Exercise 1

- Group 1: a, d, g, i, j, k
- Group 2: b, e, h
- Group 3: c
- Group 4: f

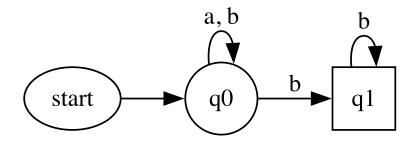
Exercise 3

Language L_1

Part A

$$L_1 = \left\{ x_0 x_1 ... \mid \left(\forall i \in N_0 \ . \ x_i \in \sum \right) \land (\exists i \in N_0 \ . \ x_i = a) \right\}$$

Part B



Part C

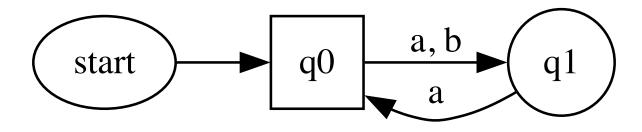
TODO

Language L_2

Part A

$$L_2 = \left\{ x_0 x_1 ... \mid \left(\forall i \in N_0 \ . \ x_i \in \sum \right) \land \left(\forall i \in N_0 \ . \ i \operatorname{mod} 2 = 1 \ . \ x_i = a \right) \right\}$$

Part B



Part C

TODO