

$$Q_2^+ |_{Rst=0}$$

		$Q_2$			
	$Q_2, Q_1$				
		00	01	11	10
$Q_0$	0	0	0	1	1
1	0	1	0	1	1
		$Q_1$			$Q_0$

$$\begin{aligned}
 Q_2^+ |_{Rst=0} &= Q_2 \cdot Q_0' + Q_2 \cdot Q_1' + Q_2' \cdot Q_1 \cdot Q_0 \\
 &= Q_2 (Q_0' + Q_1') + Q_2' (Q_1 \cdot Q_0) \\
 &= Q_2 (Q_1 \cdot Q_0)' + Q_2' \cdot (Q_1 \cdot Q_0) \\
 &= Q_2 \oplus Q_1 \cdot Q_0
 \end{aligned}$$

$$Q_2^+ = (Rst)' \cdot [Q_2 \oplus Q_1 \cdot Q_0]$$

Use a D flip-flop to implement each state bit.

