

ETGG4804 — Optimization

Lab 1 — Intro to ARM7

10 Points

Spring 2016

DUE ON 1/20/2016

Overview

The purpose of this lab is to familiarize you with the ARM7 registers, instructions and operation. The tasks in this lab are to be written in assembly language using the ARM7 instructions provided on the class website. Programs should be tested using the debug mode in Visual Boy Advance.

Tasks

1. Write a program that sets the value of R0 to 7 and R1 to 0x45.
2. Write a program that copies the value of R0 to R1, multiplies the value in R1 by 4 and adds 100 to it.
3. Write a program that counts from 1 to 10. You must use one of the ARM registers to store the current value during the count. You must use a loop.