Homework #4

Turn In:

1. Exercise #1 – Due on **Monday, July 13, 2020 at 11:00pm**
    a) For each exercise, a package must be generated to include the following items:
        - Copy of your source file (C program)—your source file MUST BE NAMED as **`cis6Summer2020YourNameHw4Ex1.c`**
        - Copy of output (copy and paste to the end of your program as **`PROGRAM_OUTPUT`** comment block)
        - Copy of **`Logic_Code_Output_COMMENTS`** (as a separate comment block) after the PROGRAM_OUTPUT.

    b) Emailing each package as follows,
        - One email message for each exercise.
        - The SUBJECT line of the message should have the following line:

`cis6Summer2020YourNameHw4Ex1.c`

        - Attaching the source file that was created in part a).

3. Q.E.D.

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1. Coding Assignment

Exercise 1 – Due Monday, July 13, 2020

(1) Write a C program with call to functions to produce the output given below.

(2) The program should display the output to screen as

```
CIS 6 - Introduction to C Programming
Laney College
YourName

Assignment Information --
  Assignment Number:  Homework 4,
                      Coding Assignment -- Exercise #1
  Written by:         YourName
  Submitted Date:     Due Date
```

You need to replace "**Your Name**" with your real name and "**Due Date**" with the specified due date.

The above result should come from a call to a function named as `displayClassInfoYourName()`, where `YourName` must be replaced by your first name and your last name initial. For examples, if your name is **John Smith** then `YourName` should be `JohnS` throughout all of your work/code as mentioned.

(3) The program will then continue to call other functions and display the results as follows,

```
// OUTPUT - Sample Run

CIS 6 - Introduction to C Programming
Laney College
YourName

Assignment Information --
  Assignment Number:  Homework 4,
                      Coding Assignment -- Exercise #1
  Written by:         YourName
  Submitted Date:     Due Date


****************************************
*              MENU - HW #4            *
*  (1) Calling displayAllDigitYourName() *
*  (2) Quit                            *
****************************************
Enter an integer for option + ENTER: 6

Wrong Option!

****************************************
*              MENU - HW #4            *
*  (1) Calling displayAllDigitYourName() *
*  (2) Quit                            *
****************************************
Enter an integer for option + ENTER: 1
```

```
Enter an integer: -9

Calling displayAllDigitYourName() with argument of -9 –

  -9 is a negative number.
  There is/are 1 digit(s).

  The digit(s) would be
    9

  There is/are 0 even digit(s).
  There is/are 1 odd digit(s).

*****************************************
*              MENU – HW #4             *
*  (1) Calling displayAllDigitYourName() *
*  (2) Quit                             *
*****************************************
Enter an integer for option + ENTER: 1

Enter an integer: -13454

Calling displayAllDigitYourName() with argument of -13454 --

  -13454 is a negative number.
  There is/are 5 digit(s).

  The digit(s) would be
    4
    5
    4
    3
    1

  There is/are 2 even digit(s).
  There is/are 3 odd digit(s).

*****************************************
*              MENU – HW #4             *
*  (1) Calling displayAllDigitYourName() *
*  (2) Quit                             *
*****************************************
Enter an integer for option + ENTER: 1

Enter an integer: 3450406

Calling displayAllDigitYourName() with argument of 3450406 --

  3450406 is a positive number.
  There is/are 7 digit(s).

  The digit(s) would be
    6
    0
    4
    0
```

```
    5
    4
    3

  There is/are 5 even digit(s).
  There is/are 2 odd digit(s).

****************************************
*              MENU - HW #4            *
*  (1) Calling displayAllDigitYourName() *
*  (2) Quit                            *
****************************************
Enter an integer for option + ENTER: 1

Enter an integer: -3450406

Calling displayAllDigitYourName() with argument of -3450406 --

  -3450406 is a negative number.
  There is/are 7 digit(s).

  The digit(s) would be
    6
    0
    4
    0
    5
    4
    3

  There is/are 5 even digit(s).
  There is/are 2 odd digit(s).

****************************************
*              MENU - HW #4            *
*  (1) Calling displayAllDigitYourName() *
*  (2) Quit                            *
****************************************
Enter an integer for option + ENTER: 1

Enter an integer: 0

Calling displayAllDigitYourName() with argument of 0 --

  The given value is ZERO!

****************************************
*              MENU - HW #4            *
*  (1) Calling displayAllDigitYourName() *
*  (2) Quit                            *
****************************************
Enter an integer for option + ENTER: 2

Have fun!
```

At least, your program should have and use the following functions,

`displayClassInfoYourName()`

`displayAllDigitYourName()`

where `YourName` must be replaced by your first name and your last name initial as mentioned.

The sample run will have the options and values selected by the user.

At least, you must run your program to produce the output as shown above.

(4) Save the program as **`cis6Summer2020YourNameHw4Ex1.c`**; and

(5) The above output should be copied and added to the end of the code in the OUTPUT comment block.