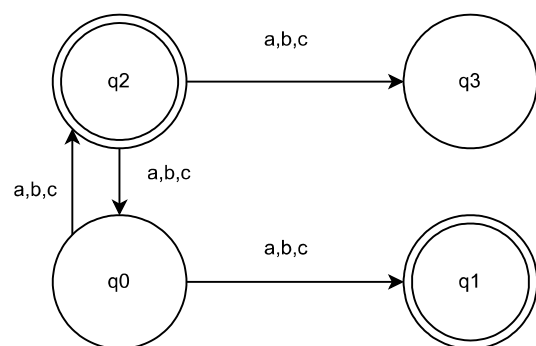
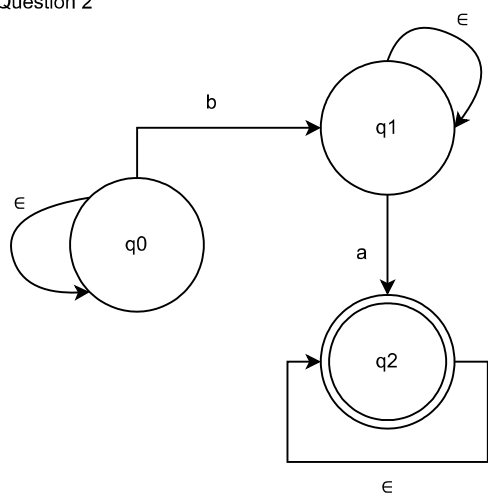


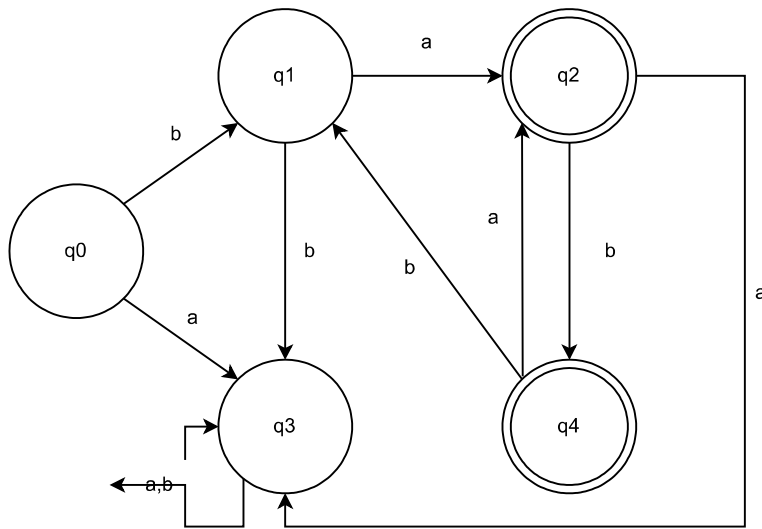
Question 1



Question 2



Question 3



Question 4

$$\Sigma = \{ a, b, \epsilon \}$$

$$Q' = \{ \{q0\}, \{q1\}, \{q2\}, \{q3\}, \{q0, q1\}, \{q0, q2\}, \{q0, q3\}, \{q1, q3\}, \{q2, q3\}, \{q0, q2, q3\}, \{q1, q2, q3\}, \{q0, q1, q3\}, \{q0, q1, q2\}, \{q0, q1, q2, q3\} \}.$$

$$q' = \{q0\}$$

$$F' = \{ \{q3\}, \{q0, q3\}, \{q1, q3\}, \{q2, q3\}, \{q0, q2, q3\}, \{q1, q2, q3\}, \{q0, q1, q3\}, \{q0, q1, q2\}, \{q0, q1, q2, q3\} \}$$

δ'	a	b	ϵ
q0	\emptyset	$\{q1, q2\}$	$\{q2\}$
q1	$\{q3\}$	\emptyset	\emptyset
q2	$\{q2, q3\}$	$\{q3\}$	\emptyset
q3	\emptyset	\emptyset	$\{q2\}$
$\{q0, q1\}$	$\{q3\}$	$\{q1, q2\}$	$\{q2\}$
$\{q0, q2\}$	$\{q2, q3\}$	$\{q1, q2, q3\}$	$\{q2\}$
$\{q0, q3\}$	\emptyset	$\{q1, q2\}$	$\{q2\}$
$\{q1, q2\}$	$\{q2, q3\}$	$\{q3\}$	\emptyset
$\{q1, q3\}$	$\{q3\}$	\emptyset	$\{q2\}$
$\{q2, q3\}$	$\{q2, q3\}$	$\{q3\}$	$\{q2\}$
$\{q0, q1, q2\}$	$\{q2, q3\}$	$\{q1, q2, q3\}$	$\{q2\}$
$\{q0, q1, q3\}$	$\{q3\}$	$\{q1, q2\}$	$\{q2\}$
$\{q0, q2, q3\}$	$\{q2, q3\}$	$\{q1, q2, q3\}$	$\{q2\}$
$\{q1, q2, q3\}$	$\{q2, q3\}$	$\{q3\}$	$\{q2\}$
$\{q0, q1, q2, q3\}$	$\{q2, q3\}$	$\{q1, q2, q3\}$	$\{q2\}$