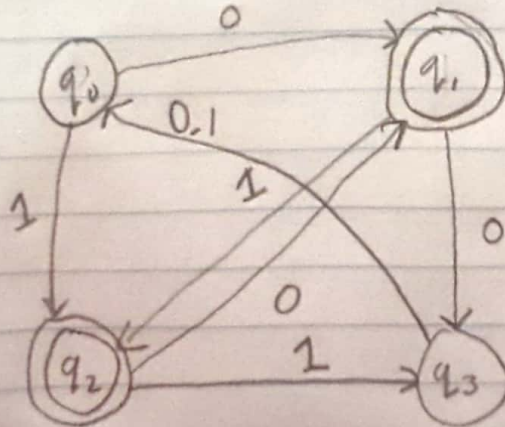


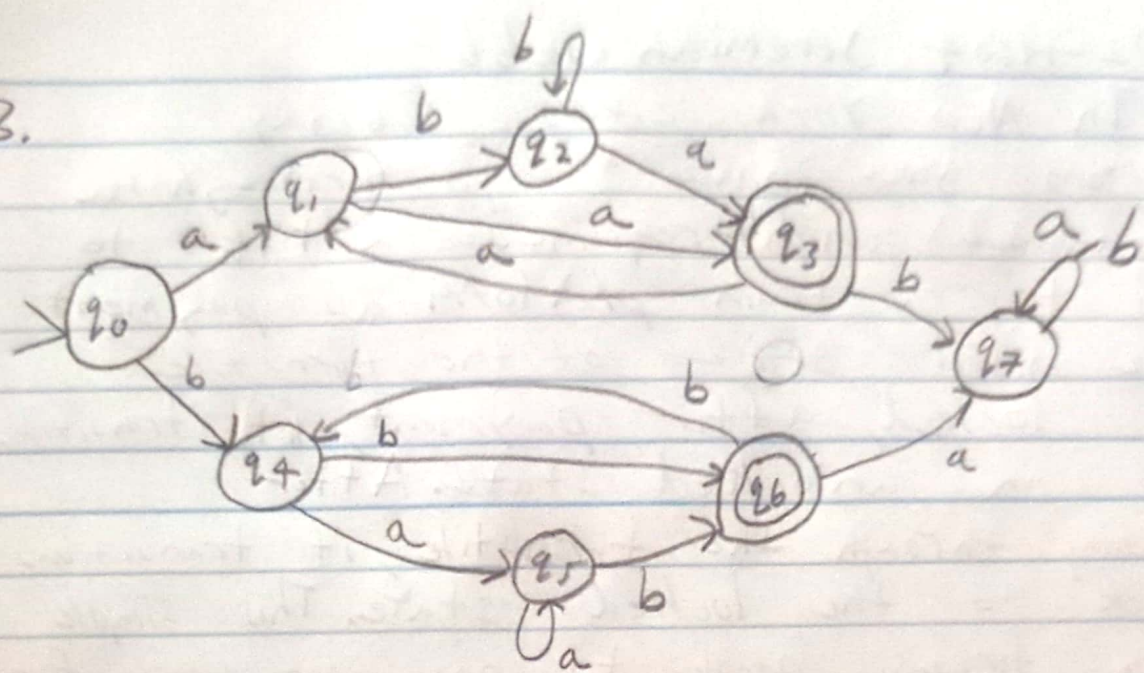
MO2-HW4 Jeremiah Webb

1. In New York city's subway system you have to go through a turnstile which requires a ticket to go to a train platform as payment. The initial state of the turnstile is locked, after payment, it transitions to an unlocked state. After pushing through the turnstile, it transitions back to the locked state. This simple design forces people to pay per person for the subway.

2.



3.



$$Q = \{q_0, q_1, q_2, q_3, q_4, q_5, q_6, q_7\}$$

$$\Sigma = \{a, b\}$$

$$q_0 = q_0$$

$$F = \{q_3, q_6\}$$

$\delta =$	a	b
0	1	4
1	2	3
2	3	2
3	1	7
4	5	6
5	5	6
6	7	4
7	7	7