## ENGR-354 HW\#7

## BRING LOGIC KIT TO CLASS!!!

Due Thursday.
By the start of class you should have your circuit wired up and working.

The assignment is to continue working on the adder circuit we began in class. In class I initially indicated that we would build a two-bit adder. However, for this assignment you only need to build (wire up on your breadboard) one full adder.

This diagram shows the items connected to the full adder which is represented by a box. There will be three data inputs: A, B and Carry-In. Each of these signals are a single bit which can be created with a slide switch. Of course power and ground must be supplied to the ICs that make up your adder but are not typically shown on logic diagrams. There will be two outputs, Sum and Carry Out, which can be connected to LEDs so you can observe the logic level. When the LED is lit up we can consider it a logic 1 and when the LED is not lit up a logic 0 .


The content of the box named Full Adder is the logic circuit you worked on in class.
The LEDs can either be segments of the Bar LED or individual LEDs.
Also, read from the start of chapter 5 through section 5.3

