

# CECS 262

## Lab 3: HD44780 LCD

### Purpose:

The purpose of this lab is to help students learn how to interface the HD44780 LCD with the 8051

### Tasks:

1. Connect your LCD to your 8051
2. Program the 8051 to display the following:
  - Mode 0 [P0.0 == 0]: Display a string on the LCD  
Example output: "Hello World"
  - Mode 1 [P0.0 == 1]: Counter that counts up every half a second from 0-99.  
When the Counter overflows it starts over at 0. The state of the number must be tracked.  
Example output: "Counter: 00", "Counter: 001", ..... "Counter: 99"
3. Test out other LCD functions such as turning off the display, changing the cursor position and so on...

### Demo and Submission:

- Group of 2
- Due 11/16/2017, End of Lab
- Submit your zipped project to Beachboard DropBox
- One Submission per group