Subset Construction Algorithm
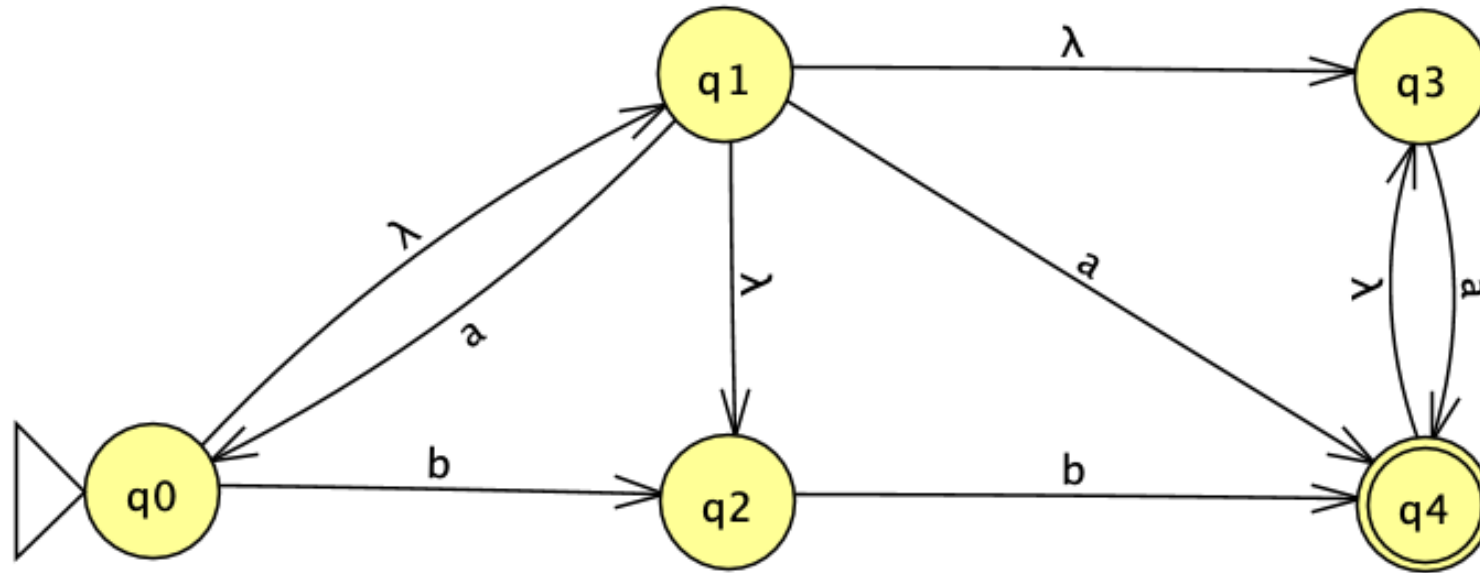
Extra Example

Apply subset construction algorithm to convert the following NFA machine to an equivalent DFA machine.

Solution

State		State reachable by	
Subset	*Label*	*a*	*b*
$\{q_0, q_1, q_2, q_3\}$	A	$\{q_0, q_1, q_2, q_3, q_4\}$	$\{q_2, q_3, q_4\}$
$\{q_0, q_1, q_2, q_3, q_4\}$	B	$\{q_0, q_1, q_2, q_3, q_4\}$	$\{q_2, q_3, q_4\}$
$\{q_2, q_3, q_4\}$	C	$\{q_3, q_4\}$	$\{q_3, q_4\}$
$\{q_3, q_4\}$	D	$\{q_3, q_4\}$	$\emptyset$
$\emptyset$	E	$\emptyset$	$\emptyset$

Solution