

(a) Position 1

000	001, \emptyset	001, \emptyset	001, \emptyset	001, \emptyset
001	110, W	110, W	010, \emptyset	010, \emptyset
010	011, \emptyset	011, \emptyset	111, \emptyset	011, \emptyset
011	100, W	100, W	000, \emptyset	000, \emptyset
100	101, \emptyset	001, \emptyset	101, \emptyset	101, \emptyset
101	110, W	110, W	110, N	110, \emptyset
110	111, \emptyset	111, \emptyset	111, \emptyset	111, \emptyset
111	100, W	100, W	100, \emptyset	100, \emptyset

(b) Position 5

Figure 1: State machine(s) (a) at position 1, (b) at position 5.

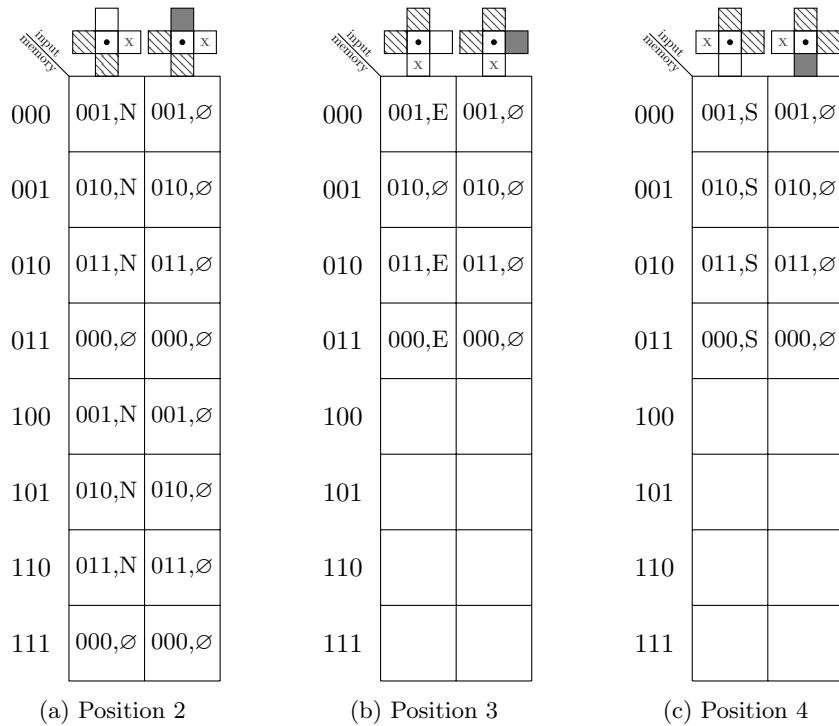
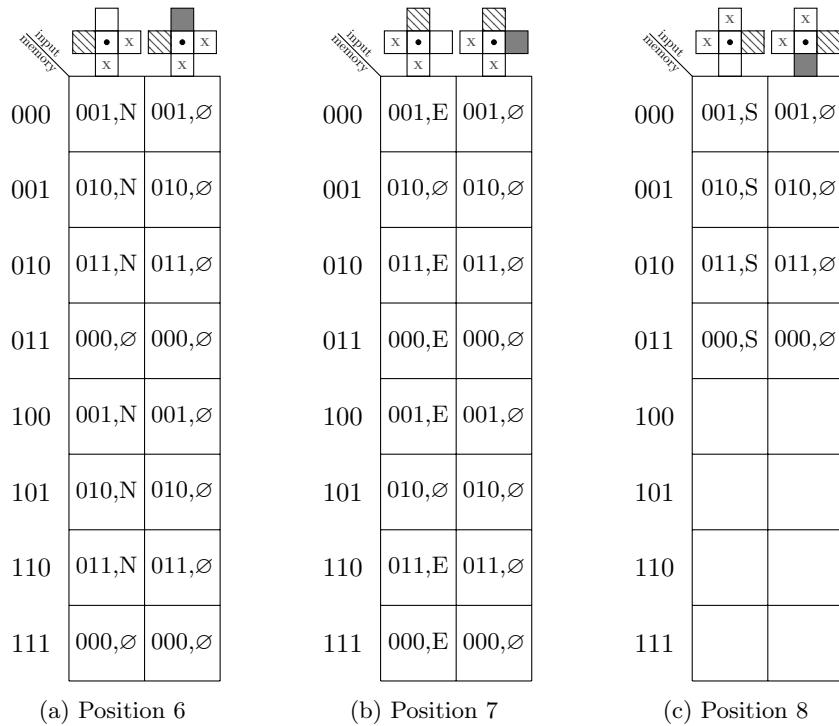


Figure 2: State machine(s) (a) at position 2, (b) at position 3, (c) at position 4.



The figure consists of three separate state tables labeled (a), (b), and (c), each representing a different position of a state machine. Each table has an 'input memory' section at the top and an 8x2 state table below.

(a) Position 6:

	input	memory	
000	001,N	001, \emptyset	
001	010,N	010, \emptyset	
010	011,N	011, \emptyset	
011	000, \emptyset	000, \emptyset	
100	001,N	001, \emptyset	
101	010,N	010, \emptyset	
110	011,N	011, \emptyset	
111	000, \emptyset	000, \emptyset	

(b) Position 7:

	input	memory	
000	001,E	001, \emptyset	
001	010, \emptyset	010, \emptyset	
010	011,E	011, \emptyset	
011	000,E	000, \emptyset	
100	001,E	001, \emptyset	
101	010, \emptyset	010, \emptyset	
110	011,E	011, \emptyset	
111	000,E	000, \emptyset	

(c) Position 8:

	input	memory	
000	001,S	001, \emptyset	
001	010,S	010, \emptyset	
010	011,S	011, \emptyset	
011	000,S	000, \emptyset	
100			
101			
110			
111			

Figure 3: State machine(s) (a) at position 6, (b) at position 7, (c) at position 8.

input memory

000	001,∅	001,∅	001,∅	001,∅	001,∅	001,∅	001,∅	001,∅
001	010,∅	010,∅	010,∅	010,∅	010,∅	010,∅	010,∅	010,∅
010	011,∅	011,S	111,∅	111,∅	011,∅	011,S	011,∅	011,∅
011	100,W	000,∅	100,W	000,∅	100,W	000,∅	100,W	000,∅
100	101,∅	101,∅	101,∅	101,∅	101,∅	101,∅	101,∅	101,∅
101	110,∅	110,N	110,∅	110,N	010,∅	010,∅	110,∅	110,∅
110	111,∅	111,∅	111,∅	111,∅	111,∅	111,∅	111,∅	111,∅
111	100,W	100,∅	100,W	100,∅	100,W	100,∅	100,W	100,∅

(a) Position 9

Figure 4: State machine(s) (a) at position 9.