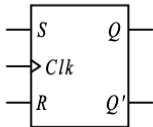
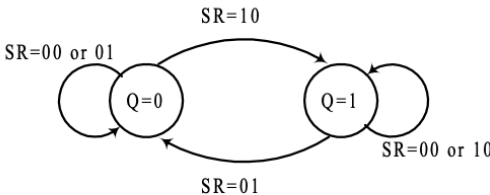
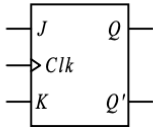
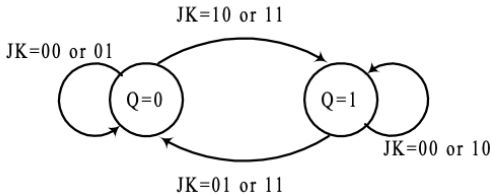
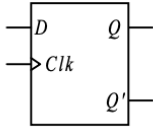
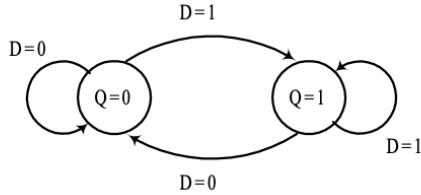
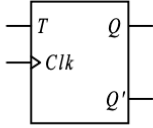
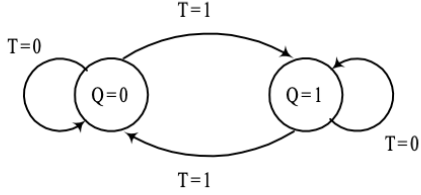


8)

Name / Symbol	Characteristic (Truth) Table	State Diagram / Characteristic Equations	Excitation Table																																																								
<div>SR</div> <div></div>	<table><tr><th>S</th><th>R</th><th>Q</th><th>Q_{next}</th></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>0</td><td>1</td><td>1</td></tr><tr><td>0</td><td>1</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>1</td><td>0</td><td>×</td></tr><tr><td>1</td><td>1</td><td>1</td><td>×</td></tr></table>	S	R	Q	Q _{next}	0	0	0	0	0	0	1	1	0	1	0	0	0	1	1	0	1	0	0	1	1	0	1	1	1	1	0	×	1	1	1	×	<div><p>SR=10</p><p>SR=01</p></div> <div>$Q_{next} = S + R'Q$$SR = 0$</div>	<table><tr><th>Q</th><th>Q_{next}</th><th>S</th><th>R</th></tr><tr><td>0</td><td>0</td><td>0</td><td>×</td></tr><tr><td>0</td><td>1</td><td>1</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>×</td><td>0</td></tr></table>	Q	Q _{next}	S	R	0	0	0	×	0	1	1	0	1	0	0	1	1	1	×	0
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<div>JK</div> <div></div>	<table><tr><th>J</th><th>K</th><th>Q</th><th>Q_{next}</th></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>0</td><td>1</td><td>1</td></tr><tr><td>0</td><td>1</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>1</td><td>0</td></tr></table>	J	K	Q	Q _{next}	0	0	0	0	0	0	1	1	0	1	0	0	0	1	1	0	1	0	0	1	1	0	1	1	1	1	0	1	1	1	1	0	<div><p>JK=10 or 11</p><p>JK=01 or 11</p></div> <div>$Q_{next} = J'K'Q + JK' + JKQ'$$= J'K'Q + JK'Q + JK'Q' + JKQ'$$= K'Q(J' + J) + JQ'(K' + K)$$= K'Q + JQ'$</div>	<table><tr><th>Q</th><th>Q_{next}</th><th>J</th><th>K</th></tr><tr><td>0</td><td>0</td><td>0</td><td>×</td></tr><tr><td>0</td><td>1</td><td>1</td><td>×</td></tr><tr><td>1</td><td>0</td><td>×</td><td>1</td></tr><tr><td>1</td><td>1</td><td>×</td><td>0</td></tr></table>	Q	Q _{next}	J	K	0	0	0	×	0	1	1	×	1	0	×	1	1	1	×	0
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<div>D</div> <div></div>	<table><tr><th>D</th><th>Q</th><th>Q_{next}</th></tr><tr><td>0</td><td>×</td><td>0</td></tr><tr><td>1</td><td>×</td><td>1</td></tr></table>	D	Q	Q _{next}	0	×	0	1	×	1	<div><p>D=1</p><p>D=0</p></div> <div>$Q_{next} = D$</div>	<table><tr><th>Q</th><th>Q_{next}</th><th>D</th></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>0</td></tr><tr><td>1</td><td>1</td><td>1</td></tr></table>	Q	Q _{next}	D	0	0	0	0	1	1	1	0	0	1	1	1																																
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<div>T</div> <div></div>	<table><tr><th>T</th><th>Q</th><th>Q_{next}</th></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>0</td></tr></table>	T	Q	Q _{next}	0	0	0	0	1	1	1	0	1	1	1	0	<div><p>T=1</p><p>T=0</p></div> <div>$Q_{next} = TQ' + T'Q = T \oplus Q$</div>	<table><tr><th>Q</th><th>Q_{next}</th><th>T</th></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>0</td></tr></table>	Q	Q _{next}	T	0	0	0	0	1	1	1	0	1	1	1	0																										
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