Create a small ALU in Logisim (based on Figure 5.15) capable of performing the following operations on two 8-bit unsigned numbers, A and B. The 2-bit control, F, indicates the operation to be performed. The operations SEQ and SGE are to produce an N-bit, zero-extended, output similar to the SLT instruction described in the text.

F	Mneumonic	Operation
00	ADD	Add A+B
01	SUB	Subtract A-B
10	SEQ	Set if A = B
11	SGE	Set if A ≥ B

You may use a Logisim adder in your ALU design, but not the Logisim comparator.

Design a test for your ALU. Submit a screenshot of your circuit diagram (make sure all text is readable), and submit a single screenshot of the Logisim table created during your testing. In addition, submit a text description of the testing so that I can understand what you are trying to show me with the table.

Collect all your work in one document. Save as pdf or some similar format. Email to me by 8am on the due date. Then, enjoy the rest of your break.

As always, homework is to be single-sided and stapled.