Lab 2

Turn In:

1. Code Assignment – Exercise #1 Due in class on Thursday, September 13, 2012
    a) For each exercise, a hardcopy package must be generated to include the following items:
        - Cover Sheet (see the sample copy include in lecture note)
        - Exercise/problem statement
        - Copy of your source file (C++ program named as **`cis25Fall2012YourNameLab2Ex1`**)
        - Copy of output (copy and paste from output screen as possible)
    b) Submitting one hard copy package for each exercise; and
    c) Emailing each document as follows,
        - One message for each exercise.
        - Attaching the source file that was created in part a).
        - The SUBJECT line of each message should have one of the following lines:

          `CIS 25 Fall 2012 Your Name : Lab 2 – Exercise #1`

          Or,

          `cis25Fall2012YourNameLab2Ex1.cpp`

3. Q.E.D.

1. Code Assignment

Exercise 1 – Due Thursday, September 13, 2012

1. Write a C++ program that will display the following information on screen.

```
Class Information --
  CIS 25 – C++ Programming
  Laney College

Assignment Information --
  Assignment Number:  Lab 02 – Exercise #1
  Written by:         Your Name
  Due Date:           Due Date
```

2. Modify your Lab #1 so that your program will then allow the user to repeatedly ask for integer values and do the same assessments. The output should be as follows,
    a. Write a function named as `analyzeIntegerYourName()` that will then ask the user to enter an integer and print out the evenness or oddness and positiveness or negativeness of this integer.
    b. In your program, `main()` will have the setup that will call `analyzeIntegerYourName()` function to produce the required output – A menu function is highly recommended.
    c. A sample output is given below.

```
****************************************
*                  MENU                *
* 1. Calling analyzeIntegerYourName() *
* 2. Quit                              *
****************************************

Select an option ( 1 or 2 ): 3

WRONG OPTION!


****************************************
*                  MENU                *
* 1. Calling analyzeIntegerYourName() *
* 2. Quit                              *
****************************************

Select an option ( 1 or 2 ): -1

WRONG OPTION!


****************************************
*                  MENU                *
* 1. Calling analyzeIntegerYourName() *
* 2. Quit                              *
****************************************

Select an option ( 1 or 2 ): 1

  Enter an integer: 12735
```

```
  12735 is an odd and non-negative number.

  The least significant digit: 5
  The most significant digit: 1

  The smallest digit: 1
  The largest digit: 7

  The sum of all digit(s): 18


****************************************
*                  MENU                *
* 1. Calling analyzeIntegerYourName() *
* 2. Quit                              *
****************************************

Select an option ( 1 or 2 ): 1
  Enter an integer: -2794

  -2794 is an even and negative number.

  The least significant digit: 4
  The most significant digit: 2

  The smallest digit: 2
  The largest digit: 9

  The sum of all digit(s): 22


****************************************
*                  MENU                *
* 1. Calling analyzeIntegerYourName() *
* 2. Quit                              *
****************************************

Select an option ( 1 or 2 ): 1
  Enter an integer: -27904

  -27904 is an even and negative number.

  The least significant digit: 4
  The most significant digit: 2

  The smallest digit: 0
  The largest digit: 9

  The sum of all digit(s): 22


****************************************
*                  MENU                *
* 1. Calling analyzeIntegerYourName() *
* 2. Quit                              *
****************************************

Select an option ( 1 or 2 ): 1
  Enter an integer: 0
```

```
  0 is an even number.

  The least significant digit: 0
  The most significant digit: 0

  The smallest digit: 0
  The largest digit: 0

  The sum of all digit(s): 0


****************************************
*                  MENU                *
* 1. Calling analyzeIntegerYourName() *
* 2. Quit                              *
****************************************

Select an option ( 1 or 2 ): 2

  Have Fun ...
```

3. Save the program as `cis25Fall2012YourNameLab2Ex1.cpp`