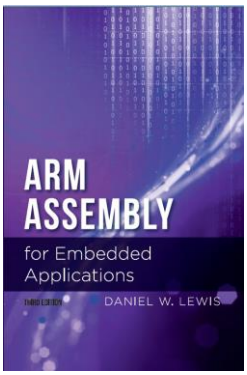

Programming Lab #4

Quadratic Equations

Prerequisite Reading: Chapters 1-5
Revised: October 10, 2017

Create a single ARM Cortex-M4 assembly source code file containing three functions. These functions are called by a main program (download from here) that will test your functions for three test cases. The functions and their prototypes are:

```
int32_t Discriminant(int32_t a, int32_t b, int32_t c) ;
```

Discriminant returns the value of b*b - 4*a*c

```
int32_t Root1(int32_t a, int32_t b, int32_t sqrt_d) ;
```

Root1 returns the value of (-b + sqrt_d)/(2*a).

```
int32_t Root2(int32_t a, int32_t b, int32_t sqrt_d) ;
```

Root1 returns the value of (-b - sqrt_d)/(2*a).

If your code is correct, the display should look like the image below: