

CAB2

CS3514

08/10/17

- 1) Connect a push-button switch with appropriate pull-down resistor to Pin 8.
- 2) Write code to toggle LED 13 on every press of the switch.
- 3) Notice how the switch bouncing results in the LED not toggling correctly.
- 4) Update your code in (2) to implement software debouncing and verify that it works correctly.
- 5) Update your code in (4) to toggle the LED on a negative-edge transition - i.e., when the button is released.
- 6) Write code to toggle the LED by pressing a key on the keyboard. Report the LED status back to the computer screen.
- 7) Use `analogWrite()` to successively brighten your LED on every button press until max brightness is achieved. Subsequent presses should successively dim the LED until it turns off.