

Assignment #6 – Direct Register Access

In this assignment you will write a program for the mbed that directly accesses the hardware registers instead of using the mbed class library. Specifically, do not use the `DigitalIn` or `DigitalOut` classes or the `#include` instruction.

Connect a switch between the mbed's p8 and GND, and a second switch between the mbed's p20 and VOUT. These switches should control the state of the 4 built-in LEDs. Initially, all 4 LEDs should be off. Each time the switch connected to p8 is pressed, one more built-in LED should turn on. If they are already all on, pressing the switch should do nothing. Each time the switch connected to p20 is pressed, one more built-in LED should turn off. If they are already all off, pressing the switch should do nothing.

The switches should be usable on a human time scale, so you'll need to either explicitly wait for the switch to be released or wait long enough that the LED updates no faster than 4 times per second if the switch is held down.

Submit your `main.cpp` file to the appropriate dropbox on Canvas by the end of April 30th.