





CMPE 453, Section-2

Lab-3

BUTTON CONTROLLED I2C DATA TRANSFER

A- In this LAB, you will use

Arduino-Uno 	Arduino Base Shield 	Grove Button 	Grove LCD Screen 
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- I. Connect Arduino base shield to Arduino Uno.
- II. Grove Button should be connected to any digital interface of base shield.
- III. Grove LCD Screen communicates with Arduino via I2C.

Useful information:

https://wiki.seeedstudio.com/GroveLCD_RGB_Backlight/

<https://wiki.seeedstudio.com/Grove-Button/>

B- Program the microcontroller by using C programming on Arduino IDE.

When your program runs, it should do the following task.

- I. At the beginning, “Hello” message should be displayed on LCD Screen.
- II. Number of button presses should be displayed on LCD display. If there exists 5 presses in 3 seconds, the number on LCD display should be set to 0.