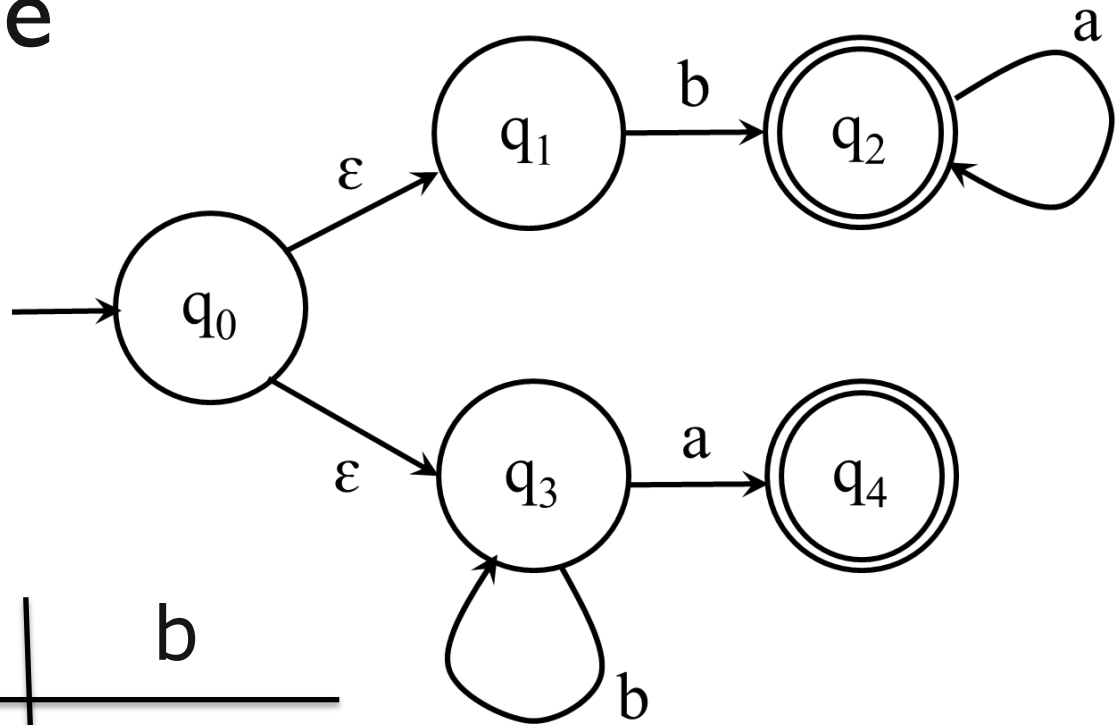
	a	b
$\{q_0, q_1, q_3\}$	$\{q_4\}$	$\{q_2, q_3\}$
$\{q_4\}$	$\{ \}$	$\{ \}$
$\{q_2, q_3\}$	$\{q_2, q_4\}$	$\{q_3\}$

Another Example



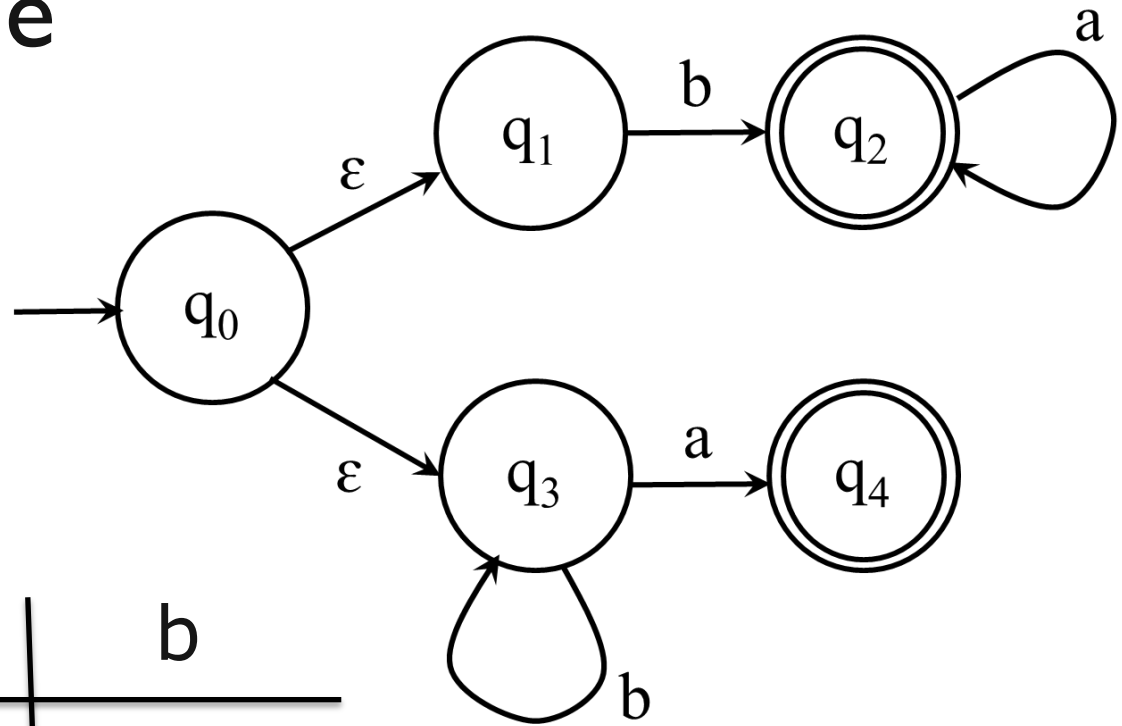
	a	b
$\{q_0, q_1, q_3\}$	$\{q_4\}$	$\{q_2, q_3\}$
$\{q_4\}$	$\{ \}$	$\{ \}$
$\{q_2, q_3\}$	$\{q_2, q_4\}$	$\{q_3\}$
$\{q_2, q_4\}$	$\{q_2\}$	$\{ \}$
$\{q_3\}$	$\{q_4\}$	$\{q_3\}$

Another Example



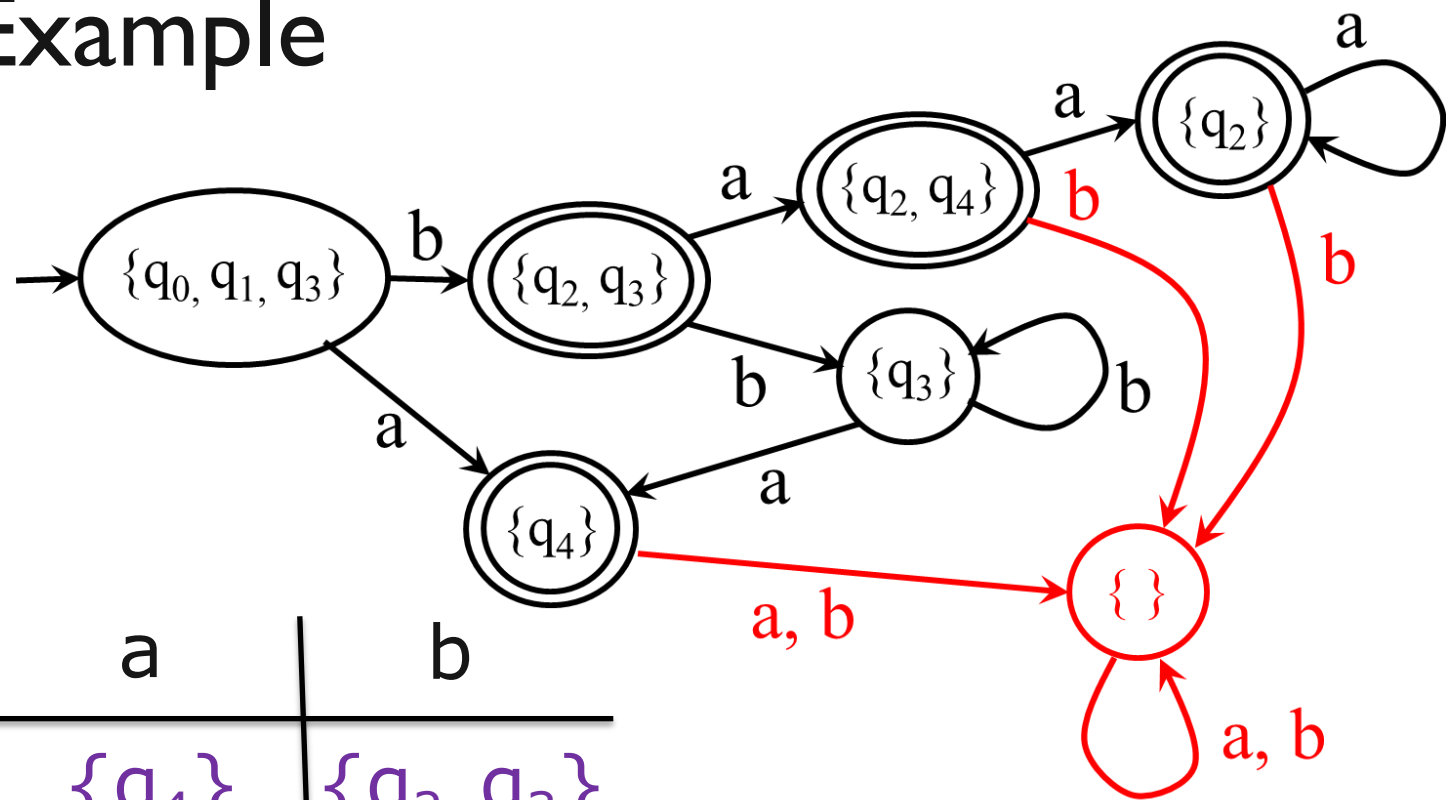
	a	b
$\{q_0, q_1, q_3\}$	$\{q_4\}$	$\{q_2, q_3\}$
$\{q_4\}$	$\{ \}$	$\{ \}$
$\{q_2, q_3\}$	$\{q_2, q_4\}$	$\{q_3\}$
$\{q_2, q_4\}$	$\{q_2\}$	$\{ \}$
$\{q_3\}$	$\{q_4\}$	$\{q_3\}$
$\{q_2\}$	$\{q_2\}$	$\{ \}$

Another Example



	a	b
$\{q_0, q_1, q_3\}$	$\{q_4\}$	$\{q_2, q_3\}$
$\{q_4\}$	$\{ \}$	$\{ \}$
$\{q_2, q_3\}$	$\{q_2, q_4\}$	$\{q_3\}$
$\{q_2, q_4\}$	$\{q_2\}$	$\{ \}$
$\{q_3\}$	$\{q_4\}$	$\{q_3\}$
$\{q_2\}$	$\{q_2\}$	$\{ \}$

Another Example



	a	b
$\{q_0, q_1, q_3\}$	$\{q_4\}$	$\{q_2, q_3\}$
$\{q_4\}$	$\{\}$	$\{\}$
$\{q_2, q_3\}$	$\{q_2, q_4\}$	$\{q_3\}$
$\{q_2, q_4\}$	$\{q_2\}$	$\{\}$
$\{q_3\}$	$\{q_4\}$	$\{q_3\}$
$\{q_2\}$	$\{q_2\}$	$\{\}$