

Homework 1: Regular Languages and DFAs
Theory of Computation (CSCI 3500)
Total Points: 10

Due: Wednesday, August 31 by 5:15pm

Write the solution to each question on its own page.

All papers must be stapled in order.

Your name must be on each page. 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:

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