

# **CMPE 460 Lab Exercise Zero Lab Report Breakdown**

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Intro to K64F GPIO and Keil MicroVision

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The purpose of this lab was to introduce the FRDM-K64F and Keil uVision IDE by writing code to utilize the K64 GPIO ports. The GPIOs were used to control three LEDs (red, blue and green) using input from one pushbutton.

- `GPIOx_PDOR=<value>;` sets the entire register to `<value>`
- `GPIOx_PSOR=<value>;` sets all bits in the register which `<value>` has a '1' bit
- `GPIOx_PCOR=<value>;` this clears all bits in the register for which `<value>` has a '1' bit
- `GPIOx_PTOR = <value>;` this toggles all bits in the register for which `<value>` has a '1' bit.
- `if(GPIOx_PDIR == <value>;)` this is used to test an input register to see if the register at bit `<value>` is high or low.