Homework 3: NFA's and Regular Expressions
Theory of Computation (CSCI 3500)

Write the solution to each question on its own page.
All questions must be in order.
Your name must be on each page.
All assignments not adhering to this will not be graded.

0. Define an NFA for the following language:

$$L = \{w \in \{a, b, c\}^* \mid |w|_a \text{ is odd or } |w|_b \text{ is even or } |w|_c = 3\}$$

1. Define a regular expression for the language:

$$L = \{w \in \{0, 1\}^* \mid w \text{ has a subword } 101\}$$

2. Convert the following NFA to its equivalent DFA using the NFA to DFA conversion algorithm: