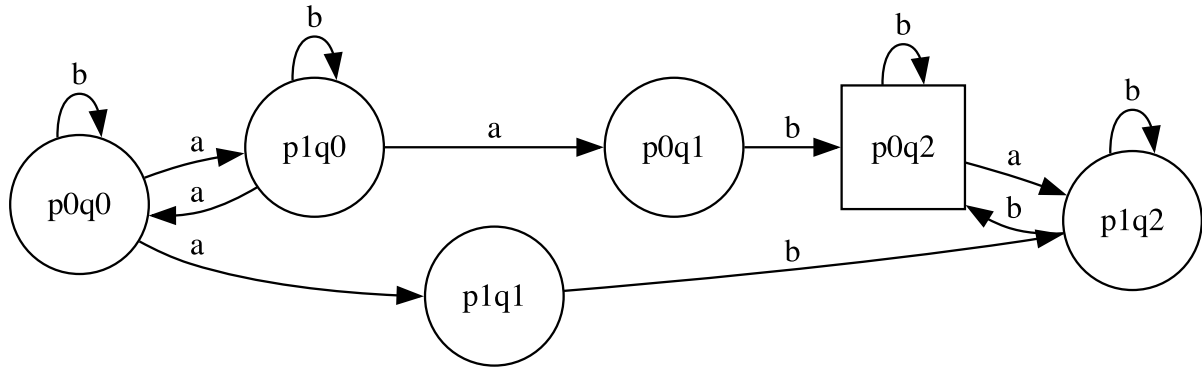


## Exercise 1

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

## Exercise 2



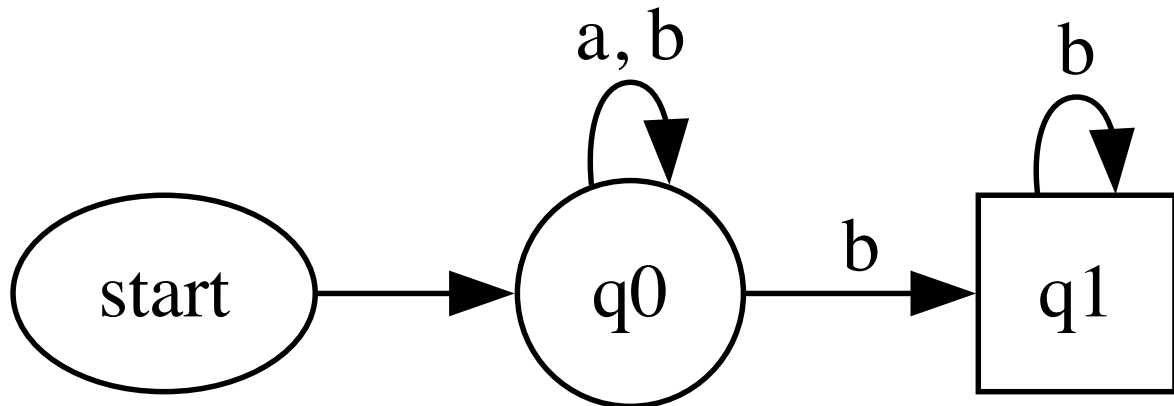
## Exercise 3

Language  $L_1$

Part A

$$L_1 = \{x_0x_1\ldots \mid (\forall i \in N_0 . x_i \in \Sigma) \wedge (\exists i \in N_0 . x_i = a)\}$$

Part B



Part C

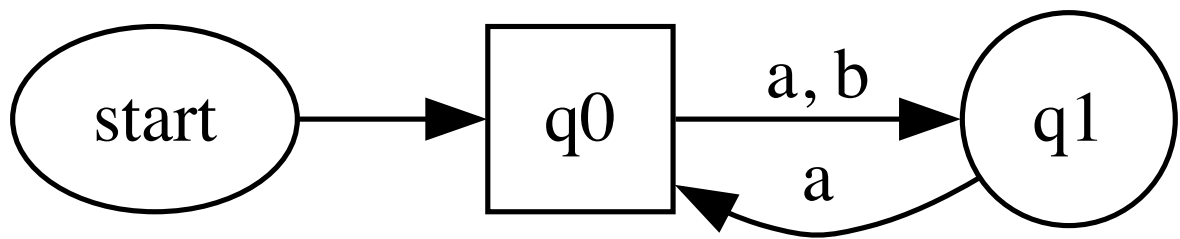
TODO

Language  $L_2$

Part A

$$L_2 = \{x_0x_1\ldots \mid (\forall i \in N_0 . x_i \in \Sigma) \wedge (\forall i \in N_0 . i \bmod 2 = 1 . x_i = a)\}$$

Part B



**Part C**  
TODO