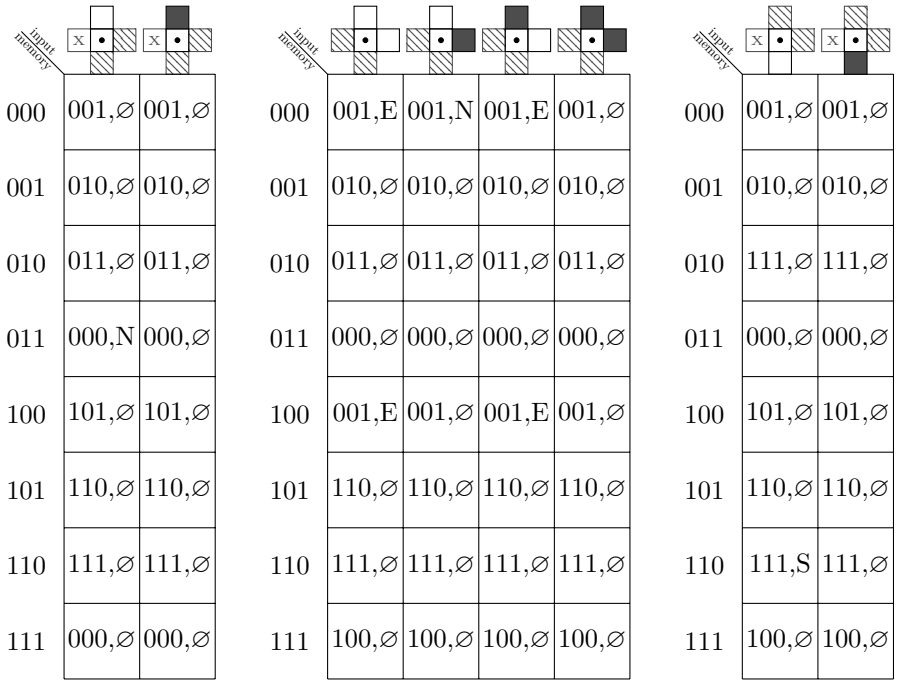
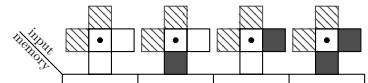


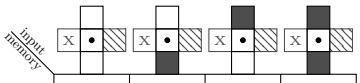
(a) Position 1 (b) Position 2 (c) Position 4

Figure 1: State machine(s) (a) at position 1, (b) at position 2, (c) at position 4.



input memory				
000	101,E	101,E	001,∅	001,∅
001	110,E	110,E	110,∅	110,∅
010	011,∅	011,∅	011,∅	011,∅
011	000,∅	000,∅	000,∅	000,∅
100	101,E	101,E	101,∅	101,∅
101	110,E	110,E	110,S	110,∅
110	111,∅	111,∅	111,∅	111,∅
111	100,∅	100,∅	100,∅	100,∅

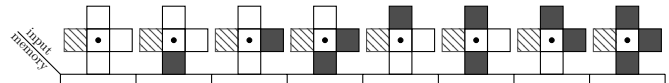
(a) Position 3



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

(b) Position 8

Figure 2: State machine(s) (a) at position 3, (b) at position 8.



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

(a) Position 6

Figure 3: State machine(s) (a) at position 6.