

input memory	
000	000,N
001	010,W
010	1000, $\emptyset$
011	010,N
100	101,N
101	1000, $\emptyset$
110	111,W
111	1000, $\emptyset$

(a) Position 1

input memory	
000	000,N
001	000,E
010	011,E
011	1000, $\emptyset$
100	101,N
101	1000, $\emptyset$
110	110,E
111	000,N

(b) Position 2

input memory	
000	001,S
001	1000, $\emptyset$
010	011,E
011	1000, $\emptyset$
100	100,S
101	110,E
110	1000, $\emptyset$
111	110,S

(c) Position 3

Figure 1: State machine(s) (a) at position 1, (b) at position 2, (c) at position 3.

input memory	
000	001,S
001	1000, $\emptyset$
010	010,W
011	100,S
100	1000, $\emptyset$
101	100,W
110	111,W
111	1000, $\emptyset$

(a) Position 4

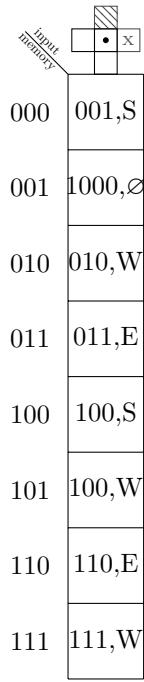
input memory	
000	000,N
001	000,E
010	010,W
011	011,E
100	101,N
101	1000, $\emptyset$
110	110,E
111	111,W

(b) Position 5

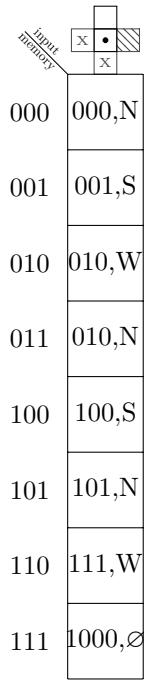
input memory	
000	000,N
001	001,S
010	011,E
011	1000, $\emptyset$
100	100,S
101	101,N
110	110,E
111	110,S

(c) Position 6

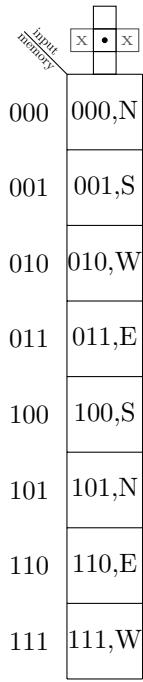
Figure 2: State machine(s) (a) at position 4, (b) at position 5, (c) at position 6.



(a) Position 7



(b) Position 8



(c) Position 9

Figure 3: State machine(s) (a) at position 7, (b) at position 8, (c) at position 9.