Homework #3

Turn In:

- 1. Exercise #1 Due on Monday, July 6, 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 cis6Summer2020YourNameHw3Ex1.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:

cis6Summer2020YourNameHw3Ex1.c

- Attaching the source file that was created in part a).
- 3. Q.E.D.

1. Coding Assignment

Exercise 1 – Due Monday, July 6, 2020

- (1) Write a C program with calls 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 3,

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 <u>last name initial</u>. For examples, if your name is **John Smith** then <u>YourName</u> 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,

```
// ----- RUN #1 -----
// OUTPUT - Sample Run #1
CIS 6 - Introduction to C Programming
Laney College
YourName
Assignment Information --
  Assignment Number: Homework 3,
                   Coding Assignment -- Exercise #1
 Written by: YourName
Submitted Date: Due Date
Calling extractDigit1YourName()
  Enter a floating-point: 12385.456
  12385.456000 is a positive value!
  The integral portion of 12385.456000 is 12385!
After the function extractDigit1YourName() finished and returned:
  1-digit : 5
Calling extractDigit10YourName()
  Enter a floating-point: 12385.456
  12385.456000 is a positive value!
  The integral portion of 12385.456000 is 12385!
After the function extractDigit10YourName() finished and returned:
```

```
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  10-digit : 8
// ----- RUN #2 -----
// OUTPUT - Sample Run #2
CIS 6 - Introduction to C Programming
Laney College
YourName
Assignment Information --
  Assignment Number: Homework 3,
                     Coding Assignment -- Exercise #1
  Written by:
                     YourName
  Submitted Date: Due Date
Calling extractDigit1YourName()
  Enter a floating-point: -456.12385
  -456.123850 is a non-positive value!
  The integral portion of -456.123850 is -456!
After the function extractDigit1YourName() finished and returned:
  1-digit : 6
Calling extractDigit10YourName()
  Enter a floating-point: -456.12385
  -456.123850 is a non-positive value!
  The integral portion of -456.123850 is -456!
After the function extractDigit10YourName() finished and returned:
  10-digit : 5
// ----- RUN #3 -----
// OUTPUT - Sample Run #3
CIS 6 - Introduction to C Programming
Laney College
YourName
Assignment Information --
  Assignment Number: Homework 3,
                     Coding Assignment -- Exercise #1
  Written by:
                     YourName
  Submitted Date:
                   Due Date
Calling extractDigit1YourName()
  Enter a floating-point: -1230.456
  -1230.456000 is a non-positive value!
  The integral portion of -1230.456000 is -1230!
After the function extractDigit1YourName() finished and returned:
  1-digit:0
Calling extractDigit10YourName()
  Enter a floating-point: -1230.456
```

```
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  -1230.456000 is a non-positive value!
  The integral portion of -1230.456000 is -1230!
After the function extractDigit10YourName() finished and returned:
  10-digit : 3
// ----- RUN #4 -----
// OUTPUT - Sample Run #4
CIS 6 - Introduction to C Programming
Laney College
YourName
Assignment Information --
  Assignment Number: Homework 3,
                     Coding Assignment -- Exercise #1
  Written by:
                     YourName
  Submitted Date:
                     Due Date
Calling extractDigit1YourName()
  Enter a floating-point: -0.456
  -0.456000 is a non-positive value!
  The integral portion of -0.456000 is 0!
After the function extractDigit1YourName() finished and returned:
  1-digit:0
Calling extractDigit10YourName()
  Enter a floating-point: -0.456
  -0.456000 is a non-positive value!
  The integral portion of -0.456000 is 0!
After the function extractDigit10YourName() finished and returned:
  10-digit : 0
```

Your program should have and use the following functions,

```
displayClassInfoYourName()
extractDigit1YourName()
extractDigit10YourName()
```

where YourName must be replaced by your first name and your <u>last name initial</u>. For examples, if your name is **John Smith** then <u>YourName</u> should be <u>JohnS</u> throughout all of your work/code as mentioned.

You must run your program four (4) times to produce the output as shown.

- (4) Save the program as cis6Summer2020YourNameHw3Ex1.c; and
- (5) The above output should be copied and added to the end of the code in the OUTPUT comment block.