# Lab 7: Logisim

By: CS 382 CAs

## **Logisim Evolution**

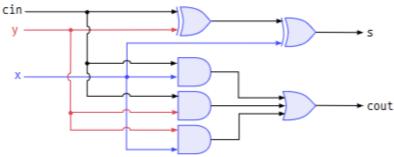
#### **Logisim Basics:**

- Binary operations like AND, OR, XOR, and NOT have a corresponding logic gate in Logisim.
- Gates can be modified to increase the number of inputs / number of bits per input
- Testing your simulation
  - Download the vector files. On the top bar, go to Simulate > Test
    Vector > Load Vector > Select test file

## Lab 6 Assignment

### Lab Assignment

- Task 1: Nibble Adder
  - Create a system of logic gates that will add two nibbles (4 bits) together
  - See Chapter 3.1.2.3 for more information



- Task 2: Two-way Nibble Multiplexor
  - Create a multiplexor that chooses between two nibble inputs
    - Only 1 bit of control signal is needed
  - See Figure 3.5 for more information

