CO222: Programming Methodology
Lab: 01

Deadline: Jan 22nd 2016 @ 8.00PM

Task 01

Write a program to read two integers with the following significance.

The first integer value represents a time of day on a 24 hour clock, so that 1245 represents quarter to one mid-day, for example.

The second integer represents time duration in a similar way, so that 345 represents three hours and 45 minutes. This duration is to be added to the first time, and the result printed out in the same notation, in this case 1630 which is the time 3 hours and 45 minutes after 12.45.

When your program is run, the input and output of the program should look like the following:

```
./time
Enter the start time: 1415
Enter the duration: 50
End time is 1505.
```

Task 02

Your second task for this lab is to write a program named **quad.c** which prompts the user to input three coefficients a, b, c for a quadratic equation

$$ax^2 + bx + c = 0$$

Your program should then compute the solution(s) to this equation, using the quadratic formula (see http://en.wikipedia.org/wiki/Quadratic_equation), and print them. Use one or more "if" statements to ensure that your program handles all cases correctly.

Following is a typical input/output scenario and the format:

```
./quad
Enter the coefficients: 1 -3 2
The solutions are: 1.00 and 2.00
```

You should test your program for the following set of inputs:

Input	Output
1 -3 2	1.00 and 2.00
15 8 1	-0.33 and -0.20
1 10 25	-5.00
5 2 3	-0.20 - 0.75i and -0.20 + 0.75i
2 0 7	-1.87i and 1.87i
2 7 -4	-4.00 and 0.50
1 0 1	-1.00i and 1.00i
1 0 -1	-1.00 and 1.00