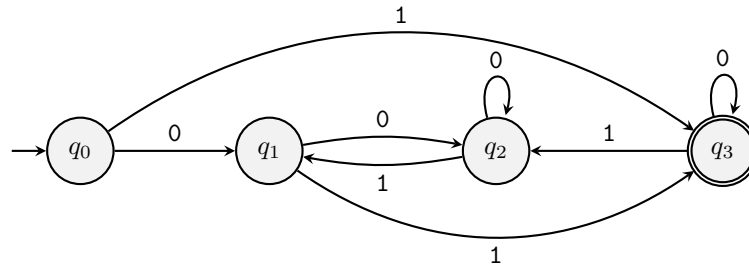


You have to use the designated spaces for your answers. No extra pages will be provided.

Problem 1: Converting DFAs to Regular Expressions (7 points)

Convert the following DFA into an equivalent regular expression using the state elimination method. First eliminate q_1 , then q_2 and finally q_3 . You must show work.



Problem 2: Regular Expressions (3 points)

Give a regular expression for the following language over $\Sigma = \{0, 1\}$.

$$L = \{w : 00 \text{ appears at the end of } w \text{ but nowhere else}\}$$