Theory of Computation

Exercise 4:

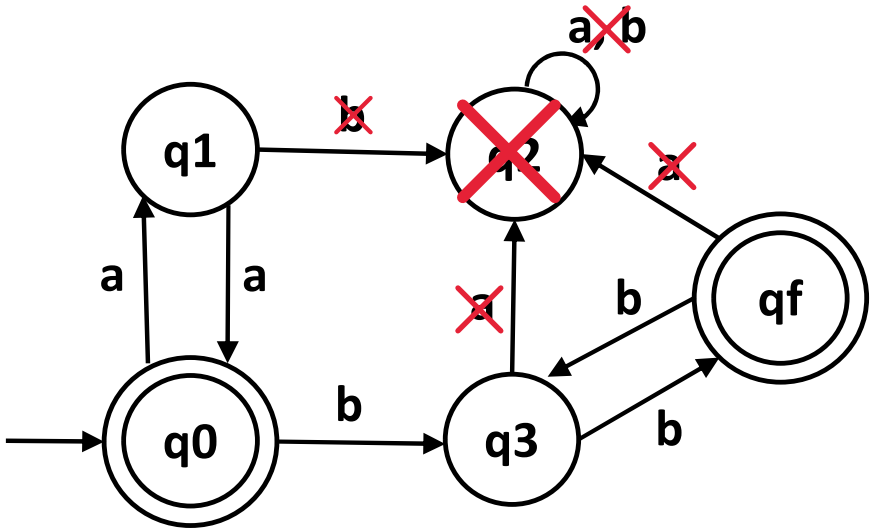
(Closure properties of Regular Language and Regular Expression)

1. Prove that the language $\{a^m b : m \geq 1 \; and \; m \neq 100\}$ is regular.

2. Find regular expression for the following language

$$L = \{ w \in \{a, b\}^* : w \; does \; not \; end \; with \; ab \}$$

*3. Find regular expression for the following DFA. (Homework 3)



L = λ + (aa)*.(bb)*+(aa*.bb)+bb