input memory				
00	01,∅	01,∅	01,∅	01,∅
01	00,W	00,W	00,∅	00,∅
10	01,∅	01,∅	01,∅	01,∅
11	00,W	00,W	00,∅	00,∅

(a) Position 1

input memory		
00	01,N	01,∅
01	00,N	00,∅
10	01,N	01,∅
11	00,N	00,∅

(b) Position 2

input memory		
00	01,E	01,∅
01	00,E	00,∅
10	01,E	01,∅
11	00,E	00,∅

(c) Position 3

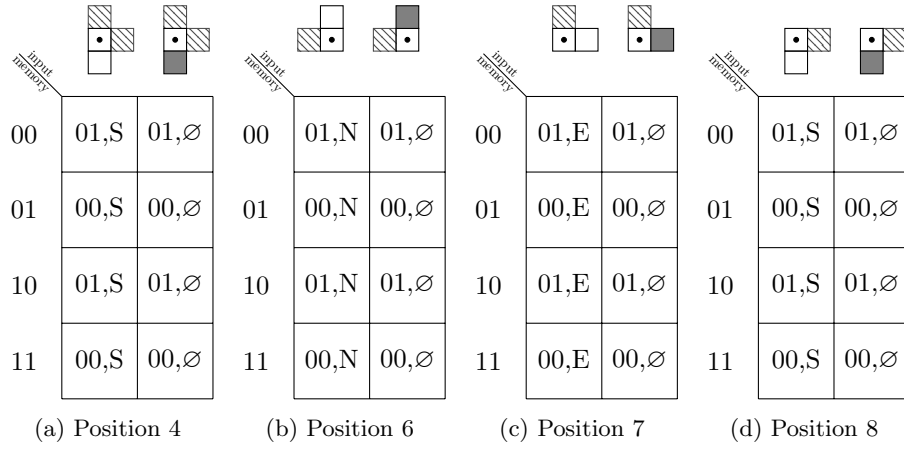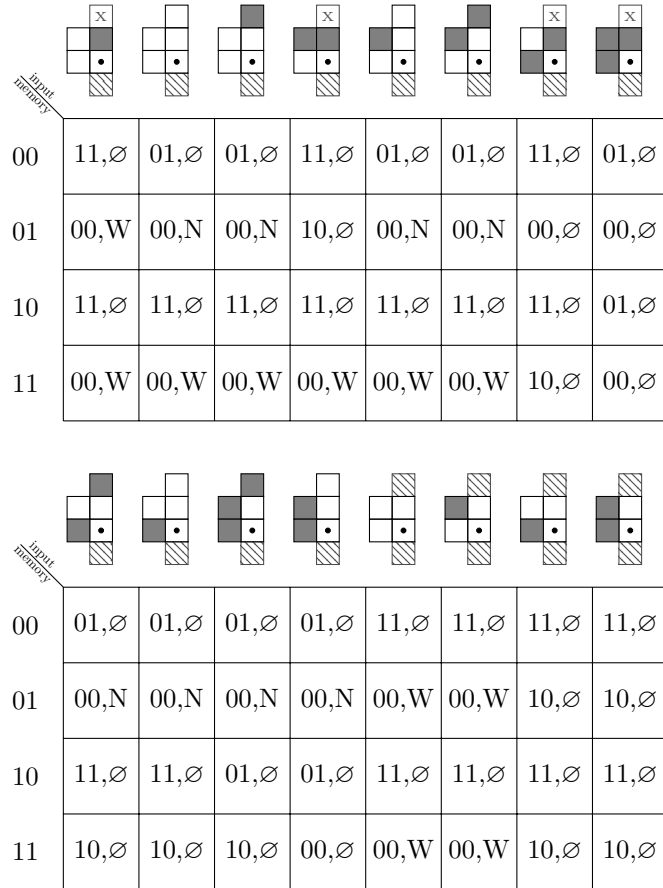Figure 1: State machine(s) (a) at position 1, (b) at position 2, (c) at position 3.

input memory		
00	01,S	01,∅
01	00,S	00,∅
10	01,S	01,∅
11	00,S	00,∅

(a) Position 4

input memory		
00	01,N	01,∅
01	00,N	00,∅
10	01,N	01,∅
11	00,N	00,∅

(b) Position 6

input memory		
00	01,E	01,∅
01	00,E	00,∅
10	01,E	01,∅
11	00,E	00,∅

(c) Position 7

input memory		
00	01,S	01,∅
01	00,S	00,∅
10	01,S	01,∅
11	00,S	00,∅

(d) Position 8

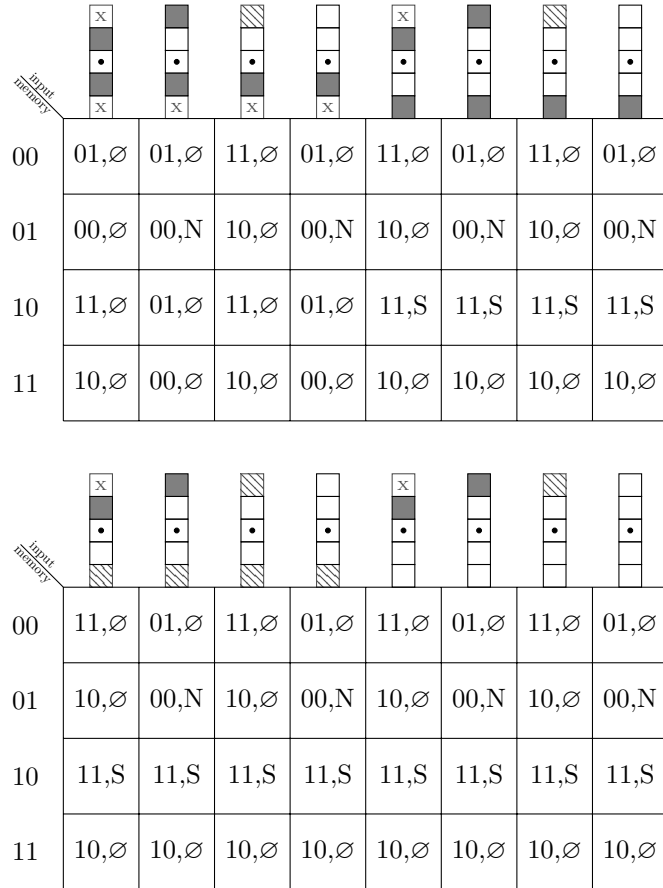Figure 2: State machine(s) (a) at position 4, (b) at position 6, (c) at position 7, (d) at position 8.

input / memory							
00	11,∅	01,∅	01,∅	11,∅	01,∅	01,∅	11,∅	01,∅
01	00,W	00,N	00,N	10,∅	00,N	00,N	00,∅	00,∅
10	11,∅	11,∅	11,∅	11,∅	11,∅	11,∅	11,∅	01,∅
11	00,W	00,W	00,W	00,W	00,W	00,W	10,∅	00,∅

input / memory							
00	01,∅	01,∅	01,∅	01,∅	11,∅	11,∅	11,∅	11,∅
01	00,N	00,N	00,N	00,N	00,W	00,W	10,∅	10,∅
10	11,∅	11,∅	01,∅	01,∅	11,∅	11,∅	11,∅	11,∅
11	10,∅	10,∅	10,∅	00,∅	00,W	00,W	10,∅	10,∅

(a) Position 5

Figure 3: State machine(s) (a) at position 5.

00	01,∅	01,∅	11,∅	01,∅	11,∅	01,∅	11,∅	01,∅
01	00,∅	00,N	10,∅	00,N	10,∅	00,N	10,∅	00,N
10	11,∅	01,∅	11,∅	01,∅	11,S	11,S	11,S	11,S
11	10,∅	00,∅	10,∅	00,∅	10,∅	10,∅	10,∅	10,∅

input
memory

00	11,∅	01,∅	11,∅	01,∅	11,∅	01,∅	11,∅	01,∅
01	10,∅	00,N	10,∅	00,N	10,∅	00,N	10,∅	00,N
10	11,S	11,S	11,S	11,S	11,S	11,S	11,S	11,S
11	10,∅	10,∅	10,∅	10,∅	10,∅	10,∅	10,∅	10,∅

(a) Position 9

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