

Turn In:

1. Exercise #1 – Due on **Thursday, July 23, 2020 by 8:30pm Email Submission**

- 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 **cis6Summer2020YourNameFinalVersionB.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:

cis6Summer2020YourNameFinalVersionB.c

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

2. This is an open book/note and compiler required exam.

3. No personal assistance from any live sources: Human or humanoid.

4. You must show yourselves on the ZOOM screen at all time (from shoulder up)!

5. Thank you for taking the “Introduction to programming” class.

6. Q.E.D.

1. Coding Assignment

Exercise 1 – Due Thursday, July 23, 2020 by 8:30pm Email Submission

- (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
```

```
Final Exam Information --
Written by:      YourName
Submitted Date: 2020/07/23
```

You need to replace “**Your Name**” with your real name.

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
```

```
Final Exam Information --
Written by:      YourName
Submitted Date: 2020/07/23
```

```
*****
*                MENU - Final Exam Version B                *
*  (1) Calling displayLargestEvenDigitInfoYourName() *
*  (2) Quit *
*****
Enter an integer for option + ENTER: 6
```

Wrong Option!

```
*****
*                MENU - Final Exam Version B                *
*  (1) Calling displayLargestEvenDigitInfoYourName() *
*  (2) Quit *
*****
Enter an integer for option + ENTER: -1
```

Wrong Option!

```
*****
*                MENU - Final Exam Version B                *
*  (1) Calling displayLargestEvenDigitInfoYourName() *
*  (2) Quit *
*****
```

Enter an integer for option + ENTER: 1

Enter a floating-point: -9.0

Calling displayLargestEvenDigitInfoYourName() with argument of -9.000000

The given argument of -9.000000 is a negative value.
-9.000000 has -9 as its integral portion.

For this integral portion of -9 --
There is/are 0 even digit(s).

```
*
*           MENU - Final Exam Version B           *
* (1) Calling displayLargestEvenDigitInfoYourName() *
* (2) Quit                                         *
```

Enter an integer for option + ENTER: 8

Wrong Option!

```
*
*           MENU - Final Exam Version B           *
* (1) Calling displayLargestEvenDigitInfoYourName() *
* (2) Quit                                         *
```

Enter an integer for option + ENTER: 1

Enter a floating-point: 23456.7668

Calling displayLargestEvenDigitInfoYourName() with argument of 23456.766800

The given argument of 23456.766800 is a positive value.
23456.766800 has 23456 as its integral portion.

For this integral portion of 23456 --
There is/are 3 even digit(s).

Looking from the LSD toward the MSD, the even digit(s) would be

```
6
4
2
```

6 is the largest even digit.
There is/are 1 largest even digit(s) of 6.

Along with this unique even digit of 6 --
There is/are 2 other additional unique even digit(s).

```
*
*           MENU - Final Exam Version B           *
* (1) Calling displayLargestEvenDigitInfoYourName() *
* (2) Quit                                         *
```

Enter an integer for option + ENTER: 1

Enter a floating-point: **-3419.766**

Calling displayLargestEvenDigitInfoYourName() with argument of -3419.766000

The given argument of -3419.766000 is a negative value.
-3419.766000 has -3419 as its integral portion.

For this integral portion of -3419 --
There is/are 1 even digit(s).

Looking from the LSD toward the MSD, the even digit(s) would be
4

4 is the largest even digit.
There is/are 1 largest even digit(s).

Along with this unique largest even digit of 4 --
There is/are 0 additional unique even digit(s).

```
*****
*           MENU - Final Exam Version B           *
* (1) Calling displayLargestEvenDigitInfoYourName() *
* (2) Quit                                         *
*****
```

Enter an integer for option + ENTER: **1**

Enter a floating-point: **-2429.766**

Calling displayLargestEvenDigitInfoYourName() with argument of -2429.766000

The given argument of -2429.766000 is a negative value.
-2429.766000 has -2429 as its integral portion.

For this integral portion of -2429 --
There is/are 3 even digit(s).

Looking from the LSD toward the MSD, the even digit(s) would be
2
4
2

4 is the largest even digit.
There is/are 1 largest even digit(s).

Along with this unique largest even digit of 4 --
There is/are 1 additional unique even digit(s).

```
*****
*           MENU - Final Exam Version B           *
* (1) Calling displayLargestEvenDigitInfoYourName() *
* (2) Quit                                         *
*****
```

Enter an integer for option + ENTER: **1**

Enter a floating-point: **-2208.766**

Calling displayLargestEvenDigitInfoYourName() with argument of -2208.766000

The given argument of -2208.766000 is a negative value.
-2208.766000 has -2208 as its integral portion.

For this integral portion of -2208 --
There is/are 4 even digit(s).

Looking from the LSD toward the MSD, the even digit(s) would be
8
0
2
2

8 is the largest even digit.
There is/are 1 largest even digit(s).

Along with this unique largest even digit of 8 --
There is/are 2 additional unique even digit(s).

```
*****
*           MENU - Final Exam Version B           *
* (1) Calling displayLargestEvenDigitInfoYourName() *
* (2) Quit                                         *
*****
```

Enter an integer for option + ENTER: 1

Enter a floating-point: -31597.766

Calling displayLargestEvenDigitInfoYourName() with argument of -31597.766000

The given argument of -31597.766000 is a negative value.
-31597.766000 has -31597 as its integral portion.

For this integral portion of -31597 --
There is/are 0 even digit(s).

```
*****
*           MENU - Final Exam Version B           *
* (1) Calling displayLargestEvenDigitInfoYourName() *
* (2) Quit                                         *
*****
```

Enter an integer for option + ENTER: 1

Enter a floating-point: 0.0

Calling displayLargestEvenDigitInfoYourName() with argument of 0.000000

The given argument of 0.000000 is ZERO.
0.000000 has 0 as its integral portion.

For this integral portion of 0 --
There is/are 1 even digit(s).

Looking from the LSD toward the MSD, the even digit(s) would be

0

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

Along with this unique largest even digit of 0 --
There is/are 0 additional unique even digit(s).

```
*****
*                MENU - Final Exam Version B                *
*  (1) Calling displayLargestEvenDigitInfoYourName() *
*  (2) Quit *
*****
Enter an integer for option + ENTER: 2
```

Have fun!

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

```
displayClassInfoYourName()
displayLargestEvenDigitInfoYourName()
```

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 `cis6Summer2020YourNameFinalVersionB.c`; and
- (5) The above output should be copied and added to the end of the code in the OUTPUT comment block.