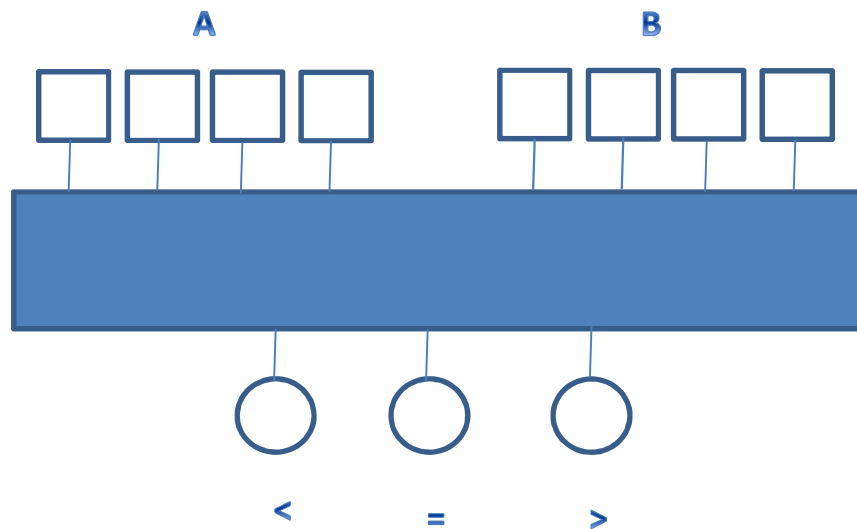CS240 Spring 2013 Project

2's Complement Comparator

Due: Midnight, April 29, 2013

Create a 4 bit 2's Complement Comparator. The circuit will look like this:

A   **B**

<   **=**   **>**

Inputs:

A – a 4 bit 2's complement number

B – a 4 bit 2's complement number

Outputs:

One of the three outputs will be set to '1' depending on the input values.

Requirements:

1) You may only use the following built-in LOGISIM gates: AND, OR, XOR, NOT.
2) You may NOT use any other prebuilt LOGISIM circuit (i.e. Adder, Multiplexer, etc.), however, you are free to construct your own Adders, Multiplexers, etc. using AND, OR, XOR, NOT gates.

Submission:

1) Name the file: CS240_Lastname_Firstname.circ   where you will replace the firstname and lastname with your own name.
2) TEST your file, preferably on another computer. If it doesn't load, you will get a zero.
3) Upload your submission to Blackboard.