

CST 337: Computer Architecture

## Homework 5

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Homework must be done on video and submitted to the corresponding submitting portal on iLearn! The video must show the functionality AND before or later your face without a scene switch (cut). The video should not exceed 100MB. Staying under one minute is totally fine.

Additional, upload the assembler text file also on iLearn!

## **Exercise:**

Construct a two bit full adder with your Arduino:

- You need 2 input pins for the first number A
- You need 2 input pins for the second number B
- Have 4 switches to determine the value on these pins (either 0 or 1), so have this switches between the input pins and the positive power supply (+).
- Have 2 output pins connected to LEDs (better with a resistor in serial) to determine the output of the 2 bit full adder
- Have another LED on a third output pin to determine a carry-over.