Lab 1 – Fixed Point Output

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**Lab 1 Objectives:**

The goals for this lab are to get familiarized with Keil uVision software and our Stellaris Development Board as well as investigate the use and implications of fixed point numbers and arithmetic. Because the ARM Cortex M3 microprocessor does not have a floating point logic unit as a part of its microarchitecture, fixed point arithmetic will have to be implemented everywhere exact calculations are required. This lab requires us to understand the different aspects of fixed point numbers such as precision and variable integers. In addition, we must understand how to create appropriate fixed point numbers for different situations and how to preform arithmetic upon them. By doing this lab were able to produce code that accepts fixed point numbers in both decimal and binary format then print them in human-readable decimal format on the OLED screen.