Lab 2

Turn In:

1. Exercise #1 – Due in class on Thursday, February 11, 2016
    a) For each exercise, a hardcopy package must be generated to include the following items:
        - Cover Sheet (use the sample copy include in class/lecture note)
        - Exercise/problem statement
        - Copy of your source file (C++ program named as **`cis25Spring2016YournameLab2Ex1.cpp`**)
        - Copy of output (copy and paste to the end of your program as COMMENT block)
        - Copy of YOUR COMMENTS (as a separate comment block) after YOUR PROGRAM OUTPUT
    b) Submitting in class one hard copy for each document
    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 the message should have one of the following lines:

          `CIS 25 Spring 2016 Your Name : Lab 2 – Exercise #1`

          Or,

          `cis25Spring2016YourNameLab2Ex1.cpp`

3. Q.E.D.

1. Coding Assignment

Exercise #1

1. Write a program to first display the exercise information as below,

```
CIS 25 - C++ Programming
Laney College
Your Name

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

2. Then, the program will generate a menu to provide the output shown below

```
****************************************
*                  MENU                *
* (1) Calling getMostOccurredDigit()   *
* (2) Calling getLeastOccurredDigit()  *
* (3) Quit                             *
****************************************
Enter your option (1, 2, or 3): 4

WRONG OPTION!

****************************************
*                  MENU                *
* (1) Calling getMostOccurredDigit()   *
* (2) Calling getLeastOccurredDigit()  *
* (3) Quit                             *
****************************************
Enter your option (1, 2, or 3): 1

Enter an integer: 123444034

Calling getMostOccurredDigit() --

The digit occurred most in 123444034 is 4.

****************************************
*                  MENU                *
* (1) Calling getMostOccurredDigit()   *
* (2) Calling getLeastOccurredDigit()  *
* (3) Quit                             *
****************************************
Enter your option (1, 2, or 3): 1
```

```
Enter an integer: -390345505

Calling getMostOccurredDigit() --

The digit occurred most in -390345505 is 5.

****************************************
*                  MENU                *
* (1) Calling getMostOccurredDigit()   *
* (2) Calling getLeastOccurredDigit()  *
* (3) Quit                             *
****************************************
Enter your option (1, 2, or 3): 1

Enter an integer: 39034550

Calling getMostOccurredDigit() --

The digit occurred most in 39034550 is 0.

****************************************
*                  MENU                *
* (1) Calling getMostOccurredDigit()   *
* (2) Calling getLeastOccurredDigit()  *
* (3) Quit                             *
****************************************
Enter your option (1, 2, or 3): 2

Enter an integer: -45588524

Calling getLeastOccurredtDigit() --

A LOD in -45588524 is 2.

****************************************
*                  MENU                *
* (1) Calling getMostOccurredDigit()   *
* (2) Calling getLeastOccurredDigit()  *
* (3) Quit                             *
****************************************
Enter your option (1, 2, or 3): 2

Enter an integer: 42351654

Calling getLeastOccurredtDigit() --

A LOD in 42351654 is 1.

****************************************
*                  MENU                *
* (1) Calling getMostOccurredDigit()   *
```

```
* (2) Calling getLeastOccurredDigit() *
* (3) Quit                            *
**************************************
Enter your option (1, 2, or 3): 2

Enter an integer: -555

Calling getLeastOccurredtDigit() --

A LOD in -555 is 5.

**************************************
*                 MENU               *
* (1) Calling getMostOccurredDigit()  *
* (2) Calling getLeastOccurredDigit() *
* (3) Quit                            *
**************************************
Enter your option (1, 2, or 3): 3

  Working Good!
```

Only `cout` and `cin` (with their built-in and supportive manipulators) are allowed to be used.

Note also that **no global variables and data are allowed**. All functions (as if you need them) must be written and no library functions are allowed.

3. Name your program as `cis25Spring2016YourNameLab2Ex1.cpp`.
4. Again, in your program, no GLOBAL DATA are allowed and you must write all functions that you need to have/use.