

## Homework 2: Regular Languages and DFAs

### 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.

Then email me a single PDF file of your solution set.

All assignments not adhering to this will not be graded.

0. (1 pt): Define the language of binary words that have an even number of ones.
  
  
  
  
  
  
  
  
  
  
1. (1 pt): Define the language of binary numbers that do not have a subword of 11.
  
  
  
  
  
  
  
  
  
  
2. (2 pt): Define a DFA for the following language:

$$L = \{w \in \{0, 1\}^* \mid |w|_0 = 1 \text{ or } |w|_1 = 2\}$$